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|  | | Environmental Health & Safety | No.: LS-001 |
| | Effective Date: 1/24/2024 | Title: Annual Eyewash Inspection | Revision: New Page 1 of 3 |

1.0 Purpose

The purpose of this Standard Operating Procedure (SOP) is to provide instructions on how to perform the annual eyewash maintenance and inspection for all eyewashes NOT associated with an emergency shower. This procedure ensures that laboratory eyewash stations NOT associated with an emergency shower meet the requirements set forth in OSHA CFR 1910.151 and ANSI Z358.1-2009 standards. (Emergency eyewashes associated with an emergency shower are inspected annual by Facilities staff.)

2.0 Scope

This procedure applies to all wet labs on the Georgia Tech campus and all eyewashes that are NOT associated with an emergency shower.

3.0 Responsibility


| Position | Responsibility |
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| Laboratory Personnel | <ul style="list-style-type: none"> Understand and perform the procedure outlined in this SOP Ensure that all relevant documentation is completed accurately Maintain SOP-related records Report any deficiencies to the PI and Building Manager |
| Principal Investigator (PI) | <ul style="list-style-type: none"> Ensure their laboratorians are aware of relevant SOP's and their responsibilities Provide technical expertise as needed Ensure corrective actions for deficiencies are implemented Review SOP-related documentation |
| Environmental Health & Safety Office | <ul style="list-style-type: none"> Ensures compliance by verifying that Appendix A is completed at annual inspections |
| Building Manager | <ul style="list-style-type: none"> Making necessary repairs as requested by Laboratory Personnel |

4.0 Equipment/Materials

| Item | Description/Item # |
|-----------------------------|--|
| Eyewash Station | Located in each laboratory (Typically at the sink) |
| 1000 mL beaker (or greater) | Available from scientific supply stores |
| Thermometer | A partial immersion thermometer capable of reading 15 to 50°C |
| Timer | A laboratory timer capable of measuring 30 seconds |
| Replacement eyewash filters | Contact VWR to obtain replacements. <ul style="list-style-type: none"> Item #: 470-004R Foam Filter, 1" diameter Item # 470-024R Foam Filter, 1.75" diameter |

5.0 Procedure

| Step | Eyewash Inspection |
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| 5.1 | Confirm and record the Building/Room and Unit #. If multiple units per room, designate details on the "Annual Eyewash Inspection Form". As each step is verified, complete the maintenance and inspection form. Steps 7-9 can be performed simultaneously. |
| 5.2 | The eyewash should be positioned at least 6 inches from the wall or nearest obstruction. Ensure that no objects are within 6 inches of the eyewash. |
| 5.3 | Any shelf above a sink eyewash station must be positioned at least 15 inches above the top of the unit. |

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| 5.4 | Pull the eyewash unit from its holder and extend halfway into the sink. Turn on the eyewash station by depressing the lever. Verify the water begins to flow within one second once the eyewash has been activated. |
| 5.5 | Pull the eyewash unit from its holder and extend halfway into the sink. Turn on the eyewash station by depressing the lever; Ensure correct hands-free operation by moving the stay open valve (metal ring) above the metal protrusion. The water should continue to flow. |
| 5.6 | Ensure dust covers are present, in good working order (undamaged), and that they open when water flow is activated. |
| 5.7 | Check that water flow is continuous, with each nozzle expelling water in roughly equal amounts and equal height. |
| 5.8 | Place a 1000 mL (or greater) beaker in the sink and set the timer for 30 seconds. Start the time and activate the eyewash lever, ensuring all expelled water goes into the beaker. Release the lever when the timer beeps or the beaker fills. |
| 5.9 | Verify beaker contains at least 750mL of water. The eyewash provides the required, minimum, low velocity flow rate of > 0.4 gallons/minute if there are at least 750mL present. |
| 5.10 | Place the thermometer in the beaker of water and read after the temperature has visually stabilized. |
| 5.11 | Record the temperature and room location on the <i>Annual Eyewash Inspection Form</i> . The temperature should be “tepid”, between 16-38 degrees C (60-100 degrees F). |
| 5.12 | Replace each eyewash filter by unscrewing the top of the spray head, removing the old foam filter, and replacing it with a new one. Discard the old filters in the waste bin. |
| 5.13 | Check that there is a Weekly Eyewash Check Log posted in the vicinity. |
| 5.14 | Verify that weekly eyewash checks have been completed and documented on the Weekly Eyewash Check Log form. |
| 5.15 | Date, initial, and record “Annual Inspection” on the bottom of the “Weekly Eyewash Check Log” affixed to the eyewash. |
| 5.16 | Verify completion of the “Annual Eyewash Inspection Record”, date and sign it, and place it in the laboratory site-specific safety binder. |
| 5.17 | Ensure that all employees are trained on the location and proper use of the eyewash unit. |
| 5.18 | Report any broken items, missing items, low-water flow, or incorrect temperatures to your building manager |


6.0 References

- 6.1 Occupational Safety and Health Administration (OSHA) CFR 1910.151 (c)
- 6.2 American National Standards Institute (ANSI) “Emergency Eyewashes and Shower Equipment” standard (Z358.1-2009)

7.0 Appendix

- 7.1 Appendix A – Annual Eyewash Inspection Record

| REV. | REASON FOR CHANGE | EFFECTIVE DATE |
|------|--|------------------|
| 0 | Original document. Written By: K. Jennings | Month Date, Year |

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APPENDIX A: Annual Eyewash Inspection Record

- **Water Temperature Check (WTC):** Acceptable range is 16-38°C
- **Clearance Check (CC):** Minimum 6 inch clearance from the wall or nearest obstruction.
- **Flow Rate Check (FRC):** Acceptable Delivery is > 750 mL/30 seconds
- **Foam filters (FF)** are replaced in each eyepiece
- **Spray heads protective covers (PC)** are in place

| Clearance Check (CC), Flow Rate Check (FRC), Changing of Both Foam Filters (FF) and Spray Head Protective Covers (PC) Check are Performed on Each Sink Eyewash Station Unit | | | | | | |
|---|------------------------------|--|---------------------------|--------------------------|----------------------|---------------|
| Building/ Room # | CC Yes/No 6" Clearance | FRC Acceptable Range >750 mL/30 sec Record Volume/# sec | FF ✓ if replaced | PC ✓ If present | WTC (16-38°C) | Date/Initials |
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Comments/Nonconforming Observations:
