

SECRETARY OF LABOR,

Complainant,

v.

DONOHUE INDUSTRIES, INC.,

Respondent.

Docket No. 99-0191

DECISION

Before: RAILTON, Chairman; and STEPHENS, Commissioner.

BY THE COMMISSION:

This case arose out of an inspection that the Secretary's Occupational Safety and Health Administration ("OSHA") conducted at a paper mill operated by Donohue Industries, Inc. ("Donohue") in Lufkin, Texas. The inspection, which resulted in a citation alleging three serious violations of the Occupational Safety and Health Act, 29 U.S.C. 651-678 ("the Act"), was prompted by the electrocution death of a Donohue employee. Donohue contested the citation, and a hearing was held before former Commission Administrative Law Judge Stanley Schwartz. He issued a decision affirming one item and vacating two others.

At issue before the Commission is the judge's decision to vacate an item that charged that Donohue failed to ground a spot welder. The judge held that the violation resulted from unpreventable employee misconduct. We affirm the judge's action in vacating the item but do so on the ground that the Secretary failed to carry her burden of proving that Donohue had knowledge of the violative condition.

I

At about 9 a.m. on August 31, 1998, six Donohue millwrights were assigned to use a spot welding machine to attach new facing wire to a drum decker, a large metal cylinder used in paper production. Millwright Robert Loggins calibrated the spot welder, and it seemed to be working properly. However, shortly after Loggins' calibration test, when the millwrights were ready to weld the new facing wire into place, they discovered that the spot welder would not work.

The millwrights reported the problem to Donohue Electrical and Instrument ("E&I") supervisor Richard Thomas, who called one of the E & I technicians, Robert Hearne, to the drum decker to "[r]eset a breaker." Hearne arrived at the drum decker at about 10:30 a.m. and shut off the electric power. He then examined the spot welder's plug. He testified that the individual wires leading into the plug had been stripped back, and that the waterproof neoprene shield was not pushed up into the plug. Loggins testified, however, that there appeared to be "just one solid black piece of wire coming out" from the plug. Hearne testified that the plug also did not have all the cord grip connectors that secure the cord to it, but he believed it was safe to use the plug without them.

Based on its condition, Hearne believed that a fault in the plug might have caused the circuit breaker to trip, so he removed the plug from the wall receptacle. The cord leading from the welder into the plug contained four wires. Three of them — a black, a white, and a green wire — ran into the plug. The fourth wire, which was red, did not run into the plug but was taped back to the cord's surface.¹ Hearne testified that he tugged on the individual wires, and the green wire, which is always the ground wire, came right out.

¹The cord was not the one originally supplied with the welding machine, because that cord had had only three wires.

Hearne then removed the plug's metal casing and took it apart to inspect. Loggins held the plug's housing, which consisted of two metal parts, while Hearne worked on the plug. According to Hearne, the black and white wires were attached to two of the three terminals in the base of the plug, but the grounding wire was not attached to anything. Hearne testified that he did not believe the grounding wire had been attached inside the plug, and that it was too big to put under the plug's grounding screw without a "lug," which was not present.

Hearne told the millwrights that he could get a newer plug which would allow him to ground the machine properly, but that the plug was in the supply room, a 10-15 minute walk from the spot welder. Because, as he testified, the millwrights were in a hurry to begin their work and it was their decision to use the ungrounded welder, Hearne decided to rewire the plug instead of replace it. Hearne did not tell anybody it was unsafe to operate the spot welder without a proper ground, because he did not believe it actually was unsafe to operate in this condition. Nor did Hearne contact a supervisor, although he was carrying his two-way radio that day. Instead, Hearne reconnected the wires in what he felt was essentially the same manner as he had found them, although he shortened all of them so that the neoprene shield would reach the base of the plug and create a watertight seal. Hearne testified, however, that he could not find a way to attach the green wire inside the casing, so he cut it back to prevent accidental contact with a phase conductor.²

After Hearne's rewiring was complete, Loggins inserted the plug into the wall receptacle and secured the locking ring ("back-in nut"). Hearne reset the circuit breaker and the millwrights returned to the drum decker. Loggins tested the spot welder on the sample

²Loggins testified that Hearne actually attached the ground wire to one of the power outlets on the plug. The judge, however, credited Hearne's version of those events over Loggins' version and Donohue does not seek to overturn that credibility finding.

of facing wire and found that the welder worked. He then handed the two welding leads up to millwright Randy Russell, who was standing atop the decker.

Russell testified that even though he was wearing rubber-soled shoes, he got a hard shock as he walked across the decker, so he dropped the leads. Millwright Marvin Dodd then got down on his knees on the drum decker and picked up the leads by their insulation. He yelled and fell on the leads, and apparently suffered repeated shocks. He died of electrocution.

Hearne testified that when he heard the millwrights yelling, he ran to the disconnect and shut it down. Hearne further testified that he then jerked the plug apart and cut off the wires, because he was very upset and didn't want anyone using the plug again. The plug was not found after the accident.

The spot welder was tested after the fatality, once by a representative of the manufacturer, and once by Mike Burleson, a mechanical engineer hired by Donohue to investigate the accident. Both testified that the spot welder worked properly and they found no defect in it.

II

Following OSHA's inspection, Donohue was cited, *inter alia*, for a violation of 29 C.F.R. § 1910.255(c)(6), which provides that the "secondary and case of all portable welding transformers shall be grounded." That is the only item on review.

In his decision, Judge Schwartz vacated the item. He found that Donohue made out the affirmative defense of unpreventable employee misconduct. Specifically, he concluded that Hearne's failure to correct the grounding problem on the spot welder's plug was "idiosyncratic behavior." The judge also found that it was not foreseeable Hearne would depart from the company's established work rule regarding grounding. He essentially based this finding on two factors. First, he noted that Donohue hired electricians such as Hearne based on their electrical training and experience, and that a specific part of the electricians'

job was to periodically inspect for compliance with grounding rules, which he described as “a basic principle of the electrical trade.” Second, the judge noted that Hearne was a non-supervisory employee who made a field decision departing from a specific work rule, even though he had a radio for contacting his supervisor and could have obtained a replacement plug from a nearby storage room.

On review, the Secretary argues that Donohue failed to properly instruct Hearne and other electricians that all electrical equipment must be grounded, and that it failed to enforce such a rule.

III

To prove a violation of an OSHA standard, the Secretary must show by a preponderance of the evidence that: (1) the cited standard applies; (2) there was noncompliance with its terms; (3) employees had access to the violative conditions; and (4) the cited employer had actual or constructive knowledge of those conditions. *See, e.g., Southwestern Bell Tel. Co. (“SWBT”),* 19 BNA OSHC 1097, 1098, 2000 CCH OSHD ¶ 32,198, p. 48,747 (No. 98-1748, 2000), *aff’d without published opinion*, No. 00-60814 (5th Cir., Nov. 15, 2001). The crucial element in this case is knowledge.

“Knowledge is a fundamental element of the Secretary of Labor's burden of proof for establishing a violation of OSHA regulations.” *Trinity Indus., Inc. v. OSHRC*, 206 F.3d 539, 542 (5th Cir. 2000) (citing *Carlisle Equipment Co. v. Secretary of Labor*, 24 F.3d 790, 792-93 (6th Cir. 1994)). “To prove the knowledge element of its burden, the Secretary must show that the employer knew, or with exercise of reasonable diligence could have known of the non-complying condition.” *Trinity*, 206 F.3d at 542.

