

Carnegie Mellon University Environmental Health & Safety FIRE LAB WORK	Environmental Health and Safety (EHS) Housekeeping Program
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1. Purpose

Poor housekeeping practices in the workplace contribute to hazardous environments that can cause incidents and injuries including, but not limited to, fires, blocked or limited emergency egress, being struck by falling objects, cuts/punctures/lacerations and slips/trips/falls. The purpose of this program is to protect Carnegie Mellon University (CMU) faculty and staff ("employee(s)"), students and visitors from hazards associated with unkempt work areas by providing general requirements and best practices related to housekeeping in the workplace. The purpose of this program is also to increase the ease and efficiency of work completion, which results from working in a clean and organized environment.

2. Scope

This program establishes the minimum housekeeping requirements for CMU employees while conducting maintenance and repair activities, general industry-type work or other construction work. The requirements herein may be exceeded by CMU employees, but may not be performed to a standard less than what is provided by this program. Procedures within this document shall be used to eliminate hazards and ensure a clean and organized work area is maintained at all times. This program also addresses employee training and annual workplace inspections. This program does not cover housekeeping related to student living areas, machine rooms and electrical closets. Note: Inspection of machine rooms and electrical closets are included in the Fire Safety Program.

3. Definitions

- a. **Employee:** CMU faculty and staff.
- b. **Incident:** A work-related event in which an injury or illness (regardless of severity) or fatality occurred, or could have occurred.
- c. **Qualified Person:** A third party contractor or an employee with a recognized degree or professional certificate, or with extensive knowledge and experience in the subject field, who is capable of design, analysis, evaluation and specifications in the subject work, project or product, and who is capable of making corrections/repairs which involves the structural integrity of the walking-working surface.

- d. **Walking-Working Surface:** Any horizontal or vertical surface on or through which an employee walks, works or gains access to a work area or workplace location.

4. Roles and Responsibilities

- a. Environmental Health and Safety (EHS):
 - i. Provide training on housekeeping practices outlined by this program.
 - ii. Maintain training records to include name of employee and the date training was completed.
 - iii. Perform annual housekeeping inspections.
 - iv. Communicate with space owners any deficiencies identified during periodic housekeeping inspections.
 - v. Perform a thorough investigation, as needed, into housekeeping incidents, including those with and without injury.
 - iv. Collaborate with Campus Design and Facility Development (CDFD), Housing Services and Facilities Management and Campus Services (FMCS) to ensure a safe working environment is maintained.
- b. Facilities Management and Campus Services (FMCS), Campus Design and Facility Development (CDFD) and Housing Services:
 - i. Ensure employees attend and participate in housekeeping training as required.
 - ii. Ensure employees and contractors maintain good housekeeping practices, such as those found in this program, on current job sites and upon job completion.
 - iii. Ensure building and renovation designs do not create hazards listed in this program.
 - iv. Collaborate with EHS create solutions to special housekeeping issues or circumstances.
 - v. Report any incident to EHS.
 - vi. Assist with investigations into any incidents with or without injury.
- c. CMU Employees:
 - i. Review this housekeeping program and follow the guidelines provided within.
 - ii. Successfully complete the training for this program.
 - iii. Report or correct any housekeeping issues that cause an unsafe condition or environment before working in that area.
 - iv. Stop work and request guidance and direction from a supervisor in any situation where an unplanned hazardous environment is encountered, where continuation of work does not feel safe, where those performing the work do not have adequate training, or a similar situation arises.
 - v. Report any incident or injury as soon as possible to your supervisor or the supervisor on duty. Follow [*CMU's Injury and Incident Reporting Procedure*](#).
 - vi. Assist in investigations into incidents with or without injury.

- vii. Contractors must adhere to their company's housekeeping program. If a housekeeping program is not in place, contractors must follow the guidance provided herein.
- viii. Contractors must remove all equipment and materials from CMU property upon completion of a job.

5. Benefits of an Effective Housekeeping Program

Maintaining housekeeping, cleanliness and organization on a worksite has many benefits which include, but are not limited to:

- a. Reduces the potential for, and occurrence of, slips/trips/falls.
- b. Ensures that emergency egress routes are maintained free and clear so that quick and easy escape from the area is possible in an emergency situation.
- c. Reduces the potential for a fire to start by keeping areas clean and free of debris and trash.
- d. Reduces the opportunity for accidental exposure to hazardous dusts, vapors or other hazardous materials.
- e. Improves material workflows by minimizing obstructions.
- f. Improves inventory tracking and accountability.
- g. Increases the ease of worksite cleanup.
- h. Increases the effectiveness of work in the area by preventing a build-up of unused materials.

6. General Housekeeping Practices

General housekeeping practices are to be utilized in order to maintain a safe working environment:

- a. Keep all places of employment, work areas and storage locations clean, neat, orderly and in sanitary condition. These areas may include, but are not limited to: storerooms, service rooms, service tunnels, penthouses, offices, classrooms, labs, restrooms, kitchens, shop spaces and walking-working surfaces.
- b. Maintain, in a clean and orderly condition, jobsites for any maintenance, repair, construction, or general industry work areas during work. Clean jobsites and work areas thoroughly once the job is completed.
- c. Keep all hallways, stairways, passageways, exits and access ways to buildings free from obstruction at all times.
- d. Refrain from using compressed air for cleaning equipment, areas or people.
- e. Remove or make flush protruding nails, screws, or similar objects to eliminate their hazard. Protect or make visible permanent objects that protrude into a walking surface.

