

# **Environmental Health and Safety**

# EMERGENCY EYEWASH AND SHOWER EQUIPMENT STANDARD OPERATING PROCEDURE (SOP)

Emergency eyewash stations and showers are not substitutes for eye and face protection and protective clothing. For assistance, please contact EHS at 372-227, or visit our <u>website</u>.

#### I. Location

a. Emergency showers and eyewash stations are required in chemical, biological, and radioactive laboratories. They are also required in shop areas where hazardous chemicals are used and/or acid batteries are charged. Eyewash stations and emergency showers should be located within 10 seconds unobstructed travel of the hazard; preferably within the laboratory/shop/work area; and preferably within 10 feet of the hazard.

## II. Design

a. Units must comply with ANSI Z358.1-2009 and OSHA 1910.151(c) standards. Eyewash stations must feature hands free operation and provide 15 minutes of continuous flow at 0.4 gallons per minute. Showers must feature hands free operation and deliver 30 gallons per minute. Hand-held drench hoses may be used in conjunction with safety showers and eyewash stations, but are not a substitute for safety showers or eyewash stations.

# III. Responsibilities

- a. Environmental Health and Safety
  - i. Ensure that each department is aware of their responsibilities under this SOP.
  - ii. Review this SOP periodically and amend as necessary.
  - iii. Assist Facilities Services and departments with plan review and placement of new equipment during new construction or major renovation.
  - iv. Maintain accurate record of location of all emergency eyewash stations and showers.
  - v. Provide equipment required to perform testing and flushing.
- b. Deans, Directors, Department Chairs & Managers
  - i. Ensure that pertinent supervisors, employees, and students are notified of their responsibilities as outlined in this SOP.
  - ii. Ensure that all employees and students (if applicable) have received instruction in the operation of emergency eyewash stations and showers.
  - iii. Ensure that procedures, equipment and materials appropriate for the specific work locations under his/her authority are provided to protect the health and safety of all employees and students.
- c. Faculty, Lab Managers, and Supervisory Staff
  - i. Ensure that the necessary emergency eyewash and safety shower equipment called for in this SOP is provided or, if such equipment is not available, that any work requiring the availability of the equipment is not performed until the equipment is available.
  - ii. Ensure that all employees and students who may need to use the emergency eyewash and safety shower equipment are trained on its location and use.
  - iii. Ensure that emergency eyewash stations within the lab are activated weekly.

SEPTEMBER 2014 1

iv. Request immediate repair for malfunctioning emergency eyewash and safety shower equipment.

## d. Staff and Students

i. Follow the requirements of this SOP.

#### IV. Use

- a. Immediate and proper use of emergency eyewash and safety showers is essential to minimizing injury upon injurious hazardous material contact. The following guidelines should aid in minimizing injury due to contact with hazardous materials:
  - i. Flush eyes and/or skin for at least 15 minutes. Never use home-made neutralizing solutions to flush chemicals from the body.
  - ii. Immediately remove contaminated clothing. Do this while under the shower when gross contamination has occurred. Have someone assist with clothing removal when possible.
  - iii. Hold eyelids open with fingers so flushing fluid can fully irrigate the eyes. Note: People may not always be able to flush their eyes on their own because of intense pain. Nearby helpers should be prepared to assist with holding the eyelids open. Other helpers may need to assist with keeping the person under the flushing fluid for at least 15 minutes.
  - iv. Seek medical attention after flushing the areas of contact for at least 15 minutes.

# V. Flushing and Inspection

- a. Keep covers for eyewash nozzles in place to protect from dust and debris.
- b. Flush eyewash stations weekly. Test showers regularly.
- c. Emergency eyewash station and eye/face wash stations/units in laboratories should be flushed for at least one minute. The water pressure should force the eyewash nozzle covers off the eyewash nozzles.
- d. Inspect eyewash and eye/face wash stations while flushing to make sure that water rises to approximately equal heights, and that fluid flow is sufficient to flush both eyes simultaneously while at a velocity low enough to be non-injurious to the user.
- e. Each personal eyewash station/unit must be reviewed regularly to make sure components are in place, the station/unit is readily accessible, and that flushing solution has not passed its expiration date (if applicable). Also verify that bottles with seals/tamper indicators are sealed, replacing those that are not (if applicable).
- f. Record testing and flushing on the inspection tag located on the emergency shower/emergency eyewash. Record to include the date and initials of the person who performed the inspection.
- g. Ensure the area around an eyewash/ shower is clear.

SEPTEMBER 2014 2