Because Hearne failed to contact a supervisor concerning the lack of grounding, it is clear that Donohue did not have actual knowledge of the violative conditions. Therefore, the issue presented is whether, with the exercise of reasonable diligence, Donohue could have discovered the ungrounded welder. Whether an employer was reasonably diligent involves

a consideration of several factors, including the employer's obligation to have adequate work rules and training programs, to adequately supervise employees, to anticipate hazards to which employees may be exposed, and to take measures to prevent the occurrence of violations. *Precision Concrete Constr.*, 19 BNA OSHC 1404, 1407, 2001 CCH OSHD ¶ 32,331, p. 49,552 (No. 99-707, 2001) (citing *Pride Oil Well Serv.*, 15 BNA OSHC 1809, 1814, 1991-93 CCH OSHD ¶ 29,807, p. 40,584 (No. 87-692, 1992)).

Donohue's work rule addressing grounding is set out in its Safety Handbook: "Portable electric tools shall be effectively grounded at all times while connected to a power source, with the exception of UL-approved double insulated tools." The welding machine was not double-insulated. The Safety Handbook also requires that: "All hand and power tools shall be maintained in good condition."³ Thomas, the E & I supervisor, testified that new hires are provided with the handbook, and another copy generally is passed out at the monthly safety meetings, where power tool requirements are discussed periodically. Hearne had a copy of the handbook.

Safety training for Donohue electricians includes classes and videos. One required video, introduced in evidence, states that a portable welding machine should be checked to make sure it is grounded. Although that video addresses arc welding, rather than the resistance welder involved here, Thomas testified that it would be equally applicable here. Another required video shows an attempt to remove a ground prong from the electrical plug of an arc welding machine, while the narrator says that an employee should "never remove or override a safety feature." Burleson, testifying as an expert for Donohue, stated that the grounding requirement is a "cardinal rule" in "basic electricity." According to Thomas, Donohue's electricians are instructed never to sacrifice safety just to get a job done quickly.

³The expert witnesses disagreed as to whether the spot welder was an "electric tool" covered by those rules. In light of Donohue's other safety training and instructions to its employees, we find it is unnecessary to resolve that disagreement.

Hearne was a highly experienced electrician. Following his graduation from high school in 1975, he entered an apprentice program for electricians and became a journeyman electrician. In 1986, Hearne earned an associate's degree in electronic engineering technology, graduating at the top of his class. Before commencing his employment with Donohue in 1996, from 1986-1996, Hearne worked as both an electronic technician and an electrician. Thomas described him as a very experienced and better-than-average employee. He had no record of safety violations at Donohue before this incident. Hearne stated that he had received the highest ratings possible in the company's evaluations of his work performance. Despite Hearne's substantial electrical experience, Hearne testified that it was his understanding that Donohue's work rule regarding grounding applied only to hand tools. He maintains that no one told him that *other* types of equipment, such as the spot welding machine, had to be grounded.

However, other testimony supports finding that Donohue's trained electricians were familiar with this basic principle of their trade. Several of Hearne's fellow electricians testified that they knew from their background or experience that all equipment should be grounded. They also generally testified that if they felt a piece of electrical equipment was unsafe, they would inform their supervisor. Like Hearne, many had not been aware before the August 31 accident of a specific Donohue work rule that all equipment must be grounded.

Thomas testified that an electrician who failed to ground a piece of machinery would receive oral counseling, at a minimum. Several Donohue electricians testified that they were not aware of any situation in which Donohue had known that an electrician had failed to ground a piece of equipment and had not disciplined the person. Several of them also were aware of Donohue disciplining an employee other than Hearne for a safety violation. Hearne was terminated based on the incident in question here.

Thomas also testified that both Donohue electricians and mechanics do quarterly inspections of the company's electrical equipment to assure grounding. When a piece of

machinery has been checked, a colored plastic tie wrap is placed around the equipment's cord. However, there is no record evidence to establish that this department had periodically inspected the model 600 spot welder, which was kept in the maintenance tool room and used only once or twice a year. Donohue admits that it did not keep records showing periodic inspection and certification of portable welding machines such as the model 600, as required by OSHA regulations.

Notwithstanding Donohue's failure to establish that the model 600 spot welder had been subjected to a periodic inspection, millwright Loggins testified that Donohue electrician Jim Wall rewired the Model 600's plug some months before the accident. Also, expert Burleson gave the opinion that the welding machine must have been grounded until August 31, because there had been no prior accidents with it and disconnection of the ground would have created substantial voltages in the plug's case. The Secretary's expert witness, OSHA electrical engineer Terry Wilkins, testified that the green wire could have been grounded by mere contact with the inside of the plug casing, although he believed that the lack of prior accidents does not establish that the machine was grounded before August 31.

IV

In determining whether Donohue was reasonably diligent, the first step is to assess the adequacy of Donohue's grounding work rule and its training programs. *Precision Concrete Constr.*, 19 BNA OSHC at 1407, 1991-93 CCH OSHD at p. 49,552. The judge found that Donohue had a work rule "which required that portable electric tools be grounded," and that electricians "were all provided with a safety handbook containing the rule when they were hired." Donohue also required electricians to view training videos that stated that welding machines should be checked to make sure they are grounded and that employees should "never remove or override a safety feature." The judge also found that each electrician "knew that it was appropriate to ground all electrical equipment," even though Donohue had not specifically instructed its electricians that its safety policy required that all equipment like the spot welder be grounded. Indeed, it was not unreasonable for Donohue to expect its trained and experienced electricians to be familiar with and adhere to this basic tenet of the electrical trade. In addition, the judge found that Donohue's periodic grounding inspection program reinforced the company's policy that all such equipment was to be grounded.⁴ Based on these findings, we hold that Donohue adequately communicated a workrule requiring that all portable electrical equipment be grounded.

The record also shows that the workrule was adequately enforced. *See, e.g., Stahl Roofing, Inc.*, 19 BNA OSHC 2179, 2182-83, 2003 CCH OSHD ¶ 32,646, pp. 51,218, 219 (No. 00-1268, 2003)(consolidated). The judge found that "Donohue's pre-inspection and post-inspection disciplinary procedures when viewed together, exhibit a serious concern for

⁴The judge pointed out that Donohue electricians found ungrounded equipment in the plant, but there is no evidence that it was portable equipment subject to the work rule at issue. He also found no evidence that "the single incident described by Hearne, in which a management determination was made to leave equipment ungrounded, involved portable equipment." Thus, he found no basis to conclude that those situations negated the effectiveness of its *portable equipment* grounding rule.

safety.” Thomas testified that an electrician who failed to ground a piece of machinery would receive oral counseling, at a minimum. Because Hearne’s failure to connect the welder’s ground wire resulted in a death, he did not receive oral counseling, as required by Donohue’s disciplinary policy for first infractions, but was terminated. Several Donohue electricians testified they were not aware of any situation in which Donohue had known that an electrician had failed to ground a piece of equipment and had not disciplined the person. Several also were aware of Donohue disciplining an employee other than Hearne for a safety violation.

Based on the foregoing, we find that the Secretary has failed to show any relevant defect in Donohue’s grounding program for portable electrical equipment.⁵ As a result, she has failed to prove the necessary knowledge by the employer of the violative condition.⁶

In his decision, the judge concluded that Donohue could not claim that it lacked knowledge of the ungrounded spot welder because it did not regularly inspect it before the accident. The Secretary elaborates on this point on review, arguing that if Donohue had periodically inspected the machine with a basic electrical tester, it would have detected the grounding problem. We find that the record does not support the Secretary’s claim. Donohue had such a tester and used it in the quarterly inspection program. However, such a testing device would not have detected a lack of grounding if the ground wire happened to be in

⁵We further note that the lack of grounding in this case appears to have been the result of the intentional, idiosyncratic conduct of Hearne in failing to follow a basic tenet of the electrical trade without checking with any supervisor to determine whether he was authorized to do so. *See, e.g., Brennan v. OSHRC (Hanovia Lamp Div. of Canrad Precision Industries)*, 502 F.2d 946, 951 (3d Cir. 1974) (employer is not responsible under the Act for behavior that “is so idiosyncratic and implausible in motive or means that conscientious experts, familiar with the industry, would not take it into account in prescribing a safety program”) (quoting *National Realty & Constr. Co. v. OSHRC*, 489 F.2d 1257, 1266 (D.C. Cir. 1973)).