- f. Organize and store all tools, equipment, supplies, chemicals or other products required for job completion at the end of each shift, and in a way that does not create a hazard.
- g. Lay out extension cords, air hoses, water hoses, ladders, pipes, tools, etc., in such a way as to minimize tripping hazards or obstructions to pedestrian traffic.
- h. Remove all trash, empty chemical containers and hazardous waste from the job site as often as necessary to maintain a clean and orderly working environment. Accomplish this at a minimum of once per shift.
- i. Prevent the accumulation of combustible waste material to prevent the risk of fire.
- j. Remove all combustible or flammable materials from stairwells. Combustible and flammable materials shall not be stored in stairwells for any amount of time.
- k. Remove all materials stored within 12 inches of any ceiling or within 18 inches of a sprinkler head. This is measured from the highest protrusion of the material to the lowest part of the sprinkler head or ceiling.
- l. Store all waste materials that are susceptible to spontaneous ignition, such as oily rags, in non-combustible disposal containers, and dispose of these materials at least daily.
- m. Maintain, at all times, a safe passage of access and egress to and from working locations. There may be no blockages of access or egress routes without first identifying and communicating to all those affected a different passage (contact EHS for assistance in this circumstance). If there is only one access or egress, that passage must be kept in an unobstructed, clean condition free of slip/trip/fall hazards at all times.
- n. Store all materials in a way that does not create a hazard.
- o. Store materials only in areas that are designed or approved for material storage.
- p. Store materials in locations where material does not block access to:
 - i. Fire alarm activation equipment
 - ii. Fire extinguishers
 - iii. Eye wash stations
 - iv. Emergency showers
 - v. First aid stations
 - vi. Automated External Defibrillators (AED)
 - vii. Electrical components
 - 1. Circuit breaker boxes, electrical panels, and fuse boxes should be kept closed at all times. A minimum clearance of 36 inches must be maintained in front of electrical equipment. The clearance area shall be at least as wide as the equipment and clear from the floor to a minimum of 6 feet in height.
- q. Ensure that eyewash stations and safety showers meet the requirements of ANSI/ISEA Z358.1-2014. For questions concerning these requirements, contact EHS by emailing Safety@andrew.cmu.edu. These requirements include:
 - i. Installation and maintenance requirements,

- ii. Requirements to ensure eyewash stations and safety showers remain unobstructed,
- iii. Monthly testing and documentation requirements for eyewash stations, and
- iv. Annual testing and documentation requirements for safety showers.
- r. Limit height of all materials stored in tiers to prevent instability, slipping, falling or collapse of materials.
- s. Secure material stored at a height of 6 feet or higher in a way that prevents any part of the material from falling.
- t. Ensure that the load of materials being stored never exceeds the capacity of that which is supporting the material. Load ratings may be visually posted on material racks to help ensure the load is not exceeded.

7. Walking-Working Surfaces

Unkempt, disorganized and unstable walking-working surfaces can be the largest contributor to incidents in a workplace. Actions to ensure that walking-working surfaces remain in safe condition include, but are not limited to:

- a. Never add more weight to a surface than that surface is capable of supporting. If concern arises about whether a walking-working surface can support a certain weight, contact EHS before adding the load to the surface.
- b. Maintain all walkways and surfaces free of hazards such as sharp or protruding objects, loose boards, damage or corrosion. Cover and make noticeable any protruding hazards. Repair or replace any loose boards, damaged or corroded walking-working surfaces.
- c. Clear leaks, spills, build-up of snow and ice or any other slip/trip/fall hazards as soon as possible. If clearing of these hazards cannot be accomplished immediately, secure the area to prevent others from accessing the hazard.
- d. Maintain, in a dry condition, the floor of each workroom when feasible. When using wet processes, maintain drainage and ensure that dry standing places such as false floors, platforms or mats are provided.
- e. Do not enter areas of standing water where electrical loads are expected to be present.
- f. Correct or repair any hazardous condition on a walking-working surface BEFORE using that surface to accomplish other work. If correction or repair cannot be made immediately, guard the area to prevent others from accessing or using the walking-working surface until the hazard has been corrected, or the surface has been repaired.
- g. When any correction or repair involves the structural integrity of a walking-working surface, a Qualified Person must perform or supervise the correction or repair.
- h. All walking-working surfaces and work areas shall be well lit and must meet or exceed the requirements of ANSI/IES RP-7-17, ANSI/IESNA RP-1-12, ANSI/IESNA RP-3-13 and ISO 30061:2007. Replace or repair burnt out bulbs and non-working light fixtures to prevent

low lighting levels. (For additional lighting details or questions about ANSI requirements, email safety@andrew.cmu.edu)

- i. All stairs available for use shall have a clear path and be free of any slip/trip/fall hazards.

8. Referenced CMU Documents:

Examples of good housekeeping practices can be found in other CMU programs, procedures or guidelines:

- a. [Indoor Air Quality \(IAQ\) Program](#) to ensure that indoor air quality is maintained at acceptable levels.
- b. [Means of Egress Safety Guideline](#) regarding material storage in corridors.
- c. [Compressed Gas Cylinders Guideline](#) to ensure that compressed gasses are stored properly.
- d. [Fire Safety Program](#) to mitigate the risk of fire that has the potential to result in property damage and personal injury.
- e. [Hazardous Communication Program](#) to ensure that all hazardous materials are stored properly.
- f. [EHS website](#) for guidance on proper hazardous waste management.

9. Revisions

Date	Documented Changes	Initials
	Initial	