
WAYNE STATE UNIVERSITY FIRE SAFETY MANUAL

Generated By:

ENTERPRISE RISK MANAGEMENT & INSURANCE PROGRAMS



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Fire Safety Statement

Pursuant to *University Policy 2002-7 Policy-Making by the President, University Risk Management Policy*, this Fire Safety Manual has been developed by the Office of Enterprise Risk Management & Insurance Programs (ERM). This Manual was reviewed by the Wayne State Police Department, the Office of Environmental Health & Safety and the Office of General Counsel. Its purpose is to ensure that the University community is protected from the effects of fires and in compliance with applicable fire codes, fire prevention standards, and life safety requirements.

In order to maintain our safe work environment, all employees, as well as students, must accept the continuous responsibility for safety not only for themselves, but also for co-workers and visitors. This Manual is promulgated to assist in achieving that goal.



David Massaron, Senior Vice President
Treasurer & Chief Financial Officer
January 2023

Wayne State University Fire Safety Program

Purpose

Wayne State University (WSU) is committed to creating an environment that is safe from the effects of fire for its students, employees, researchers, and guests. The purpose of this manual is to establish an organizational structure to ensure the effective implementation of a comprehensive fire safety and fire prevention program. This program also applies to construction, alteration, repair, renovation, maintenance, and special events at any WSU owned/leased occupancy.

Scope and Application

WSU will comply with the Michigan Fire Prevention Code, Act 207, and the Michigan State Construction Code, Act 230. Additionally, WSU will comply with all fire safety rules adopted by the State of Michigan Fire Safety Board from the National Fire Protection Association (NFPA) Codes and Standards, as well as the Michigan Building Code adopted from the International Building Code.

It will be the responsibility of the WSU Facilities Planning & Management (FP&M) Division to advise all contractors, as well as internal tradespersons, that the codes and standards for the University are:

Michigan Building Code

Michigan Rehabilitation Code for Existing Buildings

Michigan Mechanical Code

NFPA 101. Life Safety Code

NFPA 72. National Fire Alarm & Signaling Code

NFPA 70. National Electrical Code

NFPA 14. Standard for Installation of Standpipe and Hose Systems

NFPA 13. Installation of Sprinkler Systems

NFPA 10. Standard for Portable Fire Extinguishers

ASME A17.1. Safety Code for Elevators and Escalators

The State of Michigan (SOM), Department of License and Regulatory Affairs Bureau of Fire Services (BFS), will be the authority having jurisdiction with respect to all WSU owned/leased occupancies, which are defined in the Michigan Fire Prevention Code. All other WSU occupancies not under the jurisdiction of the SOM, BFS will fall under the jurisdiction of ERM Fire Marshal.

ERM will develop, implement, and maintain a fire safety and fire prevention program; promote regulatory compliance with the SOM, BFS; promote regulatory compliance SARA Title III (Michigan Firefighters Right-to-Know); designate a University Fire Marshal to perform life safety and fire safety certification approval inspections at WSU owned/leased occupancies and assist WSU departments and units with compliance issues.

The ERM Fire Marshal has the authority to shut down an operation, cause events to be discontinued, evacuate buildings, etc., when, in its professional opinion, a severe danger to life or injury may result if action is not taken. Any of these issues, including all fire safety violations and fire safety certification issues addressed by the SOM, BFS and WSU ERM Fire Marshal that are not corrected, must be forwarded to the Senior Vice President, Finance and Business Operations for review and adjudication.

No building or portion of a building shall be occupied or used without issuance of a fire

safety certification approval from BFS or ERM Fire Marshal. A temporary fire safety certification approval may be granted provided there are no substantial hazards that will result from occupancy of the building or area.

State of Michigan laws covering intentionally set fires, destructive and malicious mischief, as well as WSU Board of Governors adoption of City of Detroit Ordinances regarding the tampering of WSU fire protection equipment, and repetitive nuisance fire alarms shall be enforced by the WSU Police Department.

All fire alarm, fire protection/suppression, fire detection systems and construction drawings for new construction and renovation projects must be forwarded to the SOM, BFS for those occupancies which are within their jurisdiction (e.g. classrooms, residence halls, buildings that are owned or leased by SOM). In all other occupancies, said drawings must be forwarded to ERM Fire Marshal. These drawings will then be forwarded to the University's property insurance carrier by ERM Fire Marshal, as required.

Renovation projects at WSU owned/leased occupancies that do not change, add to, or affect building entrances; paths of egress; fire/smoke barrier walls; fire alarm, fire suppression, and fire detection systems will be considered "cosmetic remodeling" and exempt from this program. Also exempt from this program are ordinary repairs and maintenance of non-fire and life safety equipment.

The ERM Fire Marshal must be contacted in advance of construction and renovation projects to address fire and life safety issues.

Responsibility/Authority

The WSU Fire Safety Program sets fire safety standards, procedures, and practices to facilitate the University's ability to conduct safe operations and to ensure regulatory compliance. The purpose of the program is to provide minimum standards to safeguard life, health, property, and public welfare by controlling and monitoring the design, construction, occupancy use, quality of materials, and maintenance of all buildings and structures of the campus.

The ERM Fire Marshal is responsible for the overall fire safety and fire prevention programs at WSU. The ERM Fire Marshal is responsible for promoting fire safety regulatory compliance with the SOM, BFS; Michigan Occupational Health & Safety Administration; and University insurance companies. The ERM Fire Marshal will also serve as the custodian of all documents required by the program.

The SOM, BFS as well as ERM Fire Marshal constitute the “authority having jurisdiction” (AHJ) of WSU owned/leