

Emergency Equipment Inspection Policy

Intent:

This purpose of this policy is to provide reliable safety equipment to meet the needs of the University's users in a cost-effective manner. This policy provides minimum requirements for eyewash stations and safety showers for the emergency treatment of the eyes and the body of persons exposed to hazardous materials. It outlines uniform minimal requirements for equipment procurement, equipment installation, test procedures, maintenance, and responsibility on scheduled inspections for all eye wash stations, safety shower stations, portable fire extinguishers, and all exit signs.

Scope:

This Emergency Equipment Inspection Policy covers emergency showers, eyewash stations, Automatic External Defibrillators (AED), and portable fire extinguishers wherever mandated by OSHA standards, regulation, or consensus standards, or whenever a hazard assessment determines areas where corrosive materials or infectious agents are present, or where there is a reasonable probability of injury to the eyes or skin occurring because of exposure to hazardous chemicals or materials. This program applies to all plumbed and non-plumbed emergency eyewash and emergency shower equipment located in all UW-Eau Claire facilities.

Definitions:

ANSI - American National Standards Institute.

Emergency Safety Equipment - They are included emergency showers, eyewash/facewash equipment, handheld drench hoses, and combination shower with eyewash/facewash.

Emergency Eyewash/Facewash - A device used to provide fluid to irrigate and flush both eyes and face simultaneously at a velocity low enough to be non-injurious to the user.

Eyewash Bottle - A bottle, complete with flushing solution, whose design, construction, and manufacture enables the quick flushing of an eye and surrounding facial area.

Exit Signs - Marking identifying access to exits (usually internally illuminated with battery backup power).

Emergency Lighting - Backup power lighting systems that provide the necessary lighting in the event of any interruption of normal lighting.

Safety Shower - A device designed to deliver flushing fluid in sufficient volume to enable the user to have water cascading over the entire body while the hands are free.

Portable Fire Extinguisher - A portable device, carried or on wheels and operated by hand, containing an extinguishing agent that can be expelled under pressure for the purpose of suppressing or extinguishing fire by a layperson.

Combination Unit - An interconnected assembly of drenching and flushing equipment that is supplied by a single flushing fluid source.

Drench Hose - A supplemental device consisting of a flexible hose connected to a flushing fluid supply that is used to provide fluid to irrigate face and body areas.

Flushing Fluid - Potable water, preserved water, preserved buffered saline solution or other medically acceptable solutions manufactured and labeled in accordance with applicable federal regulations.

Flow Pressure - The pressure of the flushing fluid exerted in the wall of the pipe near the outlet while the faucet/outlet is fully open and flowing.

Flow Regulator - A device intended to control the flow of flushing fluid through the pipe.

Tepid - Moderately warm; lukewarm.

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Procedures

In developing its Plan, each department should ensure that it addresses, as applicable, the following guidelines:

Responsibilities

Risk Management, Safety and Sustainability (RMSS)

Step	Responsibilities
1	Be responsible for ensuring the development & implementation of this policy
2	Provide necessary resources as available to carry out the program
3	Ensure that supervisors, employees, and students are notified of their responsibilities as outlined in this Standard Operating Procedure.
4	Ensure that all employees and students have received instruction regarding operation and maintenance of emergency eyewash and shower equipment as needed.
5	Coordinate with Facilities Management for inspection, modification, repair, maintenance, and installation of emergency shower and eyewash units, as necessary.
6	Ensure that each department is aware of their responsibilities under this program.
7	<p>Implement safety showers, eyewash/facewash stations, and drench hoses.</p> <ul style="list-style-type: none"> a. Maintain an updated inventory of eyewash and safety shower units. b. Assist with building plan review and selection from a list of recommended units during new construction or major renovation. c. Provide necessary equipment and inspection tags required to test eye/face wash and safety shower equipment as required by departments. d. Notify Facilities Management to conduct semi-annual inspection to ensure that the emergency equipment is functioning properly. (See Appendix B) e. Ensure that eyewash/facewash stations within the laboratory are activated weekly and a WEEKLY activation log is maintained. f. Evaluating and approving personal eyewash bottles. g. Identifying eye/face washes and showers that are no longer needed and submit a request to Facilities Management for their removal. h. Providing technical assistance to Facilities Management and other personnel in the selection, installation, maintenance, and testing of emergency eye/face washes, safety showers, and drench hoses.

