**SAFE.GEN.9.0 SAFETY EQUIPMENT USE AND MAINTENANCE**

**PURPOSE**

To ensure optimal performance of basic laboratory equipment, all MACL sites will follow set periodic function checks. These function checks are to ensure that the required safety equipment functions properly and provides adequate protection.

**SCOPE**

This policy applies to all MACL testing, processing and specimen collection facilities and associates who use these safety devices.

**POLICY OWNERS**

QA and Safety Officer

**RELATED DOCUMENTS**

SAFE.GEN.9.1 Eyewash Maintenance Record

SAFE.GEN.9.2 Safety Shower Maintenance Record

**TEXT**

A. Biologic Safety Cabinets

1. Daily

a. Blowers are operated at least three to five minutes before beginning work.

b. The work surface, interior walls, and the interior window surface are cleaned with 10% bleach or approved commercially available disinfectant wipes. Document on appropriate laboratory maintenance record.

c. Hoods are equipped with ultraviolet lamps, which act as a germicidal agent. UV lamps are only used at the end of the shift, when the hoods are not in use and the area is unoccupied. Hoods should be closed when UV light is in use.

**Note:** UV light may cause corneal or skin burns from direct or deflected light sources. Protect eyes and skin from exposure.

d. Hoods will be labeled with signage of danger warning.

**WARNING**: This device produces potentially harmful ultraviolet (UV) light. Protect eyes and skin from exposure.

2. Annually—Preventative maintenance and certification of function are performed by an outside vendor. The Regional Laboratory Facility Department will be responsible for coordinating annual and as needed maintenance.

B. Chemical Fume Hoods

1. Annual PM and Certification performed by outside vendor. The Regional Laboratory Facility Department will be responsible for coordinating annual and as needed maintenance.

C. Eye Wash (Utilize form SAFE.GEN.9.1 Eyewash Maintenance Record)

 1. Weekly maintenance:

a. Inspect eyewash to ensure unit is free of visible scaling, rust or contamination, and that dust caps/covers fit correctly and are in place.

b. Inspect eyewash location to ensure the unit is free of obstructions and that adequate signage is in place.

c. Activate eyewash to ensure unit will go from “off” to “on” in one second or less and remain on without the use of the operator’s hands. Unit should be allowed to run long enough to ensure all stagnant water is flushed from the unit and clears piping leading to the unit. Water temperature should be tepid to the touch (between 600F and 1000F). Flushing fluid should be directed to both nozzles simultaneously and cover the areas between the interior and exterior lines of a gauge at some point less than 8 inches above the eyewash nozzle.

d. Combination eyewash and safety shower units must be capable of operating simultaneously, and meet all maintenance targets.

 2. Yearly maintenance:

a. Ensure installation and accessibility meets current required specifications as noted on form SAFE.GEN.9.1

b. Activate unit to assess flow rate, temperature, and required flushing fluid delivery capability.

c. Combination eyewash and safety shower units should be aligned for simultaneous use by the same person.

D. Safety Showers (Utilize form SAFE.GEN.9.2 Safety Shower Maintenance Record)

 1. Weekly maintenance:

a. Inspect safety shower to ensure unit is free of visible scaling, rust or contamination.

b. Inspect safety shower location to ensure the unit is free of obstructions and that adequate signage is in place.

c. Activate safety shower to ensure unit will go from “off” to “on” in one second or less and remain on without the use of the operator’s hands. Unit should be allowed to run long enough to ensure all stagnant water is flushed from the unit and clears piping leading to the unit. Water temperature should be tepid to the touch (between 600F and 1000F). The shower must deliver a minimum of 20 gallons per minute (GPM).

d. Combination safety shower and eyewash units must be capable of operating simultaneously, and meet all maintenance targets.

2. Yearly maintenance:

a. Ensure installation and accessibility meets current required specifications as noted on form SAFE.GEN.9.2

b. Activate unit to assess flow rate, temperature, and required flushing fluid delivery capability.

c. Combination safety shower and eyewash units should be aligned for simultaneous use by the same person.

E. Fire Cabinets

1. Storage of Acid/Bases must be below eye level. (Storage near the floor is recommended.)

2. Storage containers of acids and bases should be adequately separated to prevent a chemical reaction in the event of an accident/spill/leak.

**REFERENCES**

1. College of American Pathologist and CLIA Guidelines.
2. American National Standards Institute. Emergency eyewash and shower equipment. New York, NY: ANSI, 20049;Z358.1