

September 2000



September 21, 2000

Safety Alert For Immediate Release

The Electrical Safety Authority and Ministry of Labour Issue A Safety Alert on Electric Stunning Equipment

Hazard Summary

A worker was fatally injured while working in the slaughtering area of a meat packing plant. The victim was raising an animal on the lift elevator at the holding pen. The cord of the stunning device, used to stun hogs in the same area, became entangled on the animal being lifted. The device was dislodged from its wall storage rack and fell on the concrete floor. The victim picked up the device and was electrocuted when he touched the energized prods.

Further investigation revealed that when the electric stunning device fell to the floor, the switch controlling voltage to the prods broke and the contacts became closed. The worker turned on the power at the control box, likely to determine if the device was still working. This action caused the stunning device prods to become continuously energized with about 680 volts. When the victim picked up the device, he inadvertently touched the live prods of the stunning device and was electrocuted. This electrical equipment was not certified or approved for use by the Canadian Standards Association (CSA), the Electrical Safety Authority (ESA) or any other recognized testing laboratory.

Locations and Sectors

Electric stunning equipment is commonly used in the animal slaughtering industry, in particular, for stunning hogs and poultry. Other locations may include the meat packing industry, abattoirs and operations where animal slaughtering occurs.

Applicable Legislation

- 1) The Occupational Health & Safety Act and Ontario Regulation 851/90 for Industrial Establishments including sections 40, 42, 42.1, 43, 44 and 44.1 respecting the suitability and certification of electrical equipment, worker training and education, lock out requirements and personal protective equipment.
- 2) The Electricity Act and Ontario Electrical Safety Code rules 2-022, 2-034, 2-202 and 10-406 respecting the approval, use, guarding and marking of electrical equipment and bonding to ground of conductive surfaces which could become energized.
- 3) Electrical Safety Authority (ESA) Bulletin 2-13-0 and ESA Specification ESA-SPEC-002-R0 sets out the minimum requirements for field evaluation approval, installation and use of animal stunning devices

The use of unapproved or modified stunning equipment or improper use of any electrical animal stunning device can result in serious injury or death. It is an offence to use unapproved or uncertified electrical equipment or to modify such approved equipment.

Precautions

Use only certified or approved and properly grounded electrical stunning equipment. The stunning prods carry lethal voltage. Never allow human contact with the energized prods.

Disconnect, lock out and tag out the power source when cleaning or maintenance work is required. Test and troubleshoot in accordance with regulatory requirements and manufacturer's specifications.

Provide workers and supervisors with information, instruction and supervision to ensure only properly trained personnel use the electrical stunning equipment.

Follow the operating instructions, specifications, precautions and procedures as set out in the manufacturer's manual.

When working in wet locations, protect the electrical stunning equipment by installing a ground fault circuit interrupter at the receptacle or on the circuit at the panel. Note: this will not provide ground fault protection of the stunning device prods because the prods operate through an isolation transformer.

Operators must wear appropriate personal protective equipment to protect themselves against electrical contact.

Conductive surfaces, such as livestock enclosures, that may become energized shall be bonded to ground.

Protect the stunner handle from falling or other inadvertent damage. Use an insulated shelf or hanger to rest the stunner handle on. Store the electrical stunning equipment in a safe, secure place when not in use.

Ensure regular inspection and maintenance of the electrical stunning equipment by a certified electrician or a qualified person, knowledgeable in this type of equipment.

For more information or assistance, please contact the Electrical Safety Authority (1-800-498-4600), Ontario Ministry of Labour (1-800-268-8013), Ontario Independent Meat Processors Association (1-800-263-3797), Industrial Accident Prevention Association (1-800-406-4272) or your health and safety association.

Ministry of Labour, Industrial Health and Safety Program, Eastern Region
Electrical Safety Authority, Eastern Territory
September 21, 2000. Revised (draft) September 14, 2001