

 <p>Carnegie Mellon University Environmental Health & Safety FIRE LAB WORK</p>	<p>Environmental Health and Safety Fire and Life Assessment Program</p>
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1. Introduction

The Environmental Health and Safety (EHS) Fire Safety Team is committed to protecting lives, property and the continuity of operations throughout the Carnegie Mellon University - Pittsburgh Campus. To effectively manage fire risks and demonstrate compliance with fire code requirements, this Fire and Life Safety Assessment (FLSA) program has been developed.

The purpose of this document is to identify the roles and responsibilities of all stakeholders to implement and manage a program that is both effective and sustainable. FLSAs will serve to assess, prioritize and remediate fire and life safety risks; collect data for the prioritization of capital renewal projects; and promote a culture of safety throughout the university.

2. Scope

FLSAs will be conducted at buildings owned, leased and/or operated by the university. The scope of the FLSA will include the building exterior, interior common areas, assembly areas, storage rooms, garages, electrical/mechanical rooms and high-risk areas such as workshops and kitchens. Additional areas may be subject to assessment at the discretion of the assigned fire safety specialist.

Assessments will be based on the requirements contained within the International Fire Code, OSHA General Industry Safety Standards, property insurance risk engineering guidelines and established best practices for fire protection and life safety.

3. Definitions

- a. **Authority Having Jurisdiction (AHJ):** An organization, office or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installations and procedures.
Examples include, but are not limited to, the Pittsburgh Bureau of Fire, the Pittsburgh Department of Permits Licenses and Inspections, the Occupational Safety and Health Administration and the university's property insurance carrier.

- b. Campus Optics** – A platform used by EHS Fire Safety to document and report deficiencies identified during the Fire and Life Safety Assessment.
- c. Maximo** - A work order and work management platform used by Facilities Management and Campus Services (FMCS) to receive and process requests for repairs and service on campus facilities.
- d. Risk:**
 - High Risk** - Any issue that presents an imminent fire hazard OR an imminent threat to life safety OR an imminent threat to continuity of operations.
 - Medium Risk** - Any issue that may result in the failure to detect, suppress or contain a fire OR contribute to the propagation of smoke and fire OR decrease the effectiveness of the means of egress.
 - Low Risk** - Any issue that is necessary for compliance with a code or standard but that does not meet the criteria for classification as a high or medium risk.

4. Roles and Responsibilities

FLSA Program Stakeholders		
	Role	Responsibilities
Executive Sponsors	<ul style="list-style-type: none"> • Associate Vice President/Chief Risk Officer: Enterprise Risk Management • Associate Vice President: Facilities Management, Campus Services and Enterprise Space Strategy • Associate Vice President: Student Affairs Business and Financial Operations 	<ul style="list-style-type: none"> • Provide high-level program support • Communicate changes in departmental goals and objectives that may impact the FLSA program • Develop logistical and financial plans for complex issues that cannot be remediated under existing standard operating procedures or budgetary constraints. • Provide guidance and mediation for issues requiring escalation
Program Champions	<ul style="list-style-type: none"> • Director: Environmental Health and Safety • Assistant Director: Environmental Health and Safety • Director of Facilities Operations: Facilities Management Services • Executive Director: Housing Services and Space Planning 	<ul style="list-style-type: none"> • Ensure everyone involved is committed to the ultimate success of the program • Evaluate program effectiveness and provide recommendations for changes • Review FLSA reports and provide feedback • Track remediation progress and provide status updates during program meetings
Program Lead	<ul style="list-style-type: none"> • Fire Safety Manager: Environmental Health and Safety 	<ul style="list-style-type: none"> • Manage the FLSA program and track overall performance