Facilities Management

Step	Responsibilities
1	Perform timely modifications, repair, maintenance, and installation of emergency eyewash and shower equipment as required.
2	Inform RMSS after installation, repair, and modification of eyewash and/or shower equipment so that RMSS can inspect/re-inspect the units.
3	Executes all work orders for the installation or repair of emergency eyewash and shower equipment on a high priority basis.
4	Conducts annual flow rate testing and compliance assessment.
5	Maintains written records of flow rate testing and compliance assessment.
6	Notify the RMSS 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. (See Appendix D)
7	Conduct monthly checks of all fire extinguishers, emergency lights, and exit signs in all other buildings as well as the exit signs and emergency lights in the dorms.
8	All personal wash units (eyewash bottles) must be checked monthly by the user for the expiration date and to determine if it has been used. <ol style="list-style-type: none"> a. Dispose of any opened or eyewash bottles that have use by dates that have expired. b. The expiry date of the fluid should be printed permanently on the unit. c. Replenish them after used and/or when they are outdated.

Laboratory Supervisors

Step	Responsibilities
1	To ensure that the necessary emergency eye/face wash, safety shower, and drench hose equipment are located on the same level as the hazards.
2	To ensure unobstructed access to the safety shower/eyewash equipment so that it requires no more than 10 seconds to reach (no more than 55 feet walking distance).
3	To ensure that all employees and students who may need the emergency eyewash and shower equipment are trained on their location and use.
4	Inform (RMSS) before removing any emergency eyewash/shower equipment from the laboratory.

Semi-annually Flow Test and Activation

RMSS will inform Facilities Management to conduct semi-annually test for all Emergency Equipment on campus.

Step	Action
1	Flow rate of the device will be conducted semi-annually to let the water run for one minute to collect at least 1.5 liters (0.4 gallon) of water. (See Appendix B)
2	Ensure compliance with the ANSI Z358.1-2014 recommends that the flushing fluid shall be "tepid". However, ANSI provides a guideline that the flushing fluid temperature in the range of 60°F - 100°F is considered suitable.
3	Observe the Flow: <ol style="list-style-type: none"> The unit must be delivered not less than 0.4 gallons per minute of flushing fluid for 15 minutes (report low or high flow for maintenance). Ensure that the water flow is continuous, evaluate that the unit can maintain flow for 15 minutes, and is not injurious to the user's eye or face. For eye/face wash units, controlled flow must be provided to both eyes simultaneously. Uneven flow to one eye or the other indicates a malfunction or simple blockage of the filters underneath the spray cap (remove and rinse filters or report malfunction for maintenance).
4	Ensure they are in proper working condition, it has an appropriate tag the on unit, and document test with dates and initials on the unit tag after test.
5	Facilities Management's plumber should ensure that the testing does not interfere with teaching/research tasks and will be subject to all restrictions imposed on those areas where the emergency equipment is located.
6	Activation of the Unit: <ol style="list-style-type: none"> Valve activator must stay on unless manually turned off and must activate water flow in one second or less. If the eye wash station has protective caps, make sure they pop off automatically when the eye was being turned "ON". Return the caps to the proper position after flushing. Activate or flush the unit until the water runs clear to discharge rust, bacteria, or other contaminants. Keep an eye wash test record or log in the laboratory. Record the activation flushing.

Visual Inspection Procedures

Emergency eyewash/facewash and drench hose are required to have “**Weekly Inspection**” by RMSS or workplace personnel. (See [Appendix A](#))

Step	Action
1	<p>Visual Inspection of the Unit:</p> <ul style="list-style-type: none"> a. Look for corrosion, leaks, or pipe damage and proper placement of protective covers. This should be done prior to activation and to avoid risk of injury, damage to the unit, or creating a spill. b. Ensure that the unit is clean and free of any nearby obstructions. c. Activate and flush eye/face wash & drench hose for recommended timeframe. d. Ensure the eye/face wash and drench hose water is clear before turning off. e. Verify the eyewash has been tested semi-annually on the log or hang tag on the unit, or with the building manger. f. Record the test as pass or fail.
2	<p>Test Failure, Malfunctions, and Deficiencies:</p> <ul style="list-style-type: none"> a. Corrective actions must be performed when deficiencies are noted by any personnel at any time. b. Units that fail testing during normal daily activities must be repaired immediately. If deficiencies cannot be immediately corrected, the area supervisor must be notified, and the unit must be tagged “DO NOT USE”. c. The area supervisor must notify all affected employees and RMSS when emergency equipment is out of service. d. Semi-annually test failures must be corrected immediately. Malfunctions will be reported to immediate supervisors. e. Work order requesting service, call Facilities Management at: 36-3411.
3	<p>Fire Extinguishers Inspection Procedures:</p> <p>Inspect for compliance with any of the following general requirement for fire extinguisher? (See Appendix E)</p> <ul style="list-style-type: none"> a. Ensure access to the extinguisher is not blocked and that the cabinet door, if applicable, opens easily. b. The cylinder pressure should be within the recommended level on extinguishers equipped with a gauge. c. If the needle is not in green zone, contact Facilities Management to replace the defective fire extinguisher. d. Verify that the locking pin is intact, and the tamper seal is not broken. e. Check the hose and nozzle to ensure they are in good condition.

