LOCATION, SELECTION, INSTALLATION, MAINTENANCE, AND TESTING OF EMERGENCY EYEWASH AND SHOWER EQUIPMENT

1. REASON FOR ISSUE: This Veterans Health Administration (VHA) Directive provides uniform guidance on requirements, procedures and responsibilities for the evaluation, selection, installation, operation and maintenance of emergency eyewash units.

2. SUMMARY OF MAJOR CHANGES: Assigns specific responsibilities to Facility Management/Engineering Staff; assigns responsibilities for Eyewash and Shower Coordinator.

3. RELATED ISSUES: VA Directive 7700, Occupational Safety & Health; VHA Directive 7701, Safety and Health Program; VHA Handbook 7701.01, Occupational Safety and Health (OSH) Program Procedures; VHA Center for Engineering and Occupational Safety and Health (CEOSH), General Safety Guidebook; CEOSH Industrial Hygiene Guidebook.

4. RESPONSIBLE OFFICE: The Deputy Under Secretary for Health for Operations and Management (10N) is responsible for the contents of this Directive. Questions may be directed to the Director, Occupational Safety, Health and GEMS Programs (10NA8) at 202-632-7889.


6. RECERTIFICATION: This VHA Directive is scheduled for recertification on or before the last working day of February 2021.

David J. Shulkin, M.D.
Under Secretary for Health

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LOCATION, SELECTION, INSTALLATION, MAINTENANCE, AND TESTING OF EMERGENCY EYEWASH AND SHOWER EQUIPMENT

1. PURPOSE

This Veterans Health Administration (VHA) Directive provides policy and procedures for the location, selection, installation, maintenance and testing of emergency eyewash and shower equipment. AUTHORITY: 38 U.S.C 7301(b).

2. BACKGROUND

a. VHA employees routinely perform work using a variety of substances that may pose a threat to their health and safety because they can cause corrosion, severe irritation, permanent tissue damage, or be absorbed through the skin and eyes. In the case of accidental chemical exposures to the eyes, a quick and effective response is essential to prevent lasting damage or a loss of sight.

b. In order to prevent or minimize injuries to eyes and skin, the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.151(c) requires that suitable facilities for quick drenching or flushing of the eyes and body be provided in work areas for immediate emergency use when exposure to corrosive materials occurs.

c. Emergency eyewashes and showers are first aid rather than preventative measures. Emergency eyewash and shower equipment is not to be used in lieu of appropriate personal protective equipment (PPE). Evaluation of areas for emergency eyewashes and showers, however, must be conducted as if PPE was not used.

d. A lack of definitive guidance on eyewash installation, maintenance and testing has resulted in confusion and a lack of action in the field. Although OSHA requires that “suitable facilities” be provided “for immediate emergency use”, specific definitions of these terms is not provided. The voluntary American National Standards Institute (ANSI) Z358.1 “American National Standard for Emergency Eyewash and Shower Equipment” provides detailed information regarding the installation and operation of emergency eyewash and shower equipment. Although OSHA has not formally adopted the standard, they have often referred employers to ANSI Z358.1 as a source of guidance for protecting employees who may be exposed to injurious corrosive materials.

3. POLICY

It is VHA policy to provide employees, trainees, volunteers, and contractors with emergency eyewash and shower stations where there is a reasonable probability of injury to the eyes or skin occurring as a result of exposure to hazardous chemicals or materials.

4. RESPONSIBILITIES

a. **Under Secretary for Health.** The Under Secretary for Health, or designee, is responsible for:
(1) Overseeing VHA Occupational Safety and Health (OSH) Programs and policies.

(2) Establishing OSH Program performance standards for the Deputy Under Secretary for Health for Operations and Management.

b. **Deputy Under Secretary for Health for Operations and Management.** The Deputy Under Secretary for Health for Operations and Management is responsible for:

(1) Overseeing the development and implementation of the VHA OSH Programs and policies.

