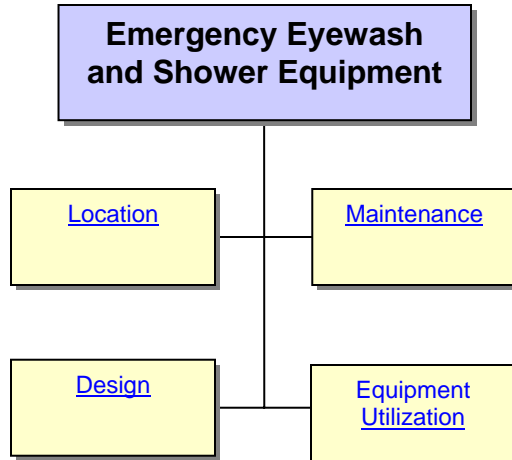


EMERGENCY EYEWASH AND SHOWER
PLACEMENT/DESIGN



[Link to the entire Policy & Procedures \(6 pages\)](#)

**AGRICULTURE AND NATURAL RESOURCES
RESEARCH AND EXTENSION CENTER SYSTEM
POLICY AND PROCEDURES**

**EMERGENCY EYEWASH AND SHOWER
PLACEMENT/DESIGN**

TABLE OF CONTENTS

I. INTRODUCTION	2
II. POLICY	2
III. SCOPE	2
IV. PURPOSE	3
V. EMERGENCY EYEWASH AND SHOWER EQUIPMENT	3
VI. EMERGENCY EYEWASH AND SHOWER EQUIPMENT REFERENCES	7

ATTACHMENT

[Attachment A](#) - Eyewash and Emergency Shower Placement/Design Flow Chart

**AGRICULTURE AND NATURAL RESOURCES
RESEARCH AND EXTENSION CENTER SYSTEM
POLICY AND PROCEDURES**

**EYEWASH AND EMERGENCY SHOWER
PLACEMENT/DESIGN**

I. INTRODUCTION

As part of their work-related tasks, Research and Extension Center (REC) employees routinely perform work with a variety of substances. Certain of these substances may pose a threat to employee health and safety because they can cause corrosion, severe irritation, or permanent tissue damage or be toxic by absorption to the eyes or skin. In order to prevent or minimize injuries to eyes or skin, the State of California administers a regulatory program through the Department of Industrial Relations, Division of Occupational Safety and Health that assures properly located, designed, and functioning emergency eyewash and shower equipment are available in, or nearby, areas where corrosive, irritating, or toxic substances are present.

II. POLICY

REC Administrative Office (AO) and RECs are committed to providing a safe work environment at all facilities. Accordingly, personnel from REC AO and RECs have cooperatively implemented a program to maintain compliance with the state regulatory program for emergency eyewash and shower equipment.

III. SCOPE

As encompassed by the state regulatory program, REC AO and RECs are required to locate, design, and maintain emergency eyewash and shower equipment in order to protect the health and safety of employees and visitors. Moreover, employees and others must be informed about the proper utilization of emergency eyewash and shower equipment to minimize the effects of accidental eye and skin exposure to harmful substances.

IV. PURPOSE

The purpose of this Policy and Procedures is to identify the criteria for locating, designing, maintaining, and utilizing emergency eyewash and shower equipment in order to reduce accidental eye and skin exposure to corrosive, irritating, or toxic substances. Information provided by this document will also assist RECs with achieving and maintaining compliance with the emergency eyewash and shower equipment program as described under California Code of Regulations, Title 8, Section 5162 and by reference, American National Standards Institute (ANSI) Publication, ANSI Z358.1-1981, Sections 4, 5, 7, and 9.