⁶In the circumstances, we need not and do not address whether Donohue made out any affirmative defense to the alleged violation.

contact with the plug's casing, even tentatively. In finding that the evidence "does not establish how long the welder was actually ungrounded prior to August 31, 1998," the judge essentially found that there was no basis to conclude that a periodic grounding inspection of the spot welder before August 31 would have detected a lack of grounding.

We find that the evidence establishes that the spot welder actually was *grounded* before Hearne opened it on August 31, because it worked properly when Loggins initially calibrated it that morning and there had been no previous accidents with it. Therefore, Donohue's failure to inspect the spot welder with a basic electrical tester does not establish constructive knowledge of a lack of grounding. Nor does the record suggest that a visual inspection for external defects before the accident would have revealed a lack of proper grounding. At best, it would have shown that a four-wire cord was attached to the plug, with the red wire taped back to prevent contact with the plug, and with fully adequate insulation. To millwright Loggins, it appeared there was "just one solid black piece of wire coming out" from the plug, and the lack of cord grip connectors was not a safety issue in Hearne's view. Thus, visual external inspection of the plug and cord would not have revealed unsafe conditions much less a lack of grounding, which we find did not exist before the day of the accident based on the expert testimony of Burleson and Wilkins. Accordingly, we find no basis on which to conclude that Donohue had constructive knowledge of the grounding problem before Hearne examined the plug on August 31.⁷ See *Stahl Roofing, Inc.*, 19 BNA OSHC at 2182-83, 2003 CCH OSHD at pp. 51,218-19.

⁷On review, the Secretary argues for the first time that all the elements of a grounding violation existed earlier on August 31, when Loggins initially calibrated the welding machine before Hearne became involved. The Secretary's failure to prove a relevant defect in Donohue's safety program also negates any such alleged violation.

The citation for an alleged grounding violation is vacated.

SO ORDERED.

/s/

W. Scott Railton
Chairman

/s/

James M. Stephens
Commissioner

Dated: August 29, 2003

SECRETARY OF LABOR,

Complainant,

v.

DONOHUE INDUSTRIES, INC., and its
successors,

Respondent.

OSHRC DOCKET NO. 99-0191

APPEARANCES:

For the Complainant:

Connie M. Ackermann, Esq., Raquel Tamez, Esq., Office of the Solicitor,
U.S. Department of Labor

For the Respondent:

Thomas H. Wilson, Esq., Merritt B. Chastain, Esq., Vinson & Elkins,
L.L.P., Houston, Texas

Before: Administrative Law Judge: Stanley M. Schwartz

DECISION AND ORDER

This proceeding arises under the Occupational Safety and Health Act of 1970 (29 U.S.C. Section 651 *et seq.*; hereafter called the "Act").

Respondent, Donohue Industries, Inc., and its successors (Donohue), at all times relevant to this action, operated a paper mill at Hwy. 103 East, Lufkin, Texas. Donohue admits it was engaged in a business affecting commerce and is subject to the requirements of the Act.

On August 31, 1998, a Donohue employee was electrocuted while using a Model 600 spot welder at the Lufkin paper mill. Following the reported fatality, from September 1 to September 16, 1998, the Occupational Safety and Health Administration (OSHA) conducted an inspection of Donohue's Lufkin work site. As a result of that inspection, Donohue was issued citations alleging violations of the Act together with proposed penalties. By filing a timely notice of contest Donohue brought this proceeding before the Occupational Safety and Health Review Commission (Commission).

On August 19-20 and September 3, 1999, a hearing was held in Lufkin, Texas. At that time the citation was amended to reflect that the citations referred only to the events of August 31, 1998 (Tr. 12). The parties agreed that §1926.255(c)(6) is the applicable standard governing the conditions described in citation 1, item 1a (Tr. 14-15). In addition, items 1 and 2 were grouped as items 1a and 1b, with a single proposed penalty (Tr. 12-13, 16). The parties have submitted briefs on the issues, as amended, and this matter is ready for disposition.

Alleged Violations of §1910.255(c)(6) and .334(a)(3)(ii)

Serious citation 1, item 1a, as amended, alleges:

29 CFR 1910.255(c)(6): The frame or case of the welding machine was not grounded under the conditions and according to the methods prescribed in Subpart S, 29 CFR 1910:

- a) At No. 5 drum decker in the ground wood dept. A model 600 stainless steel spot welder was not grounded either by ground cord or at the machine case.

Serious citation 1, item 1b, as amended, alleges:

29 CFR 1910.334(a)(3)(ii): Attachment plugs and receptacles were connected or altered in a manner which prevented proper continuity of the electric equipment grounding conductor at the point where plugs were attached to receptacles:

- a) At the No. 5 drum decker located in the ground wood department. Model 600 stainless steel spot welder was not grounded either through cord or case grounding.

Facts

At approximately 9:00 a.m., on August 31, 1998, millwrights Marvin Dodd, Jerry Mosely, Randy Russell, Robert Loggins, Ronnie Steveson and Robert Williams, were assigned to replace the facing wire on drum decker No. 5 (Tr. 19-20, 24-25, 85; Exh. R-14, R-13, R-14, C-26). The millwrights retrieved the Model 600 spot welding machine that they always used to change the facing wire from the central tool room (Tr. 25, 138-39; Exh. 1). The operating crew drained the water out of the vat (Tr. 125), and the millwrights proceeded to take off the old facing wire with tin snips, and rolling it off the decker while it ran with the rheostat on low (Tr. 25-28, 35). The millwrights then shut the decker down, and cleaned it off with wire brushes and spray wands (Tr. 35, 125). After washing down the decker, the millwrights carried the new roll of facing wire up onto the decker and wired one end of the rolled wire to the decker drum in

several places (Tr. 43). One of the millwrights then ran the drum at a slow speed as the others fed the facing wire onto the decker drum (Tr. 43). Cloth straps were then wrapped around the drum to secure the wire, and the millwrights smoothed and tightened the facing wire (Tr. 43-44).

Randy Russell testified that when they first brought the spot welder out to drum decker No 5, he and Robert Loggins calibrated the welder, to assure that it would weld the wire facing without burning (Tr. 108). Loggins stated that he was standing when he tested the machine (Tr. 445). When the millwrights were ready to spot weld the facing wire into place, approximately 30 to 45 minutes later, they discovered that the spot welder would not work (Tr. 109, 445). The millwrights reported the problem with the spot welder to their supervisor, who called an electrician, Robert Hearne, to drum decker No. 5 (Tr. 46, 109). Dodd, Mosely, Russell, and Loggins, opted to work through lunch and went back to meet Hearne (Tr. 46).

Robert Hearne, who was an E&I technician at Donohue at the time of the accident (Tr. 145), testified that it was his job at Donohue to hook up new installations, perform routine electrical maintenance, and to get equipment up and running as quickly as possible (Tr. 151).