(2) Establishing OSH Program performance standards for the Assistant Deputy Under Secretary for Health for Administrative Operations.

c. **Assistant Deputy Under Secretary for Health for Administrative Operations.** The Assistant Deputy Under Secretary for Health for Administrative Operations is responsible for:


(2) Ensuring that staffing and funding are adequate to maintain the Emergency Eyewash Program.

d. **Director, Office of Capital Asset Management Engineering and Support.** The Director, Office of Capital Asset Management Engineering and Support will collaborate with the Director of the Office of Occupational Safety, Health, and Green Environmental Management System (GEMS) Programs in the development and distribution of directives, handbooks, and information letters regarding emergency eyewash and shower equipment.

e. **Chief Consultant, Specialty Care Services.** The Chief Consultant, Specialty Care Services (10P4E) is responsible for advising VHA staff on public and occupational health issues related to eye hazards.

f. **Director, Occupational Safety, Health and GEMS Programs.** The Director, Occupational Safety, Health and GEMS Programs (10NA8) is responsible for providing administrative management and technical support to Veterans Integrated Service Network (VISN) and VA medical facility staff in complying with Federal, state, and local regulations regarding eye hazards, and eyewash and shower equipment.

g. **Veterans Integrated Service Network Director.** Each Veterans Integrated Service Network (VISN) Director is responsible for:

(1) Providing adequate resources for the implementation and maintenance of this Directive, and

(2) Ensuring that VISN Safety and Health staff evaluate emergency eyewash and shower programs during facility Annual Workplace Evaluations (AWEs).
h. **VISN Industrial Hygiene and Safety Staff.** VISN Industrial Hygiene and Safety staff are responsible for:

- (1) Providing technical assistance to facility staff.
- (2) Evaluating the emergency eyewash and shower program during each facility AWE.
- (3) Reporting program deficiencies in the AWE report.
- (4) Tracking program deficiencies to correction.

i. **VA Medical Facility Director.** Each VA medical facility Director must:

- (1) Provide adequate resources to maintain emergency eyewash and shower units.
- (2) Maintain a written Emergency Eyewash and Shower Program in accordance with this Directive (see Appendixes A - F).
- (3) Designate an Eyewash and Shower Coordinator to administer the emergency eyewash and shower program.
- (4) Designates employee(s) in the facility Eyewash and Shower program who will perform flushing of emergency eyewash and shower stations.

**NOTE:** Employees designated to perform emergency eye wash and shower flushes may include but are not limited to facilities engineering or service line employees who have custody of the units at their worksite. For portable eyewashes, special attention must be given to manufacturer requirements regarding flushing, disinfection intervals, and the use of chemical additives to extend service life; see "Plumbed and Self-Contained Emergency Showers, Eyewash Equipment, Eye/Face Wash Equipment and Combination Units Performance and Maintenance Criteria" in ANSI Z358.1-2014. For temporary eyewash bottles, expiration dates and overall condition/serviceability must be checked at each inspection. See Appendixes E and F for more information.

j. **VHA Facility Chief Engineer or Facility Manager.** The VHA Facility Chief Engineer or Facility Manager or equivalent must:

- (1) Consult with facility Safety and Health staff on the selection and location of emergency eyewashes and showers.
- (2) Ensure that emergency eyewash and shower design specifications reference and require ANSI-approved equipment/devices.
- (3) Execute all work orders for the installation or repair of emergency eyewash and shower equipment on a high priority basis.
- (4) Ensure that emergency eyewashes and showers are installed in accordance with the equipment manufacturer’s specifications and the most recent version of ANSI-Z358.1.
(5) Ensure that installed thermostatic mixing valves are American Society of Sanitary Engineers (ASSE) 1071 compliant and are included in a preventative maintenance program for proper operation.

(6) Conducts annual flow rate testing and compliance assessment (see Appendix E).