		<ul style="list-style-type: none"> • Collaborate with other departments/stakeholders with recommendations on mitigation of deficiencies and remediation efforts • Host program update meetings with stakeholders • Provide quality assurance oversight • Assist with FLSAs, where feasible
Program Facilitators	<ul style="list-style-type: none"> • Fire Safety Specialist(s): Environmental Health and Safety 	<ul style="list-style-type: none"> • Coordinate and schedule FLSAs • Conduct FLSAs of facilities with stakeholders • Document assessment findings and assign risk ratings to any issues identified • Provide recommendations for remediation of issues • Perform follow up assessments, as needed • Provide educational fire safety training
Facility Support	<ul style="list-style-type: none"> • Director of Facilities Operations: Facilities Management Services • Director of Facilities: Housing Services • Director of Facilities: Student Affairs 	<ul style="list-style-type: none"> • Provide provisions for any equipment or access needed to support the FLSA • Designate a representative to attend the FLSA and/or follow up assessment • Review FLSA reports and provide feedback • Ensure work orders are generated for all applicable issues and that corrective actions are completed within agreed upon timelines • Track remediation progress of assigned deficiencies and provide status updates during program meetings
IT Support	<ul style="list-style-type: none"> • Senior Director of Risk Operations: Enterprise Risk Management • Director of Information Technology: Facilities Management and Campus Services 	<ul style="list-style-type: none"> • Assist in the development and continued support of the software program used to document assessments (Campus Optics)
Business Unit / Departmental Representation	<ul style="list-style-type: none"> • Facility Coordinators • Business Unit / Departmental Leadership 	<ul style="list-style-type: none"> • Maintain safe conditions within assigned areas • Remediate issues identified by EHS
Insurance Services	<ul style="list-style-type: none"> • Manager: Insurance Services 	<ul style="list-style-type: none"> • Communicate property insurance requirements to the fire safety team

Access Support	<ul style="list-style-type: none"> Lieutenant - Operations Division: CMU Police Department 	<ul style="list-style-type: none"> Authorize access to restricted/alarmed areas and delegate officers to provide requested access (in accordance with current department policies)
Project Support	<ul style="list-style-type: none"> Senior Director of Engineering and Construction: Campus Design and Facility Development Senior Director of Operations and Real Estate: Campus Design and Facility Development Real Estate Manager: Campus Design and Facility Development 	<ul style="list-style-type: none"> Assist with the planning and management of any long-term projects for hazards that may require extensive repairs, money or planning Assist with addressing issues identified in leased properties

5. Fire and Life Safety Assessment Process

The following section describes the process for prioritizing, scheduling and performing assessments; documenting and prioritizing deficiencies; remediating deficiencies; and conducting follow-up assessments.

a. Prioritizing the FLSA

Buildings will be selected based on a combination of the following:

- Occupancy type
- Known hazards or risks
- Recurring trends
- Strategic goals and objectives
- Scheduling and availability of all stakeholders

It shall be the goal of this program to conduct an FLSA on a recurring basis with a target date of once every 36 months per building.

b. Scheduling the FLSA

Prior to any assessment, a fire safety specialist will contact the applicable “facility support” stakeholders via email approximately two weeks or (10) business days before the FLSA. A proposed date, time and meeting location will be enclosed with the email. The time allotted for the assessment will vary, due to differences in the size and complexity of certain facilities. However, most FLSA’s can be completed within a single day.

In the event there is a conflict within the facility that prohibits the FLSA from being performed, the fire safety specialist will collaborate with the applicable stakeholder, or

their designee, to reschedule the assessment. Participation in the fire and life safety assessment is encouraged, but not required.

c. Preparing for and Performing the FLSA

Prior to the scheduled FLSA, the assigned fire safety specialist will review the layout of the facility and any previous FLSA reports/findings.

At the start of the FLSA, all participants will meet in the designated location and begin systematically walking through the building, looking to identify fire safety deficiencies. The fire safety specialist will take notes of any deficiencies found, taking photographs, as needed. At the conclusion of the assessment, the fire safety specialist will discuss initial findings with stakeholders in attendance.

d. Documenting the FLSA and Prioritizing Deficiencies

All deficiencies found during the FLSA process will be evaluated by the fire safety specialist and assigned a risk rating as either “high” risk, “medium” risk or “low” risk. All deficiencies will be documented in Campus Optics and tracked for remediation. Each finding will include a location and description of the deficiency, applicable fire code/safety standard reference and recommended corrective actions. Pictures may be included at the discretion of the fire safety specialist. Once all deficiencies have been documented, the fire safety manager will review the report for quality assurance and provide any applicable feedback. Final FLSA reports will be completed within 10 business days of the completed assessment date and distributed to the “facility support” stakeholders for review.

