

UNITED STATES COURT OF APPEALS  
FOR THE FIFTH CIRCUIT

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No. 00-60673

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TRINITY MARINE NASHVILLE, INC.,

Petitioner,

VERSUS

OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION; ELAINE CHAO,  
SECRETARY OF LABOR, US DEPARTMENT OF LABOR,

Respondents.

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Petition for Review of Final Order of the Occupational Safety and  
Health Review Commission

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December 5, 2001

Before REAVLEY, HIGGINBOTHAM and PARKER, Circuit Judges

ROBERT M. PARKER, Circuit Judge:

Petitioner Trinity Marine Nashville, Inc., ("Trinity") seeks relief from the final order of an Occupational Safety and Health Review Commission ("OSHRC") panel upholding certain safety violation citations against the company issued in 1997 by inspectors of the Occupational Safety and Health Administration ("OSHA"). These citations were based on the interpretation of the

Secretary of Labor ("Secretary") of various articles of the Occupational Safety and Health Act ("OSH Act"). We hereby REVERSE the OSHRC final order and VACATE the citations.

#### **I. BACKGROUND AND PROCEDURAL STATUS.**

Trinity owns and operates a shipyard in Ashland City, Tennessee, engaged in the construction of river barges which are approximately 50 feet wide and 200 feet long. Several barges are usually under construction at any time throughout the shipyard facility. Because of the number of large barges and the size of the shipyard, construction requires the extensive use of long electrical power cables<sup>1</sup> to run drop lights, welding machines, grinders, fans and other equipment. One type of cable is the familiar extension cord carrying 120-volt electricity. Over time, the insulated extension cords are likely to become worn or frayed. When such wearing on a cord exceeds superficial nicks and scratches, but the cord is still salvageable, Trinity typically has restored the cord to useful service by splicing or by wrapping the excessively frayed length with insulated tape covered by friction tape. Trinity, and the shipbuilding industry in general, has followed this procedure for decades.<sup>2</sup>

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<sup>1</sup>Trinity characterizes the requirement as being for literally miles of different types of electrical cords and cables. The Secretary does not dispute this characterization.

<sup>2</sup>"Industry practice has always been that a properly repaired cable may be returned to use because after it is repaired it is no longer worn or frayed." See Petition for Review of Final Order of the OSHRC, at 4. Also, "OSHA's position [regarding repair of worn

To facilitate the movement of tools and personnel, the shipyard uses portable electrical plug-in boxes. Between 50 and 60 plug-in boxes are moved to various locations as needed. These boxes are framed of wood and contain several wired electrical receptacles providing power to longer extension cords, cables and tools. In 1989, an OSHA compliance inspector cited Trinity's<sup>3</sup> use of these plug-in boxes because they were not waterproof. OSHA withdrew the citations, however, upon a showing by Trinity that metal-cased plug-in boxes were more hazardous in the shipyard environment and that there was no safer product than the wood-framed plug-in boxes.

On July 23, 1997, a Trinity employee was electrocuted and killed after plugging a drop light into a plug-in box which had been miswired. One result of this event was an immediate investigation and inspection of the shipyard by OSHA inspectors. At the conclusion of the inspection, OSHA issued two citations to Trinity, each encompassing multiple items or discrepancies. Certain of the items were withdrawn by the Secretary and the remaining citations were tried before an Administrative Law Judge

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or frayed cables] is contrary to . . . 30+ years of industry practice . . . ." See Amicus Curiae Brief of Shipbuilders Council of America, at 1.

<sup>3</sup>The 1989 citation was to Trinity's predecessor, Nashville Bridge. Trinity's Personnel Manager, Jim Smitson, was employed in that capacity by Nashville Bridge also and provided testimony regarding the imposition of the citation and the company's understanding of the impact of its withdrawal.

("ALJ"), who affirmed them. Trinity appealed to the OSHRC, which affirmed the findings of the ALJ.