V. EMERGENCY EYEWASH AND SHOWER EQUIPMENT

A. Location

1. REC AO is responsible for properly locating emergency eyewash and shower equipment.
2. Emergency eyewash and/or shower equipment shall be located in all hazardous materials handling areas including, but not limited to:
 - a. Laboratories with chemicals present (eyewash and shower).
 - b. Pesticide storage facilities (eyewash and shower).
 - c. Pesticide mixing facilities (eyewash and shower).
 - d. Pesticide application equipment (eyewash).
 - e. Battery charging facilities (eyewash and shower).
 - f. Designated hazardous material storage facilities (eyewash and shower).
3. Location requirements for emergency eyewash and shower equipment are as follows:
 - a. Equipment shall be installed in accessible locations that an injured person can reach in 10 seconds or less and will be within an unrestricted travel distance of 100 feet or less from the hazard.
 - b. When acids or strong caustics are used, equipment shall be located within 10 feet of the work area and have unrestricted access.
 - c. Equipment shall be located so one person can use both the eyewash and shower at the same time.
 - d. Equipment shall be located away from electric outlets and appliances so there is no possibility of an electrical shock.
 - e. Equipment piping that is located in areas exposed to potential freezing temperatures shall be insulated or protected with appropriate material(s).
 - f. Equipment shall be located to minimize any potential of contamination to surface or groundwater.

B. Design

1. REC AO is responsible for properly designing emergency eyewash and shower equipment.
2. Requirements for emergency eyewash and shower equipment.
 - a. Equipment shall be readily distinguished by:
 - (1) A highly visible identification sign;
 - (2) Having a bright color painted around or behind the equipment location; and
 - (3) Being well lighted.
 - b. Control valves shall function so that the water flow continues without requiring the use of the operator's hands and until the valve is intentionally shut off.
 - c. Control valves shall be simple to operate and switch from off to on positions in one second or less.
 - d. Control valves shall be resistant to corrosion from potable water.
 - e. Manual or automatic actuators shall be easy to locate and operate by touch.
 - f. Upon installation, equipment shall be tested for leaks.
 - g. Equipment shall be supplied by potable water.
3. Requirements specific to emergency eyewash equipment.
 - a. Eyewashes shall supply potable water at a flow rate of not less than 0.4 gallons per minute (gpm) at 30 pounds per square inch for 15 minutes.
 - b. Portable eyewashes shall deliver potable water or other approved eye-flushing solution.
 - c. Eyewash water nozzles shall be protected from airborne contaminants and the protection device shall not require a separate operator motion for removal when activating the eyewash.
 - d. Eyewashes shall be mounted with water nozzles 33 to 45 inches from the floor.
 - e. Eyewashes located above work counters shall be mounted so that when spray nozzles are activated they are no more than 18 inches from the counter front.

- f. Eyewashes shall incorporate an activation device that allows the user full movement of both hands after the valve is turned to the on position.
 - g. Eyewashes shall provide sufficient room to allow the eyelids to be held open with the hands while the eyes are in the stream of water.
4. Requirements specific to emergency shower equipment.
- a. Showers shall supply potable water at a minimum flow rate of 30 gpm and shall be supplied by an iron pipe having a diameter of at least 1 inch.
 - b. Shower spray patterns shall be a minimum of 20 inches in diameter at a height of 60 inches above the surface on which the user stands.
 - c. The center of the shower spray pattern shall be located at least 16 inches from any obstruction.
 - d. Showers shall be installed with the showerhead not less than 82 inches or more than 96 inches from the surface on which the user stands.
 - e. Shower enclosures, if used, shall provide a minimum unobstructed area 34 inches in diameter.

C. Maintenance

- 1. Emergency eyewash and shower equipment maintenance and repair are the responsibility of the RECs.
- 2. Emergency eyewash and shower equipment shall be activated and inspected at least monthly to flush lines and verify proper operation.
- 3. Monthly inspection of emergency eyewash and shower equipment shall be performed by REC personnel.
- 4. A monthly emergency eyewash and shower equipment inspection log shall be maintained at the RECs.
- 5. Eye-flushing solutions shall be replaced according to manufacturer's recommendations.
- 6. Areas adjacent to emergency eyewash and shower equipment shall be kept free of obstructions so as to allow ready access to the equipment.

D. Equipment Utilization

1. If emergency eyewash or shower equipment is inoperable or appears faulty, the handling of hazardous materials must cease until the equipment is repaired.
2. All employees that might be exposed to chemical splash shall be instructed in the proper use of emergency eyewash and shower equipment.

VI. EMERGENCY EYEWASH AND SHOWER EQUIPMENT REFERENCES

- A. California Code of Regulations, Title 8. Industrial Relations, Division 1. Department of Industrial Relations, Chapter 4, Subchapter 7. Group 16, Article 109, Section 5162. Emergency Eyewash and Shower Equipment.
- B. American National Standards Institute, ANSI Z358.1-1981, Sections 4, 5, 7, and 9.