Hearne stated that he responded to a call around 10:30 a.m. on August 31; his supervisor Richard Thomas told him to go over to the No. 5 drum decker to reset the breaker (Tr. 154-55). When Hearne arrived the spot welder was plugged into the receptacle (Tr. 157; Exh. 2). Upon his arrival, he threw the knife switch down, shutting down the power (Tr. 50, 159-60). Hearne testified that the individual wires leading into the plug had been stripped back and that the waterproof neoprene shield was not pushed up into the plug (Tr. 161). Based on its condition, he believed that a fault in the plug might be responsible for tripping the breaker (Tr. 160). Hearne and Robert Loggins then removed the spot welder's three prong plug (Tr. 175; Exh. C-4, C-5) from the receptacle on the wall (Exh. C-2, C-3). The cord had three wires, a red wire, which had been taped back (Tr. 163), and black, white and green wires which ran into the plug (Tr. 163). Hearne testified that he tugged on the individual wires, and that the green wire, which is always the ground, came right out (Tr. 162, 164, 190). Hearne did not believe that the grounding wire had been attached, because it hadn't been flattened; Hearne testified that a correctly attached ground wire would have been flattened under some kind of a lug inside of the plug (Tr. 165). Hearne removed the metal casing, and took the plug apart to inspect it (Tr. 50, 58, 165). Hearne

testified that the black and white wires were attached to two of the three terminals in the base of the plug (Tr. 175).¹ The grounding wire was not attached to anything (Tr. 177).

Hearne testified that there was a green screw on the metal casing (Tr. 191). Hearne stated that with the proper terminal lug, you could ground the welder by attaching the green wire to that screw (Tr. 191). Hearne testified that the wire was too big to put under the screw without a lug (Tr. 191).

Hearne testified that he asked the millwrights whether they wanted him to get a new plug, because there wasn't any way to properly attach the ground wire in the existing plug (Tr. 178). Hearne stated that the millwrights were working through lunch, and were in a hurry; they told him that they didn't care about the plug, and just wanted the welder running (Tr. 179). Hearne believed that the welder had been working without a ground before he disassembled the plug, and felt it was the millwrights' call (Tr. 179). Hearne also believed that because the welder had been in use, it was safe to leave it ungrounded (Tr. 192, 224, 229). He, therefore, reassembled the plug in what he felt was essentially the same manner as he had found it, though he shortened all the wires so that the neoprene shield would reach the base of the plug and create a watertight seal (Tr. 179, 226). Hearne stated, however, that he cut the green wire back so that it couldn't accidentally become energized (Tr. 180-82, 226).

Robert Loggins testified that there was only one solid black cord coming from the base of the plug when Hearne started to work on it (Tr. 448). Loggins stated that, inside the casing, there was one wire, a green one, that was about an inch shorter than the other two wires, and was loose (Tr. 448-49, 471). Loggins stated that when Hearne got the plug apart, he held the two sides of the metal casing, while Hearne held the three pronged red plug and terminal in his hand (Tr. 453; Exh. C-31, C-32). Loggins testified that Hearne disconnected all three wires, trimmed them to equal lengths, and attached each of the wires, including the green ground wire to the three terminal screws (Tr. 452, 455, 676). Loggins stated that he did not know, at that time, how

¹ Donohue has a 440 three phase electrical system at the plant; however, the spot welder was a single phase machine. Therefore, only two of the three legs of the 440 system were tapped (Tr. 188). Hearne testified that it was common to find single phase equipment working off of the three phase system at the Donohue plant (Tr. 219). Both CO Wilkins and Donohue's expert, Mike Burlison, testified that there is nothing in the OSHA regulations that prohibits powering single phase equipment with a triple phase plug, and that it can be done safely (Tr. 394-95, 518).

the plug was supposed to be wired, and only learned that later, from other electricians out at the mill (Tr. 472).

Hearne testified that he would never put power to the ground, and that he did not attach it to a hot terminal on the day of the accident (Tr. 190).

Mosely, Hearne and Loggins all testified that Loggins inserted the plug into the receptacle, and Hearne threw the knife switch (Tr. 63, 183, 458). The millwrights returned to the drum decker. Loggins testified that the ground plate and facing wire were still lying on the wooden box next to the welder where he had placed them before (Tr. 458). Loggins tried out the spot welder on the sample of facing wire, and found that the welder worked without problems (Tr. 63, 88, 184, 458). Mosely testified that Loggins then handed the welder's two leads up to Russell, who was standing atop the decker (Tr. 68, 458-59). Russell testified that though he was wearing rubber soled shoes, as he walked across the decker he got a hard shock and dropped the leads (Tr. 119, 121). Dodd then got down on his knees and picked up the leads by their insulation. Russell could not tell if Dodd actually had begun to weld when Dodd yelled, and fell on the leads (Tr. 120, 130). Russell stated that he was shocked repeatedly on the decker until the power was shut off (Tr. 120-21).

Hearne testified that when he heard the men yelling he ran to the disconnect and shut it down (Tr. 185). Hearne stated that he was very upset and didn't want anyone using the plug again (Tr. 186). He jerked the plug apart and cut off the wires (Tr. 186, 239).²

Richard Thomas, Hearne's supervisor at Donohue, testified that after the accident, Hearne told him that he told the millwrights he wanted to replace the spot welder's plug, and that he cut off the ground and did not connect it to the power source (Tr. 643, 649-50). Similarly, Larry Cook, a master craftsman electrician at Donohue, testified that Hearne told him shortly after the accident that he was unable to connect the ground wire to the ground screw that was in the plug (Tr. 763).

Terry Wilkins, a OSHA Compliance Officer (CO), has a B.S.E.E., Bachelor's of Science in electrical engineering, and ten years of engineering experience in addition to his OSHA experience and training (Tr. 263-74). Wilkins is also a member of the American Society of Safety Engineers (Tr. 276). Wilkins was recognized, without objection, as an expert in basic

² Only a length of green wire was recovered after the accident (Tr. 431-32; Exh. C-31, C-32).

electrical engineering principles and compliance with OSHA's electrical safety standards (Tr. 277-78).

Wilkins testified that the model 600 spot welder is portable electric equipment subject to the requirements of §1910.254(c)(2)(I). Wilkins testified as to the contents of the depositions of Steve Harvey, a welder technician for SCAPA National, who assembles model 600 spot welders, and Sonny Drake, SCAPA's manager of installation services (Tr. 286, 312; Exh. C-37). Harvey stated, in deposition, that the model 600 is grounded internally, *i.e.*, a ground wire attached to the inside of the welder cabinet runs to the plug, which is supposed to be plugged into a grounded source (Tr. 317, 332; Exh. C-37, p. 24). If the power cord isn't plugged into a grounded source, or if the ground wire is not attached to the plug, the machine is not grounded (Exh. C-37, p. 24).

Wilkins testified that the correct procedure for Hearne to have followed in this instance would have been to connect the ground wire to the body of the plug (Tr. 390). Hearne's failure to do so was, in itself, a serious violation of the National Electrical Code as well as OSHA standards (Tr. 393). Wilkins testified that the ground wire could not have been attached to the plug as it was configured at the time Hearne found it, however, because there was no grounding lug (Tr. 418). A grounding lug is necessary to hold the grounding wire under the grounding screw on the inside of the plug's metal casing (Tr. 418). CO Wilkins believed that a complete plug would have included a grounding lug (Tr. 418-19).

Mike Burleson, a consulting engineer with Systems Engineering and Laboratories testified for Donohue as an expert in forensic reconstruction (Tr. 513-14). Burleson testified that, based on his investigation, he believed that the plug on the model 600 spot welder was miswired (Tr. 518). Based on the testimony of Robert Loggins, Burleson concluded that the ground wire had been connected to the formerly empty terminal lug and connected to the third phase of Donohue's three-phase system (Tr. 519). Burleson admitted that correctly wiring the plug was "not rocket science," and that it would be a fairly routine procedure for a journeyman electrician with Mr. Hearne's qualifications (Tr. 547-48). Burleson credited Loggins version of the events of August 31, because he was troubled by Hearne's behavior following the accident (Tr. 550-51). Burleson stated that it was illogical to disassemble the plugs and cut the wires after the event (Tr. 550-51).

Burleson stated that the spot welder's plug was a "body-grounded plug," *i.e.*, that the ground wire should have been connected to the lug screw inside the plug casing (Tr. 521). Burleson concurred with Wilkins that the welder was not grounded at the time of the accident (Tr. 518, 525). Burleson agreed that the spot welder was grounded only when the properly wired plug was plugged into a grounded receptacle (Tr. 532).

Burleson testified that the spade, or ring connector, or lug, referred to by CO Wilkins was not generally part of, though it was commonly used with, this type of plug (Tr. 527). Burleson stated that where the ground is a stranded wire, placing the wire under the grounding screw without a ring connector or lug would not make a good connection for long term use, though it would function (Tr. 527-28, 609). Burleson admitted that if, as both Heame and Loggins testified, the ground wire was loose, it was not adequately connected (Tr. 609).

Burleson stated that if Hearne cut down the ground wire rather than connecting it to the plug, it would have been a "significant violation of general electrical rules" (Tr. 553). Furthermore, Burleson stated that, in that case, the ungrounded condition of the welder would be the probable cause of the accident (Tr. 597-98).

Discussion

Serious Citation 1, Item 1a

1910.255(c)(6) provides:

Grounding. The secondary and case of all portable welding transformers shall be grounded.

The evidence establishes that the case of the model 600 spot welder was not grounded on August 31, 1998. The welder's casing was grounded only when its ground wire was attached to a plug, which was, in turn, plugged into a grounded source. Both Hearne and Loggins testified that the grounding wire was loose inside the metal casing of the plug when Hearne opened it. Hearne admits that he left the plug ungrounded when he returned it to service; he cut the ground wire so it could not become energized, neither could it be attached to the body of the plug, which both CO Wilkins and Mike Burleson testified would have been the correct procedure.³ At no

³ This judge finds Hearne's testimony credible based on his appearance and demeanor at the hearing. Moreover, his version of events is more credible than that put forth by Donohue. It is unlikely that an experienced journeyman electrician would have made the kind of error Donohue alleges Hearne made. Loggins, who is not an electrician, admits he did not register what he was seeing at the time, and only later, after learning how the plug was supposed to

time, on the date in question, was the ground wire functioning in the manner in which it was intended.

It is clear that the violative condition existed as cited. Donohue maintains, however, that the violative condition was latent, and that it could not have known that the spot welder was ungrounded until Hearne opened the plug on August 31. Donohue maintains that Hearne's failure to correct the violative condition was the result of unpreventable employee misconduct.

Knowledge. In order to show employer knowledge of a violation the Secretary must show that the employer knew, or with the exercise of reasonable diligence, could have known of a hazardous condition. *Dun Par Engd. Form Co.*, 12 BNA OSHC 1962, 1986-87 CCH OSHD ¶27,651 (No. 82-928, 1986).

Richard Thomas testified that electrical equipment is tested quarterly to assure that it is grounded (Tr. 623). Both electricians and mechanical people do quarterly checks; once a piece of machinery has been checked, a colored tie wrap is placed around the equipment's cord (Tr. 623). Thomas stated that the spot welder was kept in the maintenance room, and that no one from his department had inspected the machine (Tr. 625, 637). Thomas testified, however, that he saw the spot welding machine after the accident and observed a white tie wrap around the welder's cord; the tie wrap indicated to him that someone had checked out the spot welder (Tr. 625; Exh. C-29).

Dennis Shoemaker, a master craft electrician, has worked for Donohue for the past 18 years (Tr. 698). Shoemaker testified that he performed routine inspections as a part of his job, but that he had never inspected the model 600 spot welder, and did not know anyone who had (Tr. 699-701).

Ben Coulter, a master craft electrician, has worked at Donohue for 31 years (Tr. 737-38). Coulter testified that he never performed a routine inspection of the spot welder, and did not know anyone who had (Tr. 739).

be wired, reconstructed Hearne's actions. Hearne's explanation of his behavior before and following the accident is reasonable, and conforms to what he told Richard Thomas and Larry Cook immediately after the accident. Lastly, in admitting he removed a ground wire as an expedient measure, Hearne admits to a serious violation of the National Electrical Code as well as OSHA standards.

Larry Cook has been a master craftsman electrician at Donohue for over 10 years (Tr. 760). Cook testified that prior to August 31, 1998, he never performed any kind of routine inspection on the model 600 spot welder (Tr. 760).

Kevin Jones, a shift electrician, testified that he worked at Donohue for seven years (Tr. 745). Jones stated that he performed routine inspections of equipment as part of his regular duties, but that he had never inspected the model 600 spot welder (Tr. 749). Jones testified that a different color is used each quarter to indicate that a routine inspection has been performed, but that white ties are never used because they are too common (Tr. 748-49).

Though whether the cited welder was grounded prior to August 31, 1998 is not at issue here, this judge notes that the preponderance of the evidence establishes that Donohue failed to exercise due diligence to discover defects of any kind in the model 600 spot welder prior to that date. In her post-hearing brief, the Secretary points out that OSHA standards at §1910.255(e) require periodic inspection and certification of portable welding machines such as the model 600 (Tr. 349-50, 356-57).⁴ In discovery, the Secretary requested the required certification; Donohue replied that there were no such documents in existence (Tr. 351-52; Exh. C-39). Donohue called no witnesses with actual knowledge of any inspections. Nonetheless, Donohue claims that the white tag on the welder's cord indicates that the welder was inspected. Though the Secretary called and questioned numerous Donohue electricians and E&I technicians none could recall ever inspecting the welder; none knew of anyone who had inspected the welder. Kevin Jones, who conducted periodic inspections for Donohue's maintenance department, testified that white ties are never used to indicate that a periodic inspection has been performed.

Because the weight of the evidence shows that Donohue did not regularly inspect the spot welder which is the subject of this litigation, it cannot rely on its lack of knowledge as a defense.

This judge notes that though the evidence establishes Donohue's failure to exercise due diligence in inspecting the spot welder, it does not establish how long the welder was actually

⁴ 29 CFR 1910.255 **Resistance welding.**

* * *

(e) *Maintenance.* Periodic inspection shall be made by qualified maintenance personnel, and a certification record maintained. The certification record shall include the date of inspection, the signature of the person who performed the inspection and the serial number, or other identifier, for the equipment inspected. The operator shall be instructed to report any equipment defects to his supervisor and the use of the equipment shall be discontinued until safety repairs have been completed.

ungrounded prior to August 31, 1998. Though Hearne testified that there was no resistance on the ground wire when he gently tugged on it before opening up the plug, CO Wilkins admitted that the grounding wire, could have been grounded by its mere contact with the inside of the plug casing (Tr. 798-99).⁵ It was Burleson's opinion that disconnection of the ground would have created substantial voltages in the case (Tr. 543). Because there had been no prior incidents, he believed the spot welder must have been adequately grounded prior to the date of the accident (Tr. 543).

It is clear, however, that the welder was not grounded on the date which is the subject of this action. As noted above, the testimony of both Loggins and Hearne establishes that the welder's plug was not grounded when they initially opened it up. Moreover, Hearne's testimony establishes that he deliberately reassembled the plug without grounding it.

