

INFORMATION MEMORANDUM 82-X-59

TO: All OSH Directors, Supervisors and Field Personnel

FROM: William M. Lybrand, Director of OSH

SUBJECT: Subarticle 6, Section 1910.151(c), Medical Services and First Aid; Subarticle 7, Sections 1926.50 and 1926.51, Medical Service and First Aid, and Sanitation, Respectively; Applicable to Electric Storage Battery Charging and Maintenance Areas.

DATE: April 13, 1982

PURPOSE

This memorandum provides guidelines regarding eye wash and body flushing facilities required for immediate emergency use in electric storage battery charging and maintenance areas.

BACKGROUND

The referred sections, in general industry and construction, need clarification regarding its applicability to the hazards of electric storage battery charging areas and the potential exposure of employees to electrolyte(s). There is a clear need to identify the extent and suitability of minimum acceptable eye wash and body quick drenching facilities which are available to potentially exposed employees.

- a. The extent of potential employee exposure varies with workplace situations such as:
  1. Employee functions
  2. Type of electrolyte(s) and concentration
  3. Type and size of batteries
  4. Facility layout
  5. Personal protective equipment used.
- b. The need for eyewash and body quick drenching equipment varies with the factors noted in a. above. Therefore, judicious enforcement of the standards should provide for an evaluation of the contributing factors relative to the potential hazardous exposure, and should permit appropriate minimum assurances for adequate first aid and subsequent treatment.
- c. Various forms of eyewash equipment are available today. Many are of the portable or self-contained wall-mounted type which are limited in the quantity of water available for eyewash purposes, and usually do not provide for body drenching. This equipment may be used for compliance with the referred

standards only when it is not economically feasible to provide plumbed equipment and/or where the potential employee exposure to electrolyte(s) is determined to be slight. (See Program Directive number 76-1910.151/1923.403-1/1)

- d. Eyewash equipment should provide copious low-velocity flow of potable water at a suitable temperature of general between 60°F and 105°F.

## GUIDELINES

Compliance Personnel will evaluate the potential circumstances for employee exposure to electrolyte(s) in electric storage battery handling, charging and maintenance areas.

- a. The Compliance Officer or Industrial Hygienist shall document the following observation in the case file:
  1. Employee use of personal protective equipment.
  2. Type and chemical concentration of electrolyte(s).
  3. Special guards and/or precautions intended to provide for employee protection from electrolyte exposure.
  4. Based upon employee job functions, record the extent and type of probable employee exposure to electrolyte(s).
  5. Note the availability and location of eyewash and body flushing equipment/facilities. (An arrangement, which includes a hose equipped with a proper face and body wash nozzle, shall also be noted.)
- b. The Compliance Officer along with consultation with his Supervisor, and possibly with the Industrial Hygienist Section, shall evaluate the data documented in a. above. Where potential employee exposure to hazardous storage battery electrolyte(s) exists, the circumstances and extent of exposure shall determine the application of the following alternatives:
  1. The use of effective personal protective equipment in combination with an eyewash and body flushing station in near proximity to the work area(s), shall be deemed to provide adequate minimum protection for employees.
  2. In areas where the intent of possible exposure to electrolytes is small (i.e., such as auto garages, service stations and in certain industrial and construction situations), a specially designated pressure controlled and identified water hose equipped with a proper face and body wash nozzle which will provide copious amounts of low velocity potable water, or an appropriate portable eyewash device containing not less than one gallon of potable water which is readily available and mounted for use, is considered to provide minimum employee protection when proper personal protective equipment is used.
  3. In addition to emergency eye and/or face wash procedures, the employer shall ensure that adequate provisions have been established for the emergency care of employees exposed to eye or face contact with electrolytes.
  4. At construction sites and in commercial manufacturing facilities at locations where powered industrial trucks are parked for overnight storage

and routine battery recharging only, no need for emergency facilities exists unless potential exposure to electrolytes is substantiated. Where exposure is possible (i.e., servicing batteries) the provisions of b.2. and b.5. of the guidelines should be evaluated for applicability.

5. At construction sites and in commercial manufacturing facilities where batteries (such as industrial truck batteries) are serviced and handled, proper plumbed eyewash and body drenching equipment shall be available immediately adjacent to the work station(s) and within the work area regardless of the personal protective equipment required and used.
- c. Where employee exposure to hazardous electric storage battery electrolyte(s) exists and minimum protection measures are not provided, citations shall be issued as appropriate for violations of:
1. Subarticle 6, Section 1910.151(b) or Subarticle 7, Section 1926.50(c), a person or persons adequately trained to render first aid shall be readily available in the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees.
  2. Subarticle 6, Section 1910.132(a) or Subarticle 7, Section 1926.28(a), personal protective equipment for eye, face, head, and extremities, protective clothing and protective shields and barriers, shall be provided, used and maintained in a sanitary and reliable condition whenever it is necessary by reason of chemical hazards encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.
  3. Subarticle 6, Section 1910.151(c) and as adopted by Subarticle 7, Section 1926.51, where the eyes and body of any person may be exposed to injurious corrosive materials suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

#### EFFECTIVE DATE

This memorandum is effective upon receipt and will remain in effect until cancelled or superseded.