Trinity has appealed the determination of the OSHRC to this court. Specifically, there are two issues. First, whether an OSHA regulation prohibiting the use of "worn or frayed" extension cords of the type cited denies the continued use of cords repaired in the manner described, with insulation tape and friction tape. Second, whether Trinity was entitled to notice that OSHA had determined that the wood-framed plug-in boxes were unsafe or otherwise unsuitable, after having withdrawn the same citation in 1989, before being cited in this instance.

## **II. Standard of Review.**

We are bound by the OSHRC's findings on questions of fact and reasonable inferences drawn from them if they are supported by substantial evidence on the record considered as a whole even if this court could justifiably reach a different result *de novo*. See *H. B. Zachry Co. v. OSHRC*, 638 F.2d 812, 815 (5th Cir. Unit A Mar. 1981); 29 U.S.C. § 660(a). The OSHRC's legal conclusions are reviewed as to whether they are "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." See *Corbesco, Inc. v. Dole*, 926 F.2d 422, 425 (5th Cir. 1991); 5 U.S.C. § 706(2)(A).

We review the Secretary's interpretation of an OSHA regulation "to assure that it is consistent with the regulatory language and

is otherwise *reasonable*." See *Martin v. OSHRC*, 499 U.S. 144, 156 (1991)(emphasis in original).

### **III. Analysis.**

#### **A. Worn or Frayed Cord.**

The regulation governing the use of cords or cables for portable electric tools cited against Trinity by the OSHA compliance inspector applies vertically to the ship repair, shipbuilding and shipbreaking industry. See 29 C.F.R. § 1915.132. It specifies that "[w]orn or frayed electric cables shall not be used." *Id.* § 1915.132(d).

The Secretary has interpreted this statement to mean that a power cord which is worn or frayed, beyond "superficial" nicks and impressions, may not be used under any circumstances, even if repaired with insulating tape such that the cord is returned to its original insulation value. The only way to preserve a worn or frayed cable for further service, in the Secretary's interpretation, is to cut out the damaged portion of the cable and attach a new plug or connector to its end. The result would be, for instance, a formerly 100-foot long cable with a frayed spot in the middle being turned into two nearly 50-foot long cables with new plug connectors attached to their ends. The Secretary has not formally expressed this interpretation.

On the other hand, Trinity's decades-long practice had been to repair such worn or frayed cords with insulating and friction tape.

It was this practice which was cited by OSHA during the 1997 investigation and inspection. Trinity alleges that the practice is a standard within the industry and that OSHA compliance inspectors have never cited the practice during any prior inspection. Further, Trinity challenges the interpretation as unreasonable and in conflict with regulations generally permitting repair of other types of electric power cables.

For example, regulations generally governing electrical safety-related work practices regarding the use of equipment require that:

If there is a defect or evidence of damage that might expose an employee to injury, the defective or damaged item shall be removed from service, and no employee may use it until repairs and tests necessary to render the equipment safe have been made.

See 29 C.F.R. § 1910.334(a)(2)(ii). Therefore, the regulation at least contemplates allowing repairs to be made to electrical equipment after a defect has been identified, rendering the equipment safe to use. The regulations also permit splicing and repairing:

Flexible cords shall be used only in continuous lengths without splice or tap. Hard service flexible cords No. 12 or larger may be repaired if spliced so that the splice retains the insulation, outer sheath properties, and usage characteristics of the cord being spliced.

See 29 C.F.R. § 1910.305(g)(2)(ii). The types of worn and frayed electrical cable at issue in the instant case are not necessarily "hard service flexible cords No. 12 or larger." The controversy,

however, is not over splicing those cables. The controversy is over whether Trinity may return a worn or frayed electrical cable to service by repairing the frayed area with insulation tape such that it retains its insulation characteristics. The regulation just quoted is in accord with such an interest.

The parties agree that each of the regulations just quoted apply horizontally to all workplaces while § 1915.132 applies vertically, only to shipyards. There is also no disagreement that a vertical regulation within an industry supercedes a general, horizontal regulation. Regardless, where the vertical regulation does not address material in the horizontal regulatory scheme, the latter applies.