(7) Maintain written records of weekly function testing and inspections, annual flow rate testing, compliance assessments and completed preventative maintenance on thermostatic mixing valves.

(8) Removes emergency eyewashes and showers that have been identified for removal by the facility Safety and Health staff. Removal work shall include water supply piping to the extent necessary for dead-leg prevention.

k. **Eyewash and Shower Coordinator.** The Eyewash and Shower Coordinator has overall responsibility for day-to-day aspects of facility eyewash and shower program, specifically for aspects of the program under the explicit control or oversight of the facility. These duties are to be accomplished either individually or through coordination with other departments within the facility. The elements of the program must include the following at a minimum:

(1) Written Program. Develop and implement a written Emergency Eyewash and Shower Program, which addresses the process for locating, selecting, installing, maintaining and testing emergency eyewash and shower equipment within the purview of the medical center. **NOTE:** Appendixes A through F contain mandatory elements that must be incorporated into the facility policy.

(2) Hazard Assessment. An eyewash and shower hazard assessment will be conducted in all areas of the facility in accordance with Appendix A. Sample hazard assessment tools can be found in the General Safety Guidebook on the Center for Engineering and Occupational Safety and Health (CEOSH) Web site at: [http://vaww.ceosh.med.va.gov/](http://vaww.ceosh.med.va.gov/).

(3) Strategies for Minimizing the Number of Required Eyewashes. The VA medical facility Director will ensure the facility considers, and implements when possible, strategies that reduce the need for eyewash or shower units. These include, but are not limited to:

   (a) Eliminating or minimizing the use of caustic and corrosive chemicals. These are defined as strongly acidic or strongly basic mixtures or compounds, having a pH less than 2 or greater than 11.

   (b) To the greatest extent possible, centralize the storage and use of concentrated caustic and corrosive chemicals to specific, designated areas. For instance, restrict the mixing of cleaning agents to a centralized area, which can be equipped with a plumbed eyewash and/or shower, as appropriate.

   (c) Implementing engineering controls to reduce or eliminate employee risk of splash, immersion or contact exposure. For example, using of closed or automatic
chemical dispensing systems, splash guarding, or long handle spraying and cleaning tools.

(d) To the greatest extent possible, requiring the use of “green” chemical products, especially cleaning products, where available.

**NOTE:** Chemical products that are certified as ‘environmentally safe’ or ‘green’ are, in general, less corrosive and have less potential for harm than traditional cleaners. Their use may decrease the likelihood and severity of injuries that do occur. Manufacturer claims should always be verified by a review of the provided Safety Data Sheet and consultation with Industrial Hygienist or Health/Safety professional staff.

(e) To the greatest extent possible, implementing policies to minimize or eliminate the purchase and use of chemicals for which OSHA requires emergency eyewash systems for worker protection. Examples include methylene chloride and formaldehyde.

(4) Eyewash and Shower Equipment Installation and Replacement Program.

(a) The placement and design of eyewash and showers must meet the accessibility requirements and standards to the extent compelled by the Architectural Barriers Act (when applicable), and the VA Barrier Free Design Guide (PG-18-13) and the VA Plumbing Design Manual (latest edition) for the protection of all employees working in the immediate area.

(b) A prioritized list must be prepared by the facility Safety and Health staff, in consultation with Facilities Management staff, using the results of the Hazard Assessment. This list, based on the severity of the hazard present in the area, will give priority ranking for installation and replacement of eyewashes and showers.

(c) Eyewashes and showers determined to be necessary by a current risk assessment must be evaluated and certified by qualified personnel to ensure those units meet ANSI installation and operation standards. Units that do not meet ANSI standards must be given priority for modification, repair or replacement (see Appendix E).

(d) Eyewash and shower equipment no longer required in a work area, based on the current Hazard Assessment, must be taken out of service as soon as possible. The unit must be tagged with a “DO NOT USE” sign, the water supply turned off, and a work request prepared to remove the equipment.