	<p>f. Check the extinguisher for dents, leaks, rust, wet, chemical deposits, or other signs of abuse/wear and note any findings on the inspection report.</p> <p>g. If the extinguisher is damaged or needs recharging, remove it from service and note this deficiency on the inspection report.</p>
4	<p>Emergency Lights and Exit Signs Inspection Procedures</p> <p>Monthly Inspection: All emergency lighting, emergency egress, exit signs, and other life safety systems shall be inspected. (See Appendix F).</p> <p>a. All exit access, exit doorways, and the exit discharge systems are to remain clear and unobstructed always.</p> <p>b. At no time shall any form of obstruction be placed into the exit egress system. Aisles, hallways, corridors and exit doors, emergency escapes, etc. shall not be obstructed by any type of storage or projections.</p> <p>c. Check for physical damage to the exterior of the unit (test switch, pilot lamp, broken head, etc.)</p> <p>d. Check the AC ready light is on and the bulbs on Exit Signs are illuminated.</p> <p>e. Verify that the red or green diffuser on Exit Signs is not bleached, faded, burnt, or cracked.</p> <p>f. Verify that the lamps on Emergency Lights and Exit Signs equipped with a battery backup illuminate when the test switch is depressed (press and hold Test Switch for 30 seconds)</p> <p>g. Verify that the lamps on Emergency Lights are properly aligned and secure.</p> <p>h. The test button is located on the side or bottom of the sign.</p> <p>i. If an exit sign or emergency light is found inoperable, notify the building manager and/or contact Facilities Management at: 36-3411 for work order requesting service.</p> <p>Annual Inspection: All exit signs, night lights, and emergency lighting units are to be inspected and tested annually as follow:</p> <p>a. Correcting fire code deficiencies in a timely manner.</p> <p>b. Checking batteries and lenses for damaging and corrosion.</p> <p>c. Cleaning unit and lenses.</p> <p>d. Adjusting beams for proper alignment.</p> <p>e. Checking battery voltage output.</p> <p>f. Replacing burnt-out bulbs and dysfunctional batteries.</p>

6	<p>Semi-annually Inspection on AEDs RMSS will conduct a semi-annually inspection system and maintain the following records on site. (See CPR/AED Training Program).</p> <ol style="list-style-type: none"> a. Guidelines for use b. Manufacturer’s operating instructions c. Written self-inspection records d. The identity of the department's responsible person
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Training Program

All workers/students who might be exposed to a chemical splash must be trained by their department or lab supervisor as part of their induction on the following:

Step	Actions
1	The specific location of the units servicing that area
2	How to properly activate and use the specific type of system
3	<p>Use of the “Eyewash/Facewash Station” in the event of an eye injury</p> <ol style="list-style-type: none"> a. Individuals should be instructed to hold the eyelids “OPEN” and roll the eyeballs continuously so fluid will flow on all surfaces of the eye and under the eyelid seek medical attention. b. The specific treatment for the chemical concerned – refer to the SDS. <p>Note: People may not always be able to flush their eyes on their own because of intense pain. Nearby helpers should be prepared to assist with holding the eyelids open. Other helpers may need to assist with keeping the person under the flushing fluid for at least 15 minutes.</p>
4	<p>Use of the “Safety Shower” in the event of a chemical spill onto their body.</p> <ol style="list-style-type: none"> a. Individuals should be instructed to remove all contaminated clothing including footwear and socks/stockings while under the shower when cross contamination has occurred. b. Have someone assist with clothing removal when possible. c. An assistant may use a fire blanket or uncontaminated article of clothing as a shield to provide privacy for someone who needs to remove their clothes while under an emergency shower, and for body coverage while seeking medical attention. d. Flush body for a minimum of 15 minutes, seek medical attention. e. The specific treatment for the chemical concerned – refer to the SDS.
5	<p>Fire Extinguisher Training:</p> <ol style="list-style-type: none"> a. Individuals responsible for monthly fire extinguisher inspections need to attend the training annually and hands on training every other year.

Related Information:

- 29 CFR 1910.157 - [Portable Fire Extinguishers](#)
- 29 CFR 1910.151(c) - [Medical Services and First Aid](#)
- ANSI/ISEA Z358.1-2014: [Compliance Checklist](#)

Administration:

Approval Details

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Contact Person/Department

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