Even within the vertical shipyard regulations, certain repairs may be made to electrical cables. Arc welding cables may be spliced and/or taped when their outer insulation has been damaged. See 29 C.F.R. § 1915.56(b); Secretary's Post-Argument Memorandum, at 2. In the case of a welding cable which "becomes worn to the extent of exposing bare conductors, the portion thus exposed shall be protected by means of rubber and friction tapes or other equivalent insulation." See 29 C.F.R. § 1915.56(b)(4). The Secretary, however, argues that this standard is inappropriate when considering worn or frayed electric extension cables because such cables carry 120 or 240 volts of electricity. The arc welding circuits are limited to 80 to 100 volts and typically operate at

voltages not higher than 46 volts. Because "[t]he lower the voltage, the lower the risk of electrocution or serious injury," see Secretary's Post-Argument Memorandum at 4, the Secretary asserts that the regulation permitting repair of the lower-voltage welding cable is reasonable even while her interpretation of § 1915.132(d) prohibits similar repair of electrical extension cords.

This argument does not take into account the effect of the amperage or flow of current in the respective circuits. The amount of heat generated by an arc welder depends upon the amperage of the current flowing through it. See *Harnischfeger Corp. v. Miller Elec. Mfg. Co.*, 173 F. Supp. 45, 47 (E.D. Wis. 1959). The current generating such heat is sufficient to melt metal pieces to join them. *Id.* The amperage controlling that amount of current can be regulated over a range of values in an arc welder to meet the requirement of the welding job while maintaining a constant voltage. *Id.* Arc welders approved for use in shipyards are rated to use from 100 to 600 amps of current in accordance with Requirements for Electric Arc-Welding Apparatus, NEMA EW-1-1962, part 2, page 2. See Secretary's Post-Argument Memorandum at 3. Thus, the power out in an arc welding circuit is a function of controlling amperage, or current flow, with a constant voltage which is maintained relatively low in relation to ordinary working electrical lines.

However, even a low amperage can allow an electric arc



sufficient to burn or start a fire. See *Howard v. Sears, Roebuck & Co.*, 437 F. Supp. 883, 894 (S.D. Miss. 1977)(15-amp fuse on household current permitted a 1500-watt electric arc causing a fire to flash). Electric line overload will also cause a fire. See *Johnson v. Knight*, 459 F. Supp. 962, 965-66 (N.D. Miss. 1978)(three chandeliers each drawing 960 watts of power for 2880 watts total on 120-volt household power drew 24-amp current, overloading wire only rated for 20 amps and caused fire).

Using the same formula, a welding line carrying 46 volts and 600 amps of current will produce 27,600 watts of power. The Secretary's argument would advise the court that this is safer than an ordinary electrical extension cord so as to allow the repair of the former and not of the latter when worn or frayed. Considering that a human can be burned or electrocuted by the lower wattage produced in household electrical circuits at low amperage, see *Johnson, supra*, the Secretary's argument is unreasonable.

The Secretary also argues that OSHA takes cost as well as degree of risk into account in drafting safety standards. See *National Grain & Feed Ass'n v. OSHA*, 903 F.2d 308, 311 (5th Cir. 1990)(safety benefits of OSHA standard must be reasonably related to its costs). Therefore, the Secretary cites the cost of replacing welding cables, which are much thicker *because they carry a much higher current* and thus are more expensive than extension cords, in conjunction with the "lower risk of injury from welding

cables," as a reasonable justification for allowing their repair. The Secretary's cost-risk analysis does not compare the actual volume of welding cables used in the Trinity shipyard, nor any other shipyard, to the total number of electrical cables used and their related costs. Admittedly, there are "miles" of electrical cables in use at Trinity. Without reviewing the actual cost involved in removing a worn or frayed extension cord from service, or the cost of cutting out portions of such cords to attach a new plug connector and thereby shortening the useable cable, the Secretary's cost-risk analysis has little meaning in this context and is unreasonable.

