

Emergency Eyewash and Safety Shower Program

Scope

This program outlines the eye/face wash and shower equipment requirements for the rinsing of employees exposed to injurious materials. Each department shall provide eye/face wash and safety shower equipment within the work area where employees and/or students may be exposed to injurious corrosive materials or other dangerous chemicals. Emergency eyewash, eye/face wash and safety shower units are not a substitute for proper primary protective devices. Personal Protective Equipment (eye and face protection and protective clothing) should be worn to protect the user from flying particles and splashing liquids.

Responsibilities

Environmental, Health and Safety is responsible for:

- Preparing, reviewing and periodically revising this program.
- Monitoring compliance with this program.
- Provide consultation on placement of emergency showers and eye wash stations.
- Testing emergency eyewash and safety shower equipment quarterly and annually.

Deans, Directors and Department Heads are responsible for:

- Providing emergency safety shower and eyewash or eye/face wash equipment within the work area where employees and/or students may be exposed to injurious corrosive materials or other dangerous chemicals.
- Ensuring departmental compliance with all the procedures outlined in this program.

Facilities Management is responsible for:

- Repair, install or decommission emergency eyewash and safety shower equipment.

Supervisors of Departments/Labs, PI's and Instructors are responsible for:

- Weekly and monthly flushing of emergency eyewash and safety shower equipment.

Equipment Performance

- Emergency shower heads must be located between 82 inches and 96 inches from the surface on which the user stands.
- Emergency shower heads must be capable of delivering at least 20 gallons of water per minute, at a velocity that will not be injurious to the user.
- Control valves must be of the Stay-Open type.
- Emergency showers must be equipped with tepid water, 60°F-100°F. UNM cold water comes from the tap at greater than 60°F in most circumstances, therefore it does not require tempering.
- Emergency showers should be equipped with a drain to prevent building damage. Drains should be plugged in order to prevent accidental discharge of chemicals to the sanitary sewer system. The plug should be flush-mounted to prevent a tripping hazard. Plugs may be removed in the

event the shower is used and it was not accompanied by a large chemical spill (highly toxic chemical that endangers public areas or is adjacent to a drain).

Eyewash Units (Including Eye/Face Wash Units)

- Eyewash units shall be installed with the nozzles between 33 inches and 45 inches from the floor and at least 6 inches from the wall or nearest obstruction.
- Eyewash units must provide a controlled flow of flushing fluid to both eyes simultaneously at a velocity that will not be injurious to the user.
- There must be no sharp projections anywhere in the operating area of the unit.
- Discharge nozzles must be protected from airborne contaminants. Whatever means is used to provide this protection must not require a separate motion, by the user, to remove it when activating the unit.
- Eyewash units must be capable of delivering 0.4 gallons of flushing fluid per minute for 15 minutes.
- Eye/face wash units must be capable of delivering 3.0 gallons of flushing fluid per minute for 15 minutes.
- Eyewash units must be designed with enough room to allow the eyelids to be held open with the hands while the eyes are in the stream of flushing fluid.
- Control valves must be of the Stay-Open type.

Hand Held Drench Hose

- Hand-held drench hoses must be capable of delivering 3.0 gallons of flushing fluid per minute for 15 minutes.
- Hand-held drench hoses must provide a controlled flow of flushing fluid to both eyes simultaneously at a velocity that will not be injurious to the user.
- Discharge nozzles must be protected from airborne contaminants. Whatever means is used to provide this protection must not require a separate motion, by the user, to remove it when activating the unit.
- Control valves must be of the Stay-Open type.
- Hand-held drench hoses should not be used as a substitute for an eyewash unit unless it meets the performance indicators listed in the above section and it is not feasible to install an eyewash unit.

Installation

Emergency showers must be located such that they are accessible, require no more than ten (10) seconds to reach, and are within 55 feet of the potential hazard. This functionally means each lab should be equipped with a safety shower. In spaces where the laboratory showers are not located within the lab, there must be an unobstructed and clear path that the user can follow without the use of vision. Eyewash units (including eye/face wash and hand-held drench hoses) must be located such that they are accessible, require no more than ten (10) seconds to reach, and are within 55 feet of the potential hazard (10 feet where strong corrosives are the hazard). NOTE: Remember the injured worker may have to locate the unit while blinded by a contaminant. Emergency eyewash and showers must be kept

accessible. Items (furniture, equipment, materials) shall not be stored or placed in such a manner that would block access to them.

Testing Procedures

Testing on the equipment should follow the following schedule:

Emergency showers are tested at least monthly in accordance with the following:

- Verify adequate flow from the unit.
- Verify that the control valve is of the stay-open type and is operating properly.
- Operate for a period of time (2-3 minutes) sufficient to flush any stale water from the supply lines.
- If equipped, remove the floor plug to make sure it is functioning properly; replace plug after test.
- Record the inspection on the attached tag.

Eyewash units are tested at least monthly in accordance with the following:

- Verify flow from the unit.
- Verify that the control valve is of the stay-open type and is operating properly.
- Verify that the flushing streams rise to equal heights and that the fluid will wash both eyes simultaneously.
- Operate for a period of time (2-3 minutes) sufficient to flush any stale fluid from the supply lines.
- Record the inspection on the attached tag.

Hand-held drench hose units are tested at least monthly in accordance with the following:

- Verify flow from the unit.
- Verify that the control valve is of the stay-open type and is operating properly.
- Verify that the flushing streams rise to equal heights and will wash both eyes simultaneously.
- Operate for a period of time sufficient to flush any stale fluid from the supply lines.
- Verify that the hose is free to extend from the mounting bracket and is easy to maneuver.
- Record the inspection on the attached tag.

Weekly Flushing

Operate safety showers, eyewash and eye/face units weekly for a period of 2-3 minutes to flush any stale fluid and bacteria/viruses from the supply lines.

Shower and Eye/Face Wash Use

Immediate and proper use of emergency eye/face wash and safety showers is essential to minimizing injury. The following procedures should aid in minimizing injury due to contact with harmful materials:

- Go immediately! Do not waste a moment. Time is of the essence.
- For safety shower:
 - Pull the handle to activate the shower.

- Immediately remove contaminated clothing. Do this while under the shower when gross contamination has occurred. Have someone assist with clothing removal when possible.
- If equipped, have the assistant remove the drain plug to allow water to drain.
- Flush exposed area for at least 15 minutes.
- Seek medical attention after flushing the exposed area.
- Notify your supervisor as soon as possible.
- For eye/face wash station:
 - Activate the hands-free lever. If eyewash is of the hand-held type, have someone hold it for you, if possible.
 - Get your eyes directly into the stream of water.
 - If you have contacts, gently remove them while flushing.
 - Hold your eyes open with your fingers.
 - Gently roll your eyes to ensure complete flushing.
 - Flush for at least 15 minutes.
 - Seek medical attention after flushing.
 - Notify your supervisor as soon as possible.

Training

Supervisors shall train all persons that might be exposed to potentially injurious materials on the location and proper operation of eyewash, eye/face wash and safety shower units. Contact Environmental Health & Safety (870) 972-3644 for course materials or other assistance with this training.