e. Review and Remediation of Deficiencies

A review meeting will be conducted with the applicable “facility support” stakeholders to discuss all findings contained within the FLSA final report. If a finding is challenged, the fire safety specialist will conduct additional research and either validate, amend or remove the finding. Where issues are identified as being the responsibility of a different business unit or academic department, a separate review will take place to communicate the need for remediation. If a stakeholder is not satisfied with the outcome of the review process, the escalation procedures identified in “Section F” should be followed.

Upon acceptance of the FLSA report, the “facility support” stakeholders should begin remediation. Campus Optics has been integrated with Maximo. If it is determined that a work order is needed for a finding, work orders are generated by the system during

the review meeting. All other stakeholders will still need to submit their own work orders when applicable.

Remediation of deficiencies shall be completed by the responsible stakeholders in a timely manner. High risk issues shall be remediated within 30 days. However, in the event of an imminent fire or life safety hazard, EHS may request the deficiency to be remediated sooner than 30 days and/or request that interim life safety measures be put into place. Medium risk issues shall be remediated within 90 days and low risk issues shall be remediated prior to the next fire and life safety assessment cycle.

Where remediation of deficiencies within the agreed upon timeline is not feasible due to uncontrollable factors, a formal written plan of correction shall be submitted to EHS indicating:

- When the issue will be remediated
- Why the issue cannot be remediated within the agreed upon timeline
- What the plan is to ensure a reasonable level of safety until the issue is remediated (if applicable)

Once a month, the EHS Fire Safety Team will meet with the “facility support” stakeholders to discuss the status of remediation efforts. For any deficiencies assigned to a separate business unit or academic department, updates on remediation status should be communicated by emailing safety@andrew.cmu.edu (creating a ServiceNow ticket).

Upon notification that a deficiency has been remediated, the assigned fire safety specialist may choose to conduct a follow up assessment for validation. As corrected deficiencies are validated, these will be changed from “in progress” to “complete” within the Campus Optics system.

Once every quarter, the EHS Fire Safety Team will host a “stakeholders committee” meeting to provide updates on the status of the FLSA program.

f. Escalation Procedures

If the FLSA report or the information contained within does not meet the satisfaction of stakeholder leadership or the review meeting does not result in a resolution with a positive path forward toward a mutually agreeable resolution, the issues will be presented to FLSA program Executive Sponsors for mediation and final resolution.

6. Additional Findings

Outside of regularly scheduled FLSAs, hazards may be identified that require corrective action. These may come from direct observation by EHS while conducting a walkthrough of a facility, notification or complaint by a community member or during a regulatory inspection conducted by the authority having jurisdiction. As these issues arise, they will be communicated to the appropriate stakeholder with requirements for remediation.

7. Strategic Programs and Initiatives

While most deficiencies identified during the FLSA process can be remediated under existing standard operating procedures, some may require the development and implementation of new policies and procedures. Though it is critical that deficiencies are remediated in a timely manner, it is equally important that they are remediated in a way that adheres to code requirements, manufacturer recommendations and/or established best practices. At times, it may be necessary to extend timelines for remediation to implement administrative controls that provide quality assurance to the remediation process.

Additionally, some deficiencies may be identified as recurring trends that are widespread throughout the campus. To address the long-term prevention of these issues, strategic initiatives may need implemented to enact a positive change in culture. EHS will work with all stakeholders to identify root causes, evaluate the need for these new initiatives and develop action plans for change.

8. Revisions

Date	Documented Changes	Initials
February 2023	Revisions to entire document based on the FLSA pilot program after-action report and comments received from the Office of General Counsel.	EO
May 2024	Updated executive sponsor title for student affairs and updated Campus Optics/Maximo integration in Review and Remediation of Deficiencies section	TF

For additional questions or concerns please contact EHS: safety@andrew.cmu.edu