Finally, the Secretary's interpretation of § 1915.132(d) must be consistent with its regulatory language. In this case, the Secretary interprets the phrase, "[w]orn or frayed electric cables shall not be used" to mean that such cables cannot be repaired so as to keep them intact. The language does not, however, specifically impart that meaning. The Secretary admits that OSHA has cited violations of § 1915.132(d) on 76 occasions in the 30 years prior to this appeal, none of which occurred at the Trinity facility. None of those earlier citations are in the record to show whether they addressed the type of repairs under review here. As the Secretary points out, an agency interpretation must be expressed in a formal, authoritative manner. *Paralyzed Veterans of America v. D.C. Arena L.P.*, 117 F.3d 579, 587 (D.C. Cir. 1997).

There, petitioners were not entitled to rely on a position taken in a speech by a mid-level agency official in the face of a formal technical assistance manual which had been previously published. As that court stated, if the supplement had not been issued beforehand, the comments in the speech might have taken on added significance. *Id.* Here, there was no formal general announcement made of the Secretary's interpretation of § 1915.132(d) before the citation to Trinity was issued. The first time such an interpretation was formally made was in an OSHA Standards Interpretation and Compliance Letter dated January 16, 1998, which addressed a similar regulation, but not specifically the shipyard regulation in controversy here. When viewed in connection with § 1915.56(b)(4), and without other formal guidance, the reasonable shipyard employer could well understand the Secretary interpreted § 1915.132(d) as a consistent part of the same overall regulatory scheme.

On the bases that the Secretary's interpretation of 29 C.F.R. § 1915.132(d) in terms of safety and cost is unreasonable and that it is inconsistent with the overall, formally published regulatory scheme, this citation is vacated.

#### **B. Wood-framed Plug-in Boxes.**

OSHA cited Trinity for its use of wood-framed electrical plug-in boxes in the shipyard on the basis that they are not waterproof:

Enclosures for damp or wet locations. (1) Cabinets, cutout boxes, fittings, boxes, and panelboard enclosures in damp or wet locations shall be installed so as to prevent moisture or water from entering and accumulating within the enclosures. In wet locations the enclosures shall be weatherproof. (2) Switches, circuit breakers, and switchboards installed in wet locations shall be enclosed in weatherproof enclosures.

See 29 C.F.R. § 1910.305(e).

In a 1989 inspection, OSHA cited Nashville Bridge's use of the same wood-framed plug-in boxes for reasons similar to those herein. During a subsequent, informal conference, OSHA withdrew the citation. Trinity acquired Nashville Bridge in 1995. Personnel Director Jim Smitson was present during the 1989 OSHA inspection and testified that it was his, and Trinity's, understanding that the wood-framed boxes were satisfactory for use in the shipyard. OSHA never cited the use of the boxes during any other compliance inspection undertaken after 1989. The Secretary now contends that the boxes are unsafe in accordance with § 1910.305(e) and that OSHA's withdrawal of its 1989 citation did not impute a seal of approval because OSHA did not specifically tell Trinity that the boxes were fit for use.

A common requirement for the promulgation of interpretations and decrees by an administrative agency is that of notice to the regulated parties. See *Satellite Broadcasting Co., Inc. v. FCC*, 824 F.2d 1, 4 (D.C. Cir. 1987)(if an agency "wishes to use [an] interpretation to cut off a party's right, it must give full notice

of its interpretation").

The Secretary is entitled to use the citation process to provide the initial publication of a previously unannounced interpretation of an OSH regulation in accordance with the requirements of 29 U.S.C. § 658(a). See *Martin*, 499 U.S. at 157 (when embodied in a citation, the Secretary's interpretation assumes a form expressly provided for by Congress). However, the Secretary's "decision to use a citation as the initial means for announcing a particular interpretation may bear on the adequacy of notice to regulated parties, the quality of the Secretary's elaboration of pertinent policy considerations and on other factors relevant to the reasonableness of the Secretary's exercise of delegated lawmaking powers." *Id.* at 158 (citations omitted). When reviewing such actions, a court may examine prior interpretations, even those which were published by less formal means, to determine whether the Secretary has consistently applied the interpretation embodied in the citation, as a factor bearing on the reasonableness of the Secretary's position. *Id.* at 157.

