
Emergency Eyewash and Shower Station Weekly Activation

1.0 Objective & Intent

The objective of this Standard Operating Procedure (SOP) is to establish a mandatory weekly activation and inspection protocol for all plumbed emergency eyewash and shower stations within the facility. This procedure ensures that each station delivers a continuous, tepid flow of water at the required volume and pattern, effectively flushing hazardous materials from eyes and skin in the event of an emergency.

This SOP is designed to comply with WorkSafeBC regulations (OHS Regulation Part 4, Sections 4.44-4.46) and ANSI Z358.1-2014 standards, which mandate weekly activation to verify proper operation and to clear stagnant water from the supply line. Failure to perform this weekly check can result in bacterial growth (e.g., Legionella), sediment buildup, valve seizure, or inadequate flow, rendering the equipment non-functional during a critical chemical exposure incident.

The specific risk mitigated by this SOP is the failure of emergency flushing equipment due to lack of maintenance. In a cabinet and millwork environment, workers are exposed to wood dust, solvent-based adhesives, paints, stains, and cleaning chemicals. A non-functional eyewash or shower can lead to prolonged chemical contact, resulting in severe eye damage, skin burns, or systemic toxicity. Weekly activation ensures immediate, reliable decontamination capability.

2.0 Operational Scope

This procedure applies to all plumbed emergency eyewash stations, combination eyewash/shower units, and drench hoses installed in the cabinet and millwork manufacturing facility. It covers all locations where hazardous chemicals are stored, mixed, or used, including the finishing booth, glue-up area, spray room, chemical storage room, and maintenance workshop.

This SOP is to be performed by designated safety personnel, maintenance technicians, or trained shift leads who have completed the company's Emergency Equipment Inspection Training. It does not apply to self-contained or portable eyewash units, which have separate weekly maintenance requirements outlined in SOP-EW-002.

All eyewash and shower stations must be activated and inspected every seven calendar days, with the date and results recorded on the inspection tag attached to each unit. If a station fails any part of the inspection, it must be immediately tagged out of service and reported to the Plant Safety Officer for corrective action.

3.0 Hazard Identification & Mandatory PPE

- Chemical Splash: Residual chemicals in supply lines or on station components may spray during activation. Wear chemical splash goggles and nitrile gloves.
- Slip/Trip Hazard: Water spillage on concrete floors creates a slip hazard. Ensure the area is clear of obstructions and use wet floor signs.
- Hot Water Burn: Supply water may be heated above 38°C (100°F) if the mixing valve is faulty. Verify tepid water temperature (20-38°C) before full activation.
- Biological Contamination: Stagnant water may contain bacteria (Legionella). Avoid inhaling aerosolized water mist. Wear safety glasses and keep face away from initial flow.
- Pinch Points: Activation handles, pull rods, and foot treadles have moving parts. Keep fingers clear during operation.
- Mandatory PPE: CSA-approved safety glasses or chemical splash goggles, nitrile or chemical-resistant gloves, steel-toed boots with slip-resistant soles, and a high-visibility vest if in a traffic area.

4.0 Required Safety Equipment & Tools

- Lockout/Tagout (LOTO) kit with personal lock and hasp (only if isolating supply for repair)
- Digital thermometer (range 0-50°C, $\pm 0.5^\circ\text{C}$ accuracy) for verifying tepid water temperature
- Graduated bucket or flow measurement bag (minimum 5-gallon capacity) to measure flow rate
- Stopwatch or timer (smartphone acceptable) to measure flow duration
- Flashlight for inspecting bowl and drain area for debris or sediment
- Inspection tag and permanent marker for recording date and initials
- Wet floor signs (2 per station) to cordon off spill area
- Absorbent pads or shop towels for drying the station and floor after activation
- Chemical splash goggles and nitrile gloves (for the inspector)

5.0 Step-by-Step Safety Procedure

1. Notify all personnel in the immediate area that the eyewash/shower station will be activated. Post wet floor signs around the station to prevent slip accidents. Ensure the floor drain (if present) is clear of debris.
2. Visually inspect the station for any physical damage, leaks, corrosion, or obstructions. Check that the dust cover on the eyewash nozzles is in place and free of debris. Verify that the activation handle or pull rod is unobstructed and moves freely.
3. Don chemical splash goggles and nitrile gloves. Position yourself to the side of the eyewash basin to avoid direct spray. Grasp the activation handle or push the activation flag firmly to start the water flow. Allow the water to run for at least 15 seconds to clear the supply line of stagnant water.
4. After 15 seconds, use the digital thermometer to measure the water temperature at the eyewash nozzle. The temperature must be between 20°C and 38°C (68°F to 100°F). If the temperature is outside this range, tag the unit out of service and report to the Plant Safety Officer immediately.
5. Place the graduated bucket or flow measurement bag under the eyewash nozzles. Activate the station and simultaneously start the stopwatch. Collect water for exactly 15 seconds. The collected volume must be at least 1.5 litres (0.4 gallons) per minute for each eyewash nozzle, meaning a combined minimum of 3 litres in 15 seconds for a dual-nozzle unit. Record the volume.
6. For combination shower units, pull the shower activation handle or chain. Verify that the shower delivers a continuous flow of water with a minimum diameter of 50 cm (20 inches) at the point of discharge. Measure the flow rate using the bucket method: collect water for 60 seconds. The minimum acceptable flow is 75.7 litres (20 gallons) per minute. Record the volume.
7. Inspect the eyewash nozzles during flow to ensure both streams are parallel and of equal height, providing a consistent flushing pattern. Check that the shower head is not clogged and that water is distributed evenly. Use the flashlight to look for sediment or debris in the basin or drain.
8. After completing the flow test, shut off the station by returning the activation handle to the off position or closing the valve. Dry the eyewash basin, shower area, and floor with absorbent pads or shop towels. Replace the dust cover on the eyewash nozzles. Remove wet floor signs.
9. Complete the inspection tag attached to the station. Write the date, your initials, and a checkmark indicating pass. If any deficiencies were noted (e.g., low flow, temperature issue, leaks), write 'FAIL' and immediately attach a red 'Out of Service' tag. Report the failure to the Plant Safety Officer and submit a maintenance work order.
10. Log the inspection results in the SafeDesk digital compliance system or the paper logbook located in the safety office. Include the station ID, date, inspector name, flow rates, temperature, and any corrective actions taken. File the record for a minimum of three years per WorkSafeBC requirements.

Regulatory Disclaimer: This document is a generic safety template provided for educational and informational purposes only. It does not constitute professional engineering, legal, or regulatory compliance advice. The end-user assumes all liability for validating all safety protocols against specific machinery manufacturer manuals and local occupational health and safety regulations (e.g., WorkSafeBC, CSA standards) before deployment.