Donohue argues that no representative of management was present on August 31, and that it cannot be held liable for Hearne's unpreventable misbehavior on that date. The Commission has held, however, that the fact that the employer may not have known of the specific instance of violative conduct at the time it occurred does not mean that the conduct was unpreventable. *Ormet Corp.*, 14 BNA OSHC 2134, 2138-39, 1991-93 CCH OSHD ¶29,254, p. 39,203 (No. 85-531, 1991). Whether Donohue had constructive knowledge of Hearne's conduct depends on the steps it took to prevent such behavior, and so must be discussed as part and parcel of Donohue's claim of employee misconduct.

Unpreventable employee misconduct. Richard Thomas testified that he was on Donohue's hiring committee; he stated that in a job search for electricians, such as Robert Hearne, the committee looked for applicants with an associate degree in electrical engineering or electronics, who had at least five years of experience (Tr. 615-16). Thomas testified that an electrician at Donohue starts out as a basic journeyman, and is given safety training which includes classes and views various videos, including "Welding Safety, Securing the Work Zone," and "Maintenance Training, Introduction to Arc Welding" (Tr. 616-17; Exh. R-7, R-8). Thomas testified that the two tapes refer to grounding, and warn the viewer not to take off any

⁵ The standard originally cited required that grounding be in accordance with the requirements of subpart S (Tr. 333). Subpart S §1910.304(f)(4) requires that the grounding circuit be permanent and continuous. No such requirement in restriction is contained in the standard the parties agreed was applicable to this welder.

safeties or remove any grounds (Tr. 618). Thomas testified that the Champion [now Donohue] Safety Handbook was in effect at the time of the accident (Tr. 619; Exh. R-1). Page 2 of the safety handbook referring to Power Tool Safety, states that “[p]ortable electric tools shall be effectively grounded at all times while connected to a power source [with the exception for UL approved double insulated tools].” (Tr. 621). New hires are provided with a safety handbook, and the contents of the handbook are reviewed at monthly safety meetings (Tr. 622).

Thomas testified that an electrician who discovered equipment that was ungrounded was supposed to fix it, or if that was impossible, bring it to the shop, or cut off the plug to disable the equipment (Tr. 656). Thomas was not aware of any circumstance in which an electrician discovered, but failed to ground an ungrounded piece of machinery (Tr. 627, 658). Thomas testified that electricians are instructed never to sacrifice safety just to get a job done quickly (Tr. 656). Thomas stated that an electrician who failed to ground a piece of machinery would receive, at a minimum, oral counseling (Tr. 655).

Thomas stated that Hearne was a more than qualified applicant, and a better than average employee (Tr. 616, 642). Hearne earned an associates degree in electronic engineering technology in 1986, graduating at the top of his class (Tr. 148). Hearne started at Donohue in 1996 and had a good safety record before the accident (Tr. 150, 647-48). Thomas testified that he did not want to let Hearne go, but that because his failure to connect the welder’s ground wire resulted in a death, Hearne did not receive oral counseling, as required by Donohue’s disciplinary policy for first infractions (Tr. 467-68). Instead Hearne was terminated (Tr. 650, 652, 659; See also testimony of Robert Hearne, Tr. 151-52, 203).

Robert Hearne admitted that he had a copy of the safety hand book provided by Donohue, which requires that portable electrical tools be grounded (Tr. 236-37). Hearne testified that the electricians actually checked hand tools for grounds, but that it was his understanding that Donohue’s work rule applied only to hand tools (Tr. 205, 246). Hearne testified that no one told him that other types of equipment had to be grounded (Tr. 206). Hearne did not believe he had the authority to stop the job to replace the defective plug (Tr. 247). He did not call his supervisor to have the work stopped because he was just trying to get the equipment up and running (Tr. 244, 248), and he did not believe the spot welder was unsafe to operate (Tr. 233). Hearne stated that some equipment can be operated safely without a ground

(Tr. 207). Hearne did not believe he was violating a safety rule when he failed to ground the model 600 spot welder (Tr. 231).

Hearne stated that he had, prior to August 31, run across other ungrounded equipment at Donohue (Tr. 181). Hearne testified that on one other occasion, he had talked to his supervisor, Richard Thomas about an ungrounded piece of machinery (Tr. 232). Hearne stated that after conferring with their supervisor, Gene Finley, it was determined that it would cost too much money to ground the equipment, and it was left ungrounded (Tr. 232).

Shoemaker testified that he was never told specifically that all equipment had to be grounded until after the August 31, 1998 accident, though as an experienced electrician he knew it was appropriate to do so (Tr. 701, 718). Shoemaker testified that he was aware of equipment at Donohue that was not grounded as of August 31 (Tr. 702). Shoemaker did not know of any circumstance where a supervisor knew of and allowed an employee to leave a piece of equipment ungrounded (Tr. 715). Shoemaker also stated that he had performed quick fixes on machinery to get it up and running, though the quick fix might not be the safest alternative (Tr. 702). Shoemaker testified that he did not have the authority to pull an unsafe piece of equipment out of service (Tr. 703). If the equipment was part of a production process, he would have to go to his supervisor, who would have to clear it with operations (Tr. 703). Shoemaker did not feel that he would get into trouble for shutting down a piece of unsafe equipment, if he could prove the equipment was actually unsafe, but stated that under the present management, he would hesitate before making the call himself (Tr. 704). Shoemaker believed he might get in trouble if the production department did not believe there was actually a safety problem (Tr. 704).

Shoemaker was not aware of anyone, other than Robert Hearne, who had ever been terminated for violating a safety rule (Tr. 707-08). Shoemaker did know of other mill employees who had been disciplined for safety violations (Tr. 717). Shoemaker also knew of some Donohue employees who removed locks prior to completion of a lock-out/tag-out procedure, exposing three contractors who were sitting on the bus bar to possible electrocution, who were not disciplined (Tr. 708-12). Shoemaker did not know whether those employees actually violated any Donohue safety rule, but testified that the action was, at least, a serious error in judgment (Tr. 710-11).

Charles Freeman, a master craft electrician, has worked at Donohue for over 15 years (Tr. 720). Freeman testified that he had never been informed by anyone at Donohue that all equipment must be grounded prior to the August 31 accident (Tr. 724). Freeman also testified that he has come across equipment at Donohue that is not grounded (Tr. 724). Freeman stated that if he found an unsafe piece of equipment, he would tell the operator that it was unsafe, but that it would be up to the supervisor in that department what steps would be taken (Tr. 732). However, he also testified that if the operator insisted on using an unsafe (ungrounded) piece of equipment, he would call his supervisor (Tr. 732-33).

Ben Coulter testified that before August 31, 1998, he was not aware of a specific work rule that all equipment be grounded (Tr. 742). Coulter stated that he had been asked to hook up a piece of equipment without a ground, and that he had temporarily fixed equipment to get it back into service (Tr. 743).

Kevin Jones testified that he was unaware, prior to August 31, that Donohue had a work rule requiring that all equipment be grounded (Tr. 752). He was never instructed to ground all equipment (Tr. 752). Jones testified that he had come across equipment that was not grounded, and plugs that did not have anywhere for the ground to go (Tr. 751, 753). Jones testified that he had temporarily fixed equipment to get it running (Tr. 753). Jones stated that it was not the shift people's job to permanently fix equipment; that responsibility was day shift's, though sometimes weeks would go by before equipment was permanently fixed (Tr. 754). Jones testified that if he felt a piece of equipment was unsafe, he would contact his supervisor before putting it back into service (Tr. 757). Jones did not know of any incidents where supervisory personnel knew of a violation of safety rules, but did nothing about it (Tr. 757).