Where a company has been informed by an OSHA inspector that its procedures or processes are safe and satisfactory, the company has a valid fair notice complaint if cited for the same procedures in a later inspection. See *Secretary of Labor v. Miami Industries, Inc.*, 15 O.S.H. Cas. (BNA) 1258 (Rev. Comm'n 1991), *aff'd in part*, 983 F.2d 1067 (6th Cir. 1992) (where company had explicitly been

told by compliance inspector that its machine guarding installation was satisfactory but was later cited for the same installation, the citation was withdrawn on fair notice grounds). The Secretary distinguishes the instant case, however, because Trinity was not explicitly told that the wood-framed plug-in boxes were satisfactory under § 1910.305(e). We hold that the circumstances of this case are sufficient to show that Trinity had a fair expectation that OSHA found the electrical boxes satisfactory for use under § 1910.305(e) when OSHA withdrew its citation in 1989.

Section 1910.305 is a general regulation governing electrical wiring methods, components and equipment for general use. Subsection (e) specifically governs electrical enclosures for use in damp or wet locations. A shipyard, such as Trinity, is inherently a wet location. That condition may pertain because some of the work is conducted outdoors or because the barges, still under construction, may be placed in the water or floated. Trinity's predecessor, Nashville Bridges, was cited for the use of the wood-framed boxes in that type of wet environment, specifically because it was a wet environment. The citation was later withdrawn. The Secretary argues that OSHA did not explicitly state the boxes were satisfactory for continued use; there is, however, no dispute that OSHA did not proclaim that the boxes were unsatisfactory for continued use, either. When viewed in the "wet environment" context of § 1910.305(e) and with Trinity's status as

a shipyard, OSHA's failure to specifically warn Trinity that the boxes did not conform to that section while withdrawing the citation is implicit, if not explicit, approval. Trinity is entitled to notice that OSHA considered the boxes unsafe in the wet environment after such implicit approval.

The Secretary has the right to interpret § 1910.305(e) in the manner briefed to this court. Further, OSHA has the right to cite nonconforming business entities for safety related regulatory violations. This court can imagine that a compliance inspector could enter Trinity's workplace, for example, and determine that some number of the wood-framed plug-in boxes had deteriorated or were broken open and therefore were not in proper operating condition for the wet environment and justifiably cite the transgression. From the photos in the record, some of the boxes appeared to be in such a condition. That is not, however, what OSHA did. Instead, it cited the boxes as being a *per se* violation because unpainted wood is not waterproof. That may be a reasonable interpretation of § 1910.305(e). Because OSHA at least implicitly approved the use of the boxes in similar conditions, under which it would reasonably expect a shipyard to continue operating, such an interpretation now is not a consistent application of the interpretation applied earlier. On that basis, the Secretary's position, now, that Trinity should be cited for using the boxes, and the use of a punitive citation to initially publish such an

interpretation, is unreasonable. *See Martin*, 499 U.S. at 157.

The 1997 interpretation regarding wood-framed electric plug-in boxes was initially published as a citation against Trinity after Trinity's prior use of those boxes was implicitly approved in 1989. That interpretation is inconsistent and therefore unreasonable. Trinity did not have fair notice of the differing interpretation. This citation is vacated.

#### **IV. Conclusion.**

For the reasons stated herein, we hold that the Secretary's interpretation of 29 C.F.R. § 1915.132(d) was unreasonable as applied to electric cable repairs and that Trinity did not have fair notice that its use of wood-framed plug-in boxes violated 29 C.F.R. § 1910.305(e). The penalties assessed against Trinity on those bases must be set aside. Therefore, the opinion of the Occupational Safety and Health Review Commission is hereby REVERSED and the citations issued against Trinity are hereby VACATED.