

Emergency Washing/Showering Equipment

Quick Tips

This document contains information to help PCC staff in affected departments understand the requirements for the placement, availability, inspection, and use of emergency washing/showering equipment. Such equipment includes emergency eyewashes, faucet-mounted eyewashes, safety showers, combination eyewash/shower equipment, hand-held drench hoses, and squeeze bottles containing commercially prepared solutions intended to be used to flush or irrigate the eyes. The information in this Quick Tips document was obtained from OR OSHA regulations, program directives, and Fact Sheets pertaining to emergency washing/showering equipment and is not specific to any particular make or model of emergency washing/showering equipment. Affected departments should refer to manufacturers' literature and guidance for their specific units.

Hazard Assessment: Department managers should conduct hazard assessments to determine whether emergency washing/showering is required in their area(s). Hazard assessments should consider a number of factors, including:

-Chemical properties: Evaluate a chemical's physical state, concentration, temperature, and pH. Acids with a pH < 2.5 or bases with a pH > 11 require immediate flushing if they enter the eye or are splashed onto one's face and/or body.

-Chemical use patterns: Evaluate the frequency and duration when handling, transferring, using, or disposing of the chemical.

-Training: Review safety data sheets and measures that employees can take to protect themselves, including personal protective equipment.

-Worksite conditions: Evaluate the facility layout, whether the worksite is fixed or mobile, indoors or outdoors, and whether the water source can be protected from freezing.

-Equipment: Evaluate the availability of emergency washing/showering equipment as well as water sources.



Equipment Selection: The following guidelines should be used to determine the type of EWE to install in a given area:

-Emergency eyewashes are required in all areas where employees may reasonably be exposed to a substance that can cause corrosion or permanent tissue damage to the eyes.

-Safety showers are required whenever there is a possibility that either highly corrosive or highly toxic chemicals may splash over substantial areas of the body.

-Hand-held drench hoses are single-headed emergency washing devices connected to flexible hoses and used to irrigate and flush the face or other parts of the body. Drench hoses may not be used as a sole means of protection or as a substitute for plumbed or self-contained equipment but can be used to supplement emergency washing equipment.

-Squeeze bottles of isotonic solutions or chemical formulations used as substitutes for water must be appropriate for the hazard; properly tested and maintained; and replaced prior to their expiration

date. Personal eyewash equipment, such as quart sized squeeze bottles, may not be used as a sole means of protection or as a substitute for plumbed or self-contained equipment, but can be used to supplement emergency washing equipment.

-Plumbed vs. self-contained equipment: If a clean, potable water source is readily available at fixed worksites, plumbed units are preferred. Otherwise, consider self-contained equipment.



Performance Requirements: Due to the myriad of different makes and models of emergency washing/showering equipment, departments responsible for such equipment are referred to the equipment manufacturers' instructions and specifications for details on such topics as required water pressure, flow rate and equipment operation. Missing manufacturer information can often be obtained as a result of an internet search.

Equipment Locations: Emergency washing/showering equipment is located throughout PCC in a variety of settings such as shops, studios, laboratories, and chemical storage areas. This equipment should be identifiable by means of a highly visible sign, alerting users to its presence. The placement of such equipment into new areas requires a hazard assessment.

Weekly Inspections: Departments in which emergency washing equipment is located are required to conduct weekly inspections on the plumbed emergency washing equipment in their areas. Departments may perform such inspections at other intervals when written, standard work procedures are available and followed. These inspections involve activating the equipment to allow water to flow. Departments should follow the equipment manufacturers' instructions for inspecting self-contained units.

Inspections should be documented and include the date of inspection as well as the inspector's name or initials. The inspection document should be affixed to the emergency washing equipment or posted nearby. If departments opt to affix inspection documents to their equipment, it is recommended that document be kept in sealed plastic containers and connected to the equipment with wire or string in such a way that it will not impact or impede the activation or use of the equipment.

Inspection criteria include ensuring that:

- A highly visible sign is present near the equipment
- The area around the equipment is unobstructed and highly visible
- Bowls and spouts are clean and free of trash, scale, and any foreign matter
- Protective eyewash covers are clean, intact, and properly positioned
- Protective caps come off upon activation of the unit
- Water flows from both eyepieces and the streams of water converge
- Water flow continues until the activation paddle is returned to its resting position
- Water drains from the bowl
- Maintenance problems are promptly reported to Facilities Management Services

Examples of inspection forms are included at the end of this document.



Other inspections: Plumbers from Facilities Management Services (FMS) perform preventative maintenance inspections on emergency washing/showering equipment on a semi-annual basis. Plumbers and other FMS employees may work on specific pieces of such equipment more frequently than this as a result of deficiencies noted during weekly user inspections.

Training: Managers in affected departments are responsible for ensuring that their employees receive training on how to use emergency washing/showering equipment. Generalized information on the emergency use of such equipment can be found toward the end of this document.

Emergency Use: Should an emergency arise that requires the use of emergency washing/showering equipment, users should do the following:

- Travel immediately to the equipment
- Draw attention to yourself; yell for help
- Activate unit; remove protective caps on self-contained units
- For eyewashes:
 - Hold eyelids open with hands and lean into the eyewash so eyes are directly in the water stream; remove contact lenses while flushing eyes; gently roll eyes to ensure flushing is complete
 - Irrigate eyes for 15 minutes
- For safety showers:
 - Get into the water stream
 - Use shower curtain/shield (if equipped)
 - Remove affected clothing
 - Flush affected area(s) for 15 minutes
- If help has not arrived, contact Public Safety at (971) 722-4444



If an emergency arises and you are available to help, guide affected person to eyewash or shower and talk them through the above points, encouraging them to continue flushing for 15 minutes; call Public Safety when able.

Safety Shower Inspection

Housekeeping – Area should be well lit, marked with a sign and have no obstructions/clutter present.

Activate unit/flush line – All jets should work with good flow; water should be clear and flow until paddle/actuator is moved to resting position.

Testing, water pressure, & flow rate should be in accordance with manufacturer’s criteria. Unit should be protected from freezing during cold weather.

Building		Room		Unit ID	
Week	Date	Initials	Week	Date	Initials
1			27		
2			28		
3			29		
4			30		
5			31		
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Emergency Eyewash/Drench Hose Inspection

Housekeeping – Area should be well lit, marked with a sign and have no obstructions/clutter present; bowl should be clean and free of trash, scale, and foreign matter; protective covers should be in place.

Activate unit/flush line – Water pressure should remove covers; all jets should work with good flow; streams of water should meet; water should be clear and flow until paddle is moved to resting position.

Testing, water pressure, & flow rate should be in accordance with manufacturer’s criteria.

Unit should be protected from freezing during cold weather.

Self-contained units – Cartridges (or fluid/additive) should be within shelf life.

Building		Room		Unit ID	
Week	Date	Initials	Week	Date	Initials
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