Larry Cook stated that he was never told of Donohue's work rule requiring that all equipment be grounded, though, as an experienced electrician, he knew that it was appropriate, when wiring machinery, to ground it (Tr. 761, 764). Cook testified that he had come across ungrounded equipment at Donohue (Tr. 761). Cook did not feel that he had the authority to shut a piece of equipment down (Tr. 761). If he found ungrounded, or otherwise unsafe equipment, Cook stated that he would notify his supervisor, and if directed, he would ground such equipment (Tr. 764-65).

A.W. Davidson has been an electrical and instrument (E&I) technician with Donohue for 35 years (Tr. 767). Davidson testified that he had never specifically been instructed to ground all equipment (Tr. 770). However, he assumed that all equipment should be grounded (Tr. 770). Davidson did not believe he had the authority to stop a job without the permission of the maintenance or production supervisor (Tr. 771). Davidson testified that he is president of the International Brotherhood of Electrical Workers (IBEW) local, and was in a position to know of any disciplinary actions taken against the local's members (Tr. 773). Davidson could remember only one instance, other than the termination of Robert Hearne, when a member of his union was disciplined for violating a safety rule (Tr. 772-74). Davidson was aware of one additional instance when written reprimands were issued to plant employees who were not members of the union (Tr. 775). Davidson testified, however, that he was also aware of instances where employees violating safety rules were not disciplined (Tr. 778-79).⁶ It was Davidson's opinion that safety rules were not consistently enforced at Donohue (Tr. 781).

Discussion

In order to establish an unpreventable employee misconduct defense, the employer must establish that it had: established work rules designed to prevent the violation; adequately communicated those work rules to its employees (including supervisors); taken reasonable steps to discover violations of those work rules; and effectively enforced those work rules when they were violated. *New York State Electric & Gas Corporation*, 17 BNA OSHC 1129, 1995 CCH OSHD ¶30,745 (91-2897, 1995).

The record establishes that Donohue had a work rule which required that portable electric tools be grounded. Its electricians were all provided with a safety handbook containing the rule when they were hired. Though none of the electricians testifying at the hearing had ever been specifically instructed that Donohue had a safety policy requiring that all such equipment be grounded, each one knew that it was appropriate to ground all electrical equipment. Though the portable welder itself was apparently overlooked, it is undisputed that Donohue conducted routine checks to assure that portable equipment was grounded. Though Donohue's electrician's testified that they found ungrounded equipment in the plant, it was not clear whether the subject

⁶ Those incidents involved: asbestos removal, confined space entry, asbestos removal and mercury clean-up, respectively.

equipment fell under the work rule, which applies only to *portable* equipment, and none stated that they left portable equipment ungrounded after having discovered it. There was no evidence that Donohue's supervisory personnel knew of any uninspected or ungrounded portable equipment⁷

Donohue's electricians, including Robert Hearne, were hired because they had demonstrated educational and practical electrical experience. It was not unreasonable for Donohue to assume that these trained individuals were familiar (as indeed they were) with basic electrical principles, including grounding requirements. This judge cannot say that Donohue failed to exercise due diligence in communicating and/or enforcing its work rule requiring the grounding of portable equipment where: 1) its electricians were hired on the basis of their electrical training and experience; 2) the subject work rule was one of the basic principles of the electrical trade; and 3) a specific part of the electricians' job was to periodically inspect equipment for compliance with said work rule.

This case does not involve the oft-found situation where a supervisor engages in misconduct and is exposed to the hazardous condition. The Commission has found that to be strong evidence of lax enforcement of the employer's safety program. *Baytown Construction Co.*, 16 BNA OSHC 1705, 1710, 1992 CCH OSHD ¶29,741, p. 40,414 (No. 88-2912-5, 1992). Richard Thomas, Hearne's supervisor, was sufficiently trained in the hazards of and procedures necessary for the grounding of electrical equipment. Hearne was a non-supervisory employee. The field decision he made was a departure from a specific work rule. He possessed a radio for contacting Thomas and a replacement plug was readily available from a nearby storage room. Unlike sudden rescue attempts in confined spaces, it was not foreseeable that Hearne would depart from the company's established work rule based on the facts set forth above.

In addition, there is no evidence that any prior failure to ground portable electric tools went undisciplined. Richard Thomas, Hearne's supervisor, as noted above, credibly testified that he was not aware of any circumstances in which an electrician discovered but failed to ground an ungrounded piece of machinery. An electrician who failed to ground a piece of machinery would receive, at a minimum, oral counseling. Also, Commission precedent does not rule out

⁷ It was not established that the single incident described by Hearne, in which a management determination was made to leave equipment ungrounded, involved portable equipment (Tr. 232).

consideration of post-inspection discipline, provided it is viewed in conjunction with pre-inspection discipline. *R. Zoppo Co.*, 9 BNA OSHC 1392, 1981, CCH OSHD ¶25,230 (No. 14,884, 1981). Here, Donohue, after a thorough in-house investigation, terminated Mr. Hearne. The merits of the termination are appropriately before an arbitrator for resolution. The record supports a finding that Donohue's pre-inspection and post-inspection disciplinary procedures when viewed together, exhibit a serious concern for safety.

In reaching my conclusion, it is found that Mr. Hearne's violative conduct was idiosyncratic behavior. This case is tragic. Both parties have presented an excellent record and post-trial briefs. The issue of unpreventable employee misconduct has been a very close one. The dispositive factors have been that Mr. Hearn was a very experienced journeyman electrician. He was well trained in the area of grounding electrical equipment. His failure to ground the equipment was a serious mistake of judgment that violated both OSHA standards and basic NEC electrical standards. The rule itself is basic. Both parties' experts agreed that it was against basic electrical concepts to fail to ground the welding machine. If this was a matter where an employee, even an experienced journeyman electrician, was allowed broad discretion to perform his work by whatever means the employee considered reasonable and appropriate in the circumstances, the result would have been different. In such a case, the fact that Hearne was a journeyman electrician with a known record of safe work performance would not relieve Donohue of the responsibility to affirmatively enforce its safety rules. Donohue's specific work rules as applied to this work situation did not give employees too much discretion in identifying unsafe conditions. I find Respondent could reasonably rely on its employee Hearne to recognize and avoid the dangerous condition of not grounding the welding machine he encountered at the workplace.

For the reasons stated above, I find that Donohue had a work rule which required the grounding of all portable electrical tools. Given the nature of the electrical staff's training and the scope of their job duties, the rule was adequately communicated. Respondent has established its affirmative defense of unpreventable employee misconduct. The citation is therefore vacated.

Serious Citation 1, item 1b

1910.334(a)(3)(ii) provides:

Attachment plugs and receptacles may not be connected or altered in a manner which would prevent proper continuity of the equipment grounding conductor at the point where plugs are attached to receptacles. Additionally, these devices may not be altered to allow the grounding pole of a plug to be inserted into slots intended for connection to the current-carrying conductors.

Facts

The Secretary showed that the cord on the welder had been changed out, or altered, in that the cord in use on August 31 was not the one originally supplied with the welder. CO Wilkins noted that in Steve Harvey's deposition, Harvey stated that because the spot welder is a single-phase piece of equipment, only three-wire cords are supplied with the welder as manufactured (Tr. 353). Harvey stated that the cord that was on the welder on August 31, 1998 had been altered, *i.e.*, a four wire cord had been substituted (Tr. 354; deposition of Steve Harvey, p. 31-33; Exh. C-38). Robert Loggins testified that he recalled the power cord being replaced (Tr. 476).