(e) In areas where plumbed eyewash or shower units are required, but not in place, a work request will be prepared to install appropriate equipment.

1. Until plumbed or self-contained eyewashes can be installed, interim measures must be taken to protect employees.

**NOTE:** Acceptable temporary substitutes include personal eyewash bottles (see Appendix F) and portable ANSI-approved eyewashes. They are not intended as a permanent substitute for plumbed equipment.
2. When deemed necessary by the hazard assessment, ANSI approved emergency eyewashes and showers must be installed in areas with new construction.

(5) Training. All personnel assigned to install, perform repairs, flush and test eyewashes and showers must be trained on the manufacturer’s specifications and on ANSI performance standards for the specific device.

(a) Supervisors must be trained in the use, maintenance, operation, and inspection of emergency eyewash and shower equipment.

(b) Employees assigned to flush emergency eyewashes must be trained in flushing and visual inspection requirements.

(c) Employees working in areas where emergency eyewashes and showers are required to be trained on the following two items.

1. Proper operation and effective use of the emergency equipment.

2. Procedures for assisting other employees in using the eyewash and shower.

(6) Correction of Deficiencies. If the emergency unit is not operating to ANSI specifications, the area supervisor must tag the unit with a “DO NOT USE” sign and contact Facilities Management for repair or replacement (see Appendix E).

I. Facility Industrial Hygiene and Safety Staff. Facility Industrial Hygiene and Safety staff are responsible for:

(1) Conducting hazard assessments jointly with facility management staff in all areas of the facility, including areas with existing eyewashes, using the guidance provided in Appendix A.

(2) Conducting new assessments jointly with facility management staff every time the workplace conditions change.

(3) Maintaining written hazard assessment records for all areas of the facility.

(4) Evaluating and approving personal eyewash bottles (see Appendix F).

(5) Identifying emergency eyewashes and showers that are no longer needed and submitting a request to Facilities Management for their removal.

(6) Reviewing project specifications for all new construction and renovation projects to determine the need for eyewash and shower units, including proper selection and installation.

(7) Providing technical assistance to Facilities Management and other personnel in the selection, installation, maintenance, and testing of emergency eyewashes and showers.

(8) Conducting an annual review of all elements of the emergency eyewash and shower program.
(9) Maintaining a written evaluation of the annual review.

(10) Providing training to employees and supervisors in the use, inspection, maintenance, and testing of emergency eyewash and shower units.

m. **Work Area Supervisors.** Work area supervisors are responsible for the following:

(1) Maintaining responsibility for the emergency eyewash and shower program in the assigned work areas and processes, to include associated equipment.

(2) Assisting Safety and Health staff in performing hazard assessments of work areas to determine where eyewashes and showers are needed.

(3) Notifying facility Safety and Health staff of changes in work areas or work processes and practices that require a Hazard Assessment to evaluate the need for new installations, or for the removal of existing emergency eyewashes or showers.

(4) Ensure that any new work area or new work process which could pose a risk has a portable eye wash unit until a permanent one can be installed.

(5) Ensuring designated employee(s) perform periodic eyewash and shower flushes at the designated schedule, perform inspection of portable flush stations and disposable eyewash bottles, and maintain appropriate records.

(6) Maintaining an inventory of, and regularly inspecting all single-use disposable eyewash bottles used by service employees, to include expiration date. Expired personal eyewash bottles must be discarded and replaced; see Appendix B and F.

(7) Conduct and document training for all employees regarding hazards which require emergency eyewashes and showers. Training shall include correct activation and proper use of equipment, including eyewash bottles.

(8) Ensuring that any employee who uses an emergency eyewash or shower is provided medical care as soon as possible.

