

Rooftop Laboratory Exhaust Systems Maintenance and Repair Safety Procedures

Last Reviewed Date: 12/2014

Effective Date: 3/1999

Applies to: Faculty, Staff, Students, Others

For More information Contact: EHS, Occupational Health & Safety
at 860-486-3613 or ehs@uconn.edu

A. Purpose

These procedures have been developed to protect employees from health and safety hazards while performing maintenance and repair work on or near rooftop exhaust fans and related systems.

B. Scope

This program applies to all faculty, staff, students and others working at the Storrs and regional campuses.

C. Policy Statement

As stated in the University's [Health and Safety Policy](#), the University of Connecticut is committed to providing a healthful and safe environment for all activities under its jurisdiction and complying with federal and state health and safety standards. As such, all entries into a confined space at the University of Connecticut must be in accordance with these procedures.

D. Enforcement

Violations of these procedures may result in appropriate disciplinary measures in accordance with University Laws and By-Laws, General Rules of Conduct for All University Employees, applicable collective bargaining agreements, and the University of Connecticut Student Conduct Code.

E. Responsibilities

1. Supervisors

- a. Inform employees of these procedures.
- b. Require employees to follow these procedures.
- c. Ensure that PPE is available to employees and require them to use it.

2. Employees

- a. Familiarize themselves with these procedures and comply with the requirements.

- b. Wear appropriate PPE, as required.

F. Safety Procedures

1. General Safety Procedures--All Laboratory Exhaust Systems

Prior to working on **any** rooftop laboratory exhaust system/fan, workers must:

- (1) Notify affected room or area representatives.
- (2) Ensure that the occupants have closed, sealed, or removed all hazardous materials from the fume hood and have shut down any experiments.
- (3) Shut down, lock and tag out the system/fan and place a sign (use sign in [Appendix A](#) of this policy—copy onto gold-colored paper) on fume hood cabinets to notify room occupants.
- (4) Wear appropriate Personal Protective Equipment (PPE)—refer to section C of this policy.

2. Biosafety Cabinet Exhaust Fans

All biosafety cabinets are HEPA-filtered at the cabinet. Very few biosafety cabinets are ducted to the outside. Those that are ducted to the outside **do not** pose a biological hazard beyond the HEPA-filtered cabinet. However, if work will be performed inside a biosafety cabinet, it must first be assessed by Biological Health and Safety (486-3613 or 486-2436).

3. Chemical Fume Hood Exhaust Fans

- a. All fume hood exhaust **internal** components have potential chemical hazards. Therefore, workers should wear chemical resistant gloves (e.g., nitrile or neoprene) in addition to any standard PPE (see section C). Disposable coveralls should be considered depending on the nature of the work.
- b. Observe all postings at rooftop accesses with regard to additional PPE or precautions, as required.

4. Radiological Hood Exhaust Fans

- c. There are two fume hoods on campus where *volatile* (airborne) radioactive material is used (Main Accumulation Area and EHS Radiation Safety Lab). These exhaust fans are labeled at the rooftops. Workers should not open or perform maintenance on the ventilation systems for these specialized hoods without prior approval from Radiation Safety (486-3613). As a precaution, any workers that must access the roof shall obtain clearance from Radiation Safety prior to accessing the roof.
- a. Within some laboratories on campus there are fume hoods labeled for radioactive material use. The ventilation systems (exhaust fans and ducts) of these fume hoods

present no radiation hazards to workers. However, if work will be performed inside a fume hood, it must first be assessed by Radiation Safety (486-3613).

