

EHS Standard of Care #1: Ventilation

Engineering

1.0 Scope

- 1.1 EHS's ventilation engineering controls certification program is designed to ensure that these critical systems are working properly and meet current health and safety standards.
- 1.2 List of engineering controls serviced through EHS
 - 1.2.1 Biological Safety Cabinet (BSC) – (serviced by OSEH)
 - 1.2.2 Chemical Fume Hood (FH)
 - 1.2.3 Vertical Laminar Flow Polypropylene (VLFP) Fume Hood – “Hybrid Hood”
 - 1.2.4 Local Exhaust Ventilation (LEV)
 - 1.2.5 Laminar Flow Device (LFD)
- 1.3 Services to units outside of the General Fund structure are billed for provided services

2.0 Equipment Categories

- 2.1 BSC – Class II unit providing personnel, product and environmental protection. The majority of applications involve containment of biological hazards while providing sterile field for vulnerable experimental materials.
- 2.2 FH – Exhausted fume hoods providing personnel protection only.
- 2.3 VLFP Hood – Metal-free exhausted fume hood for personnel protection with a purified air curtain for product protection.
- 2.4 LEV – A variety of configurations for local exhaust or capture of point source emissions, providing personnel protection and/or smoke, odor,

dust or heat control. Includes snorkels, canopies, paint booths, gas cabinets, etc.

- 2.5 LFD – HEPA-filtered cabinet designed specifically for product protection and quality control (clean bench). LFDs do not provide personnel or environmental protection. Used for “sterile field” work, either clinical preparations or research requiring “zero air”.

3.0 Provided Services

- 3.1 BSC – Annual certification with aerosol challenge filter testing, filter repair/replacement, balancing, maintenance (*see Standard of Care # 4: BSC Maintenance*) and decontamination as necessary. Additional certifications beyond the annual will be billed to the BSC owner.
 - 3.1.1 Maintenance, parts, and filters will be rebilled on BSCs over 10 years old. (*see Standard of Care #3: BSC Service Criteria*).
 - 3.1.2 New units still under warranty (typically 4 years) will be repaired by the manufacturer’s representative (*See Standard of Care # 5: BSC Warranty Work*). OSEH technicians are approved to provide warranty work on most BSC brands with manufacturer’s authorization.
- 3.2 FH – Annual certification of face velocity and inspect for full functionality on safety features. Mechanical maintenance provided by Facilities Management on faulty hoods are to be tagged out of service.
- 3.3 VLFP Hood – Annual certification of face and down-flow velocities with balancing as necessary.
- 3.4 LEV – Certifications are completed annually by EHS. Maintenance is provided by Facilities Management or the owner.

3.5 LFD –LFDs are designed for quality control not occupational health and safety. At the request of the owner, OSEH will provide annual certification of face velocity, aerosol challenge filter testing, and inspection of full functionality to ensure sterile field for QA/QC reporting. Maintenance and filter replacement services are also available and will be billed for time and materials.

4.0 **Reporting**

4.1 BSC – A BSC certification sticker is placed on the unit indicating the date of the certification.

4.2 FH – A fume hood certification sticker is placed on the unit indicating the date of the certification. Failing fume hoods are posted out of service. A work order is sent to Facilities Management to service failing hoods.