5. REFERENCES


b. **Architectural Barriers Act (ABA) Accessibility Guidelines.** 36 CFR part 1191, Appendices C and D.

c. American Society of Sanitary Engineers (ASSE), Standard #1071-20112 (or most current version), “Temperature Actuated Mixing Valves for Plumber Emergency Equipment”.

d. College of American Pathologists, **Laboratory Accreditation Program**, GEN.72500.
e. Enforcement of Non-Discrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Veterans Affairs. Title 38 Code of Federal Regulations (CFR), Part 15, sections 15.101 through 15.170.

f. General Services Administration (GSA).

g. OSHA Standard 29 CFR 1910.151 Medical Services and first Aid.

h. OSHA Standards Interpretations for 1910.151(c).


j. VHA Center for Engineering and Safety and Health, “General Safety Guidebook”.

k. VHA Center for Engineering and Safety and Health, “Industrial Hygiene Guidebook”.

l. VHA Center for Engineering and Safety and Health, Eyewash and Shower resources website (Internal website, not accessible outside VA).
EMERGENCY EYEWASH AND SHOWER LOCATION (MANDATORY)

1. Hazard Assessment:

   a. Each area of the facility designated for plumbed eyewashes, deluge showers, portable wash stations or personal eyewash bottles must have a documented hazard assessment (for complete requirements of the personal disposable eyewash bottle program, see Appendix F, Section 6).

   b. The report must describe the specific chemical risks which drive the requirement and any alternative controls that were evaluated, including process modifications and use of product alternatives. Records of this assessment must reflect the current operational process, facility layout and work area locations, and be readily available for review by staff in these areas.

   c. The VHA General Safety Guidebook contains an example of a Hazard Assessment that may be used in documenting the assessment. The General Safety Guidebook is available on the CEOSH Web site at: http://vaww.ceosh.med.va.gov (internal VA Web site, not available to the public).

   d. Hazard assessments must be repeated whenever a change in processes, chemicals, or controls could result in the need for new emergency eyewash or shower equipment or the removal of existing equipment. Supervisors in charge of the subject work area are responsible for requesting updated hazard assessments when processes, work practices, or chemical(s) used change.

   NOTE: A chart identifying some areas and agents that need to be evaluated is included in the General Safety Guidebook. This is not a comprehensive list of all areas requiring emergency flushing units. Additionally, the listing of an agent does not mandate installation of emergency equipment, but it does indicate that an assessment must be conducted.

2. Accessibility: The distance from the worker’s location to the emergency eyewash or shower is not to exceed 10 seconds walking distance. ANSI recognizes that the average person travels about 55 feet in 10 seconds. In areas where extremely corrosive chemicals are used, that distance may be reduced. The Safety Data Sheet (SDS) for chemicals must be consulted when determining travel distances to emergency equipment. Reduced travel distance or additional controls must be considered, if necessary to accommodate persons with disabilities.

   a. Emergency flushing equipment must be located on the same floor level as the hazard.

   b. The emergency eyewash or shower units are not to be located in an area where employees must pass through a locked or latched doorway or weave around equipment to obtain access.

   c. For substances that are gaseous or highly volatile, the emergency eyewash or shower may be located outside of the immediate area of the potential release.
3. Priority Ranking:

   a. All new, replacement and existing emergency eyewashes and showers must be ranked based on the severity of the hazard in the work area. **NOTE:** Several examples of Hazard Assessment forms are available in the General Safety Guidebook. Each form results in the generation of a priority ranking. The same type of Hazard Assessment form should be used throughout the facility.

   b. The Priority Ranking scores must be maintained as a part of the hazard assessment.

   c. The Priority Ranking scores must be used to develop the Equipment Installation and Replacement Plan.
EMERGENCY EYEWASH AND SHOWER SELECTION (MANDATORY)

1. Emergency eyewashes and showers purchased and installed for projects and procurements under the direct control of the VHA facilities must comply to ANSI standards. Emergency equipment must be installed in accordance with the manufacturer’s specification to maintain the ANSI certification.

**NOTE:** ANSI-approved portable eyewash and shower equipment is available from manufacturers for field or remote locations.

