

# Emergency Washing/Showering Equipment

## Frequently Asked Questions

### **What is emergency washing/showering equipment?**

Emergency washing/showering equipment consists of eyewashes, safety showers, combination eyewash/shower units, drench hoses, and portable eyewash bottles. These systems are used to flush/irrigate the eyes, face and/or body as a result of a hazardous substance being splashed or sprayed onto these bodily surfaces. Emergency washing/showering equipment can either be plumbed or self-contained.

### **Where should emergency washing/showering equipment be located?**

This equipment must be provided in work areas where a hazard is present that could involve substances splashing or spraying onto bodily surfaces.

### **When would it be best to use self-contained eyewash equipment?**

Self-contained equipment is best suited to academic or operational areas where there is no plumbed supply of water or in situations when the work moves from one location to another.

### **What are the regulatory requirements for the water sources used in emergency washing/showering equipment?**

In general, only potable water should be used for eyewashes and safety showers. The water itself should be tepid (60-95°F) so as to not accelerate adverse chemical reactions or pose a health hazard to the employee. Eyewashes and safety showers should be protected from freezing during cold weather. Finally, the water source should be sufficient to allow for 15 minutes of flushing.

### **What are the regulatory requirements for the performance of emergency washing/showering equipment?**

Emergency washing and showering equipment must have stay-open valves that are not subject to unauthorized shut-off so that an individual can use both hands to hold the eyes open or to remove clothing. Valve actuators should be large enough to be easily located and activated within 1 second. Eyewashes should deliver 0.4 gallons of water per minute for a minimum of 15 minutes; Safety showers should deliver 20 gallons of water per minute for a minimum of 15 minutes.

### **Are the water quality and performance requirements different for self-contained units?**

Water quality, temperature, flow rates and times remain the same for both plumbed and self-contained units. However, know that water should be changed regularly in these units to maintain it in a sanitary condition. Specific water treatments that are commercially available as additives can be added to the water in self-contained units to kill algae, fungi, or other organisms. Sealed cartridges of eyewash solution are available for specific makes and models of equipment. Replace treated solutions or cartridges based on the manufacturer's recommendations. When selecting self-contained units, know that the capacity of an eyewash's reservoir must be at least 6 gallons, whereas the capacity for a shower must be at least 300 gallons.

### **How far from the hazard should emergency washing/showering equipment be located?**

In general, OR OSHA regulations require that the distance from the hazard to the emergency washing/showering equipment should not exceed 10 seconds walking distance. The path to the equipment should not require that an employee pass through a doorway or weave around or through machinery or other obstacles. If other employees are always in the same area to assist the exposed employee, this requirement may be waived. In situations in which gases or highly volatile substances are present (e.g., anhydrous ammonia), it may be necessary to locate the equipment outside the immediate source of exposure.

### **Are there housekeeping requirements associated with emergency washing/showering equipment?**

A highly visible sign should be used to identify the location of the equipment. Additionally, the area surrounding the equipment should be well lit so the equipment is highly visible. OR OSHA regulations require that emergency washing/showering equipment stations be clean, sanitary, and operating correctly. There should be nothing present that would impede employee access to, or activation of, the equipment. Accumulations of scale should be removed from the nozzles of equipment and there should not be debris in the bowls of eyewashes. Many eyewashes are equipped with protective dust covers that will move out of the way when the eyewash is activated.

### **Who is responsible for emergency washing/showering equipment at PCC?**

Each department that possesses emergency washing/showering equipment in their classrooms, labs, offices, etc. is responsible for maintaining the equipment and performing the required inspections. Facilities Management Services (FMS) should be contacted for equipment installations or plumbing issues.

### **What does an emergency washing/showering equipment inspection involve?**

A visual inspection of the immediate area should include reviewing signage, visibility, distance, access and housekeeping. It is important to activate plumbed units to flush the supply line and verify proper operation. Self-contained emergency washing/showering equipment should be tested in accordance with the manufacturer's instructions. Particular attention should be given to changing the flushing fluid frequently to ensure that safe fluid is available whenever it is needed. Inspections should be documented; an inspection record can be posted near or on the equipment that shows the dates of inspection and the inspector's initials. Paper inspection records can be placed in sealable bags when there is a risk of the record getting wet. Emergency washing/showering equipment is required to be inspected weekly per OR OSHA regulations. Departments using such equipment may perform inspections at other intervals when written, standard work procedures are available and followed.

**Where can I go for additional information and resources on emergency washing/showering equipment?**

Oregon OSHA's regulations on this topic can be found in 437-002-0161 (5) *Emergency Eyewash and Shower Facilities*. OR OSHA also has a Fact Sheet (FS-02) entitled *Eyewash and Safety Showers* and a Program Directive (A-63) *Eyewash and Safety Showers*. All of these can be found on OR OSHA's website. The American National Standards Institute, ANSI, provides guidance on the installation and operation of emergency washing/showering equipment in ANSI Z358.1, *Emergency Eyewash and Shower Equipment*.