Discussion

The Violation. The record establishes that changing out the cord and plug would not necessarily prevent continuity of the ground. The welder could have been grounded by correctly attaching the ground wire to the body of the plug. This alteration does not establish a violation of the standard.

However, as discussed above, it is clear that on August 31, 1998, the plug of the subject welder was connected, or snipped off so as to prevent connection, in a manner which prevented continuity of the grounding conductor. The Secretary has shown that, on that date, the standard was violated.

Employee Misconduct. As in the item above, Donohue relies on the affirmative defense of employee misconduct. Donohue maintains that its work rule requiring that all portable electrical equipment be grounded was adequately communicated and enforced, and should have prevented the cited violation, barring the misconduct of Robert Hearne. This judge agrees. For the reasons stated above this item is vacated.

Serious citation 1, item 3

The citation alleges:

29 CFR 1910.334(a)(4): Portable electric equipment and flexible cords used in highly conductive work locations, or in locations where employees were likely to contact water or conductive liquids, were not approved for those locations:

- a) In the ground wood place wood drum No. 5. A Model 600 stainless steel spot welder was with out a ground or special protection in a wet and high humidity location.

Facts

The drum decker consists of a drum, approximately 8 feet in diameter and 15 to 20 feet long. The drum sits in a big stainless steel vat, and as it turns separates wood pulp from the water in the vat (Tr. 36, 135). Russell described the operation as a wet process, and stated that there was some water on the floor, and that both his clothing and leather gloves were wet on the day of the accident (Tr. 111, 115, 135). Russell testified that he had been shocked by the welder before when his hands and/or gloves were wet (Tr. 131-32).

Loggins testified that it was pretty wet around the No. 5 drum decker, and that his gloves were wet on the day of the accident (Tr. 473, 478).

Tommy Maxie, a screen room helper at Donohue on August 31, 1998, testified that he was part of the crew who washed down the decker that morning for maintenance (Tr. 481). Maxie testified that he checked the vat after the accident, and found that the dump valves were open on the decker and that there was very little water in the bottom of the vat (Tr. 485).

Mosely testified that there was not a lot of water around during the re-facing operation, but that it was hot and humid in August, and that his clothes and gloves were wet from sweat (Tr. 38). Mosely had gotten a “tingle” from the welder before, and testified that it was quite common to be mildly shocked when using it (Tr. 28, 76-77). Mosely identified dried wood pulp and wet pulp and water mixed on the floor in the Secretary’s photographs of the drum decker area (Tr. 40-42; Exh. C-7, 16, 17, 18, 19, 20, 29). In addition there was dried pulp on the spot welder itself (Tr. 91-92).

Robert Loggins testified that there was no water actually on the spot welder’s case at the time of the accident (Tr. 465).

Burleson testified that when the welder was examined after the accident, there was no evidence of corrosion to indicate that there had ever been any water inside the unit (Tr. 515).

Terry Wilkins opined that the No. 5 drum decker area was a “wet location,” in that there could be standing water in the area where the spot welder was used, and because sodium hydroxide, which is generally used in pulping operations, makes water more conductive (Tr. 280). Wilkins

testified that Article 100 of the National Electric Code defines wet locations as “distillations underground or in concrete slabs or masonry, in direct contact with the earth and locations subject to saturations with water or other liquids, such as, vehicle washing areas and locations exposed to weather and unprotected.” (Tr. 282).

Burleson did not consider the decker area a wet location, because there was no standing water in the decker’s vat (Tr. 533). Moreover Burleson did not believe that the spot welder, if properly grounded, posed an unreasonable risk when operated in a damp environment (Tr. 535). The spot welder has rubber wheels, and is elevated off the floor of the drum decker area (Tr. 535). The S-O cord on the welder is suitable for damp locations (Tr. 555).

In his deposition Sonny Drake testified that Donohue’s 600 spot welder was not UL approved (Deposition of Sonny Drake, p. 11). Drake stated that approval could not be obtained until an automatic shut-off thermostat was installed on the model; otherwise the model design was identical (Tr. 312; Deposition, p. 11-12). Drake stated that the model was specifically developed for the pulp and paper industry for the exact purpose it was used (Deposition, p. 16). Drake testified that it was safe to operate the spot welder in the kind of damp environment where the drum decker was located (Deposition, p. 18-19). Drake testified that the welder would pose a hazard only if the operator was actually standing in water, or if the welder was sprayed down, and water had gotten into the cabinet itself (Deposition, p. 20).

Wilkins stated that, based on the depositions of Steve Harvey and Sonny Drake, he did not believe that the model 600 spot welder was approved by any nationally recognized testing laboratory for any location, wet, dry or damp, prior to sometime in 1997 (Tr. 289-91, 320). Wilkins stated that the spot welder at issue in this matter was manufactured sometime in the mid

'80's; the welder was loaned to Donohue in 1988 (Tr. 289).⁸ Wilkins testified that the plug itself was listed as a watertight plug by UL (Tr. 321), but, based on Hearne's testimony, Wilkins believed that the plug had not been maintained, and so lost its approved status (Tr. 318-322).

Discussion

The cited standard provides:

Conductive work locations. Portable electrical equipment and flexible cords used in highly conductive work locations (such as, those inundated with water or other conductive liquids), or in job locations where employees are likely to contact water or conductive liquids, shall be approved for those locations.

Although the drum decker vat had been drained prior to the refacing project, the wood pulp operation is a wet process, and there was generally water, or other conductive liquid in the drum decker area. Some liquid remained in the drum decker vat and on the floor during the refacing process. The employees present on August 31 testified that it was very humid in the drum decker area, that their clothes, gloves and skin were wet. The evidence establishes that the drum decker area was a highly conductive work location, because there was generally water and/or conductive liquid in the area with which employees were likely to come in contact.

It is clear that the model 600 spot welder in use at Donohue had not received any kind of approval, and so did not comply with the requirements of §1910.334(a)(3)(ii).

Penalty

A penalty of \$7,000.00 was proposed for this item.

Donohue is a large company, with approximately 1,000 employees; 250 in the cited plant (Tr. 370). Donohue's millwrights had been exposed to the cited hazard intermittently since 1988, whenever refacing a drum decker.

CO Wilkins testified that a piece of equipment not approved for a conductive work location could expose employees to the danger of electrical shock, which could result in death (Tr. 325-26). Wilkins could not testify as to the precise hazard, because he did not know under what conditions it was safe to operate the welder, because there was no approval by any testing laboratory (Tr. 326). The record indicates that it was quite common for the millwrights to

⁸ In 1988, SCAPA was known as National Filtration; Donohue was then Champion (Tr. 515, Drake's deposition; Exh. , p. 13).

receive a mild shock when using the welder with wet gloves. The record does not, however, support Wilkins opinion that the lack of approval could lead to serious electrical shock or electrocution. On the contrary, it appears that the welder eventually obtained UL approval without any major design changes. There is no evidence that the addition of the automatic shut-off thermostat required for the model 600's approval increased the welder's safety in conductive environments. In short, this judge believes that the gravity of this item was overstated.

Taking into account the relevant facts, I find that a penalty of \$1,000.00 is appropriate.

ORDER

1. Citation 1, item 1a, alleging violation of §1910.255(c)(6) is VACATED.
2. Citation 1, item 1b, alleging violation of §1910.334(a)(3)(ii) is VACATED.
3. Citation 1, item 3, alleging violation of §1910.334(a)(4) is AFFIRMED, and a penalty of \$1,000.00 is ASSESSED.

/s/
Stanley M. Schwartz
Judge, OSHRC

Dated: March 13, 2000