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PLAINTIFF'S EXHIBIT

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DIRECTIVE 100-10 - CLARIFICATION OF SPLICES AND TAPS

The use of splices and taps for flexible cords and cables is clarified in Occupational Safety and Health Administration Program Directive 100-10 issued on August 28, 1972.

OSHA received many requests for clarification regarding the use of splices and taps in the flexible cords of electrical devices and utilization equipment.

Section 400-3 of the National Electrical Code states that flexible cord may be used only for (a) pendants, (b) wiring of fixtures, (c) connection of portable lamps and appliances, (d) elevator cables, (e) wiring of cranes and hoists, (f) connection of stationary equipment to facilitate their frequent interchange, (g) prevention of the transmission of noise or vibration, and (h) facilitating the removal or disconnection of fixed or stationary appliance for maintenance or repair.

In initial field usage and installation of flexible cord as listed, splicing or tapping is not permitted. The restriction applies only to initial installations.

It is not intended to preclude the use of splices and taps when properly made in factory manufactured assemblies or in the repair of flexible cord when made in accordance with the provisions of Section 110-14 (b) which states:

"Splices. Conductors shall be spliced or joined in splicing devices suitable for the use or by brazing, welding, or soldering with a fusible metal or alloy. Soldered splices shall first be so spliced or joined as to be mechanically and electrically secure without solder and then soldered. All splices and joints and the free ends of the conductors shall be covered with an insulation equivalent to that of the conductors or with an insulating device suitable for the purpose."

In addition, the resultant splice for flexible cords must provide the flexibility and usage characteristics as that of the cord being spliced. Such repairs may be made by vulcanized splices or equivalent means such as systems using shrinkable materials.

NIOSH REGARDING CONDUCTING HAZARD EVALUATION

This information is a follow up to No. 26 Pfizer Occupational Safety and Health Report issued on April 10, 1972.

Final regulations concerning procedures for conducting occupational health hazard evaluations in workplaces will be issued soon by the National Institute for Occupational Safety and Health.

The regulations were proposed by NIOSH on March 17.

NIOSH is required to carry out evaluations of potentially toxic substances in the workplace at the request of employers under the Occupational Safety and Health Act. The regulations will be applicable to requests received from any employer or authorized representative of employees in establishments covered by the Act.

An authorized representative of employees, as defined by the regulations now in final draft form, may be either a representative for purposes of collective bargaining, or an employee who has written authorization from two or more employees who are employed in the workplace where the substance is normally found. Where there are three or less employees in the workplace, any one of the employees may be considered an authorized representative.

NIOSH is considering provisions for giving advance notice to employers, and authorized representatives of employees who request health hazard evaluations, except in cases where in the judgment of the NIOSH official, giving such notice would adversely affect the validity and effectiveness of the investigation. In the case of employee requests, the employer would be given advance notice along with the employee representative.

Failure to Notify

NIOSH Director Dr. Marcus Key said failure to give advance notice in the past "has impeded our hazard evaluation program due to the fact that the processes in question have sometimes not been in operation on the day of our visit or employers and employee representatives and other key personnel have not been available."

NIOSH could avoid possible misrepresentation of actual plant conditions by exercising its right to conduct private interviews with appropriate employees, Key said.

Copies of all final reports of health hazard determinations will be forwarded to the Department of Labor and the appropriate state agency, as well as to the requesting party. Each determination will, as a minimum, state the levels of concentration of the substances as they are found to exist, state whether or not there are potentially toxic effects from such concentrations, and provide the basis for those judgments.

The regulations will deal also with trade secrets and classified information, the taking of photographs and environmental samples, as well as other procedures related to the conduct of health hazard evaluations.

STANDARD REVISION PERMITTING ONE GALLON CONTAINERS

The standard for flammable and combustible liquids, 1910.106 (d)(2)(iii), was amended to permit use of one gallon glass containers by the Occupational Safety and Health Administration on September 14.

OSHA proposed an amendment to the standard for the size of glass and plastic containers for Class 1A and Class 1B flammable liquids February 23, 1972. No hearings were requested but several comments on the proposal were received.

A number of comments in opposition to the proposal emphasized the fragility of glass, requesting an upper limit of one quart for both 1A and 1B liquids. Some related the successful use in their own establishments of stainless steel safety cans (lined and unlined).

The principle issue is whether one gallon glass containers are safer than smaller size glass containers. If a one gallon glass container were broken more liquid would be spilled and a greater fire result. On the other hand, when four one quart or eight one pint containers are to be handled, the changes of breakage are greater.

Submitted statements showed that for certain reagents, residue upon evaporation and color shift are significantly greater if the reagent is stored in a metal container as compared with the same reagent stored in a glass container. The effect of such changes may be to compromise analytical techniques. Also, these same fine analysis techniques may require the use of substantial quantities of reagent as well as the maintenance of a quantity of a standard reagent over a long period of time.

After consideration of all relevant information, OSHA concluded that one gallon glass containers were safer than a large number of smaller glass containers.

OSHRC RULING - FAILURE TO CONDUCT OXYGEN TESTS.

A proposed penalty of \$700 was increased to \$900 for an employer's serious violation of section 5(a)(1) of the Occupational Safety and Health Act in not conducting appropriate tests to determine the sufficiency of oxygen prior to permitting its employees to enter a confined space, namely, a furnace.

The decision of Occupational Safety and Health Review Commission Judge James D. Burroughs involved Aro, Inc. (No. 465).

The furnace was a special atmospheric type used for heat treatment in several different operations performed by the employer. Argon gas was used in the furnace and was introduced to replace oxygen. The gas line to the furnace was controlled by two shut off valves and a flow meter. The employer relied on this system to assure safety in the furnace. A procedure was established whereby both valves were to be shut off and the flow meter checked prior to anyone entering the furnace.

Aro was issued four citations for serious violations following an accident in which two employees died upon entering the furnace to make repairs. Proposed penalties totalling \$2,800 were assessed.

The employer admitted that it did not conduct tests to determine respirable qualities of the atmosphere in the furnace, did not disconnect or blanket the argon piping system leading into the furnace, and did not have suitable rescue equipment convenient and readily available. Only one citation should have been issued under section 5(a)(1) of the Act, Burroughs said. He added that the issuance of four citations serves only to pecuniarily punish the employer for standards of conduct which the Secretary deemed warranted.

The only danger present at the time the two workers entered the furnace was the presence of an oxygen deficient atmosphere within the furnace caused by argon leaking into it, the judge said. The lack of rescue equipment and blanking the piping system would not have assured that sufficient oxygen was within the furnace, Burroughs stated. He said that the Act does not require these four separate measures all be undertaken by the employer in this case.

Aro recognized the hazard of argon asphyxiation in the furnace, Burroughs found. If the employer did not recognize the hazard, it was due to his failure to investigate the danger until the fatalities occurred, according to the judge.

The employer's reliance on the double valve system put the cart before the horse, in the opinion of Burroughs. "Such a system might be sufficient to insure that the flow into the furnace has ceased but it cannot assure the employee that there is sufficient oxygen inside to permit safe entry."

A penalty of \$900 was appropriate for the one serious violation as there was a severe potential for injury and the good faith of the employer was considerably tarnished, Burroughs concluded.

The judge's decision will become a final order of the commission if review is not directed within 30 days.

REFERENCE

Bureau of National Affairs Occupational Safety & Health Reporter, pages 416, 417, 419, 420, 425 and 426.