2. Election of the emergency eyewashes and equipment must be approved by the facility Safety and Health staff.

**NOTE:** When necessary, Occupational Health personnel need to be consulted for assistance.

3. Equipment selection must take into consideration space required to install and operate equipment, plumbing connections, accessibility, availability of drains, and hazards that might result from equipment operation.

4. ANSI-approved self-contained eyewashes are acceptable, especially in areas where a tepid water supply is not available.

5. Drench hoses used as eye or face washes must meet the ANSI performance requirements for those devices.

6. Personal Eyewash Bottles (sealed, single-use, disposable products) are not appropriate as a long-term control and must be strictly monitored. Disposable eyewash bottles may be used as a supplemental control, but cannot be used as a substitute for an ANSI approved eyewash. Eyewash bottles may be kept in the immediate area where hazardous chemicals are used, to supply immediate interim flushing until the employee can proceed to an ANSI approved eyewash (see Appendix F).
EMERGENCY EYEWASH AND SHOWER INSTALLATION (MANDATORY)

1. Emergency eyewashes and showers must be installed in accordance with manufacturer’s specifications and ANSI installation standards.

2. All units must be in accessible locations, free from obstructions. Units that do not meet accessibility requirements must be evaluated by the facility Safety Officer and a written approval for continued use. In addition, a work order for relocation or removing the obstruction shall be generated. A copy of this approval must be maintained in the work area and in the Safety Office.

3. The location of this equipment must be identified with a highly visible sign.

4. The equipment must be installed on a system that is capable of delivering the quantity and pressure of water required by the manufacturer’s specification to comply with the requisite ANSI Z358.1 approval.

5. All emergency eyewash and showers need to deliver tepid water (60-100 degrees Fahrenheit). Installed thermostatic mixing valves shall be ASSE #1017-2012 compliant.

   **NOTE:** The General Safety Guidebook provides information on methods of achieving tepid water. In addition, the ANSI standards are to be used as a reference for the requirements for thermostatic balancing of mixing valves installed in eyewash stations.

6. Exceptions for tepid water provisions must be approved by the facility Safety Committee.

7. Freeze protection must be provided, when needed.
EMERGENCY EYEWASH AND SHOWER MAINTENANCE (MANDATORY)

1. All personnel assigned to perform repairs and testing of emergency eyewashes and showers must be trained on the manufacturer's specifications and on ANSI performance standards for the specific device.

2. Emergency equipment must be maintained in accordance with the manufacturer's specifications.

3. Modifications to emergency equipment that voids the ANSI approval of the device are prohibited.

4. Plumbed emergency eyewashes, combination eye and face washes, and drench hoses must be activated weekly by a person designated to flush the line and ensure proper operation. The duration must be long enough to flush the water contained in the emergency eyewash service line, back to the connection point to the building water supply. Consult with facilities management staff, if necessary, to determine the amount of time to hold open the flushing mechanism. This process verifies adequate flow, ensures the supply line remains clear of sediment and reduces the buildup of microbial contamination (biofilm) due to sitting water.

5. Plumbed emergency showers (stand-alone and combination units) must be activated on a monthly basis by designated personnel. The duration must be long enough to flush all water contained the emergency shower service line, back to the connection point to the building water supply. This process verifies adequate flow and ensures the supply line remains clear of sediment and reduces the buildup of biofilm due to sitting water.

6. If examination of the fluid flushed from the shower reveals discoloration or sediment, increase the frequency of flushing until the problem is corrected or until the shower is replaced.

7. Self-contained showers and eyewashes must be checked weekly to ensure that the flushing fluid is full and in good condition. Self-contained units must be maintained in accordance with the manufacturers' requirements. During each inspection, verify cleanliness and expiration date of the flushing fluid. Discard expired fluid immediately and refill the unit according to manufacturer instructions.

8. A written record of the activation of emergency units must be maintained at or near the device. Records must be kept on a tag or label attached to the eyewash or shower, or on an inspection checklist maintained on file, or by an electronic method that provides a permanent record.

9. Units that fail testing shall be repaired immediately. If deficiencies cannot be immediately corrected, the area supervisor must be notified and the unit must be tagged “DO NOT USE”. The area supervisor must notify all affected employees and the facility Safety Office when emergency equipment is out of service. A suitable substitute shall be used as an temporary (interim) control for the eyewash if the hazardous activity continues during repair or replacement.
EMERGENCY EYEWASH AND SHOWER TESTING (MANDATORY)

1. Facilities Management is responsible for:

   a. Testing all emergency equipment after installation to ensure that it meets the manufacturer’s installation requirements.

   b. Testing all devices annually using the manufacturer’s inspection procedures to ensure continued conformance with ANSI Z358.1.

   c. Maintaining a written record of the procedures used and the testing date.

2. Units that fail testing shall be repaired immediately. If deficiencies cannot be immediately corrected, the area supervisor must be notified and the unit must be tagged “DO NOT USE”. The area supervisor must notify all affected employees and the facility Safety Office when emergency equipment is out of service. A portable unit may be temporarily required to meet the need for an emergency eyewash and shower.

3. A written record of the activation and inspection of emergency units must be maintained at or near the device. Records must be kept on a tag or label attached to the eyewash or shower, or on an inspection checklist maintained on file, or by an electronic method that provides a permanent record.

NOTE: A sample “Emergency Eyewash and Shower Equipment Survey and Inspection Form” is included in the VHA General Safety Guidebook.
PERSONAL EYEWASH BOTTLES (MANDATORY)

1. Eyewash bottle stations are not authorized for use in areas where plumbed eyewash installations are feasible.

2. Eyewash bottles and sealed portable eyewash units have a finite water supply and are considered interim first aid, not as a replacement for additional eye washing or medical care. The main purpose of these units is to supply immediate flushing. The injured person needs to proceed to a plumbed or self-contained eyewash to flush their eyes for the required 15-minute period.

3. Personal eyewash bottles may be considered for use:
   a. During an interim period until permanent eyewashes can be installed.
   b. For activities remote to facilities that do not allow immediate access to plumbed eyewashes.

4. For remote field operations, eyewash bottles may be made available at the immediate job site to be used in conjunction with sealed portable eyewash units available on the work vehicle or truck.

5. For highly mobile operations within facilities, personal eyewash bottles may be supplied on work carts for immediate first aid. Employees must be trained on the locations of the closest permanent eye wash stations to be used for sustained flushing in each work area.

6. Where eyewash bottles are allowed, a formal eyewash bottle program must be administered that includes:
   a. **Hazard Assessment.** Selection and use of eyewash bottles must be evaluated and approved by the Facility Safety Manager. Factors to consider in the evaluation include, but are not be limited to:
      
      (1) The physical and chemical characteristics of the chemical, including the risk of injury.

      (2) Contingencies for cold temperatures and potential for eye wash solution freezing. Electrical heating units may be required.

      (3) Volume of solution required for operations with a high risk of eye injury and remoteness to a plumbed eyewash to allow for longer flushing times.

   b. **Approval.** Upon approval, eyewash bottles must be assigned to individual users.

   c. **Master List.** The Safety Manager must maintain a list of designated eyewash bottle users, including the number of eyewash bottles assigned to the service, and the expiration dates of the eyewash solutions.
d. **Training.** All designated users must be:

(1) Trained in the proper use of the eyewash bottle, including a demonstration of actual use of the eyewash bottle.

(2) Informed of the necessity of quickly accessing a plumbed eyewash, or reporting to the emergency care unit, whichever is closer.

(3) Inspection. Supervisors are responsible for inspecting eyewash bottles weekly to ensure that all bottles are sealed and have not reached their expiration dates.