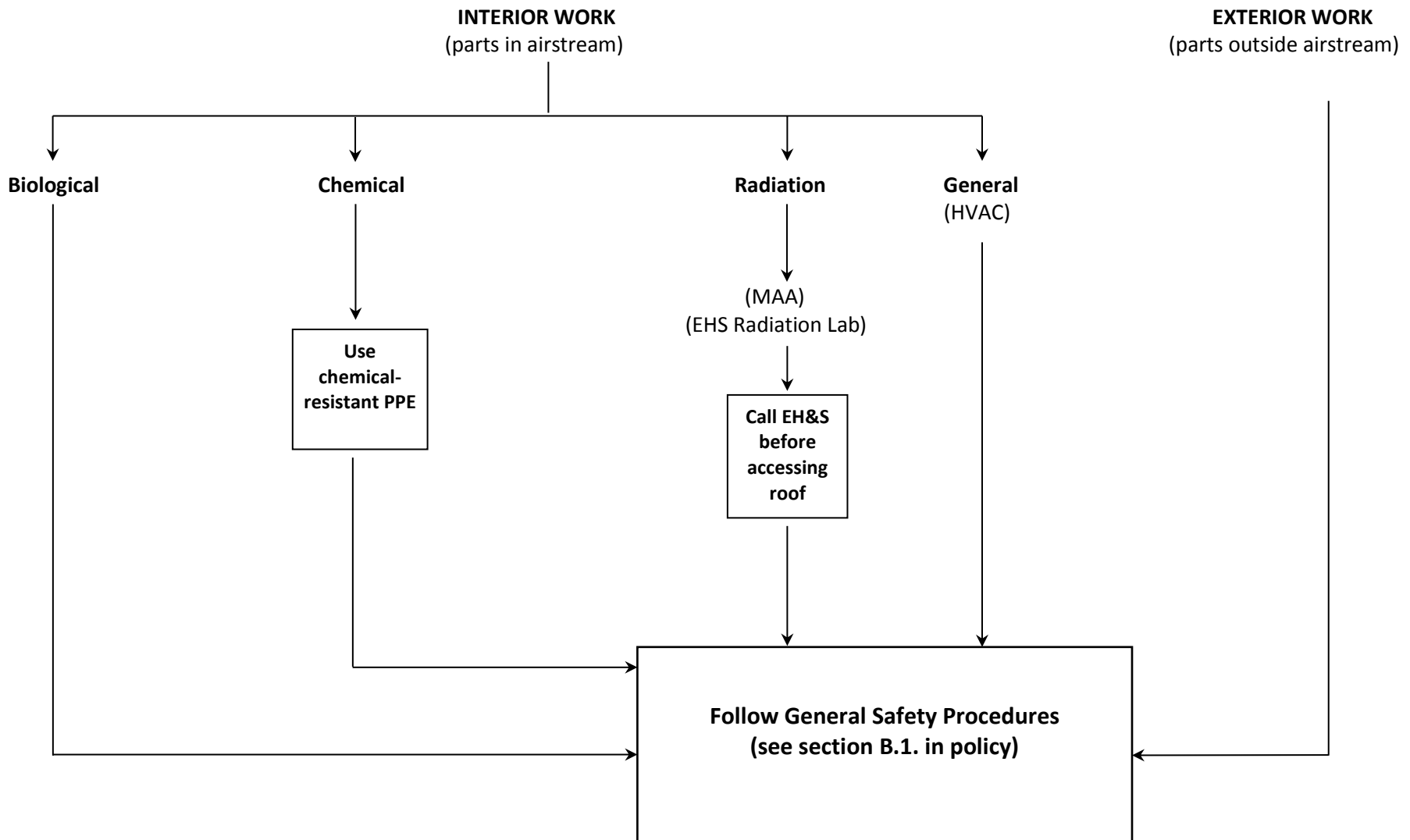
C. Personal Protective Equipment

Personal Protective Equipment (PPE) is required for **all work** that presents health or physical hazards to workers. Some form of PPE may be required for **any work** involving exhaust system operation and maintenance. Therefore, a hazard assessment must be made prior to the work to determine the appropriate PPE for the job. In addition, basic hygiene practices, such as washing up with soap and water after any work, should always be used. **The minimum level of PPE to be used will be work gloves and safety glasses or goggles.** For further information contact Occupational Health and Safety at 486-3613.

D. Flow Chart of Safety Procedures

To assist workers in determining the proper safety procedures to follow, the following flow chart has been developed:

**ROOFTOP LABORATORY EXHAUST SYSTEMS
MAINTENANCE & REPAIR
Flow Chart of Safety Procedures**



A large, bold, black-outlined rectangular sign with a white background. The word "WARNING" is written in the center in a very large, bold, black, sans-serif font. The sign has a slight shadow effect, giving it a three-dimensional appearance.

WARNING

WORKERS ON ROOF

DO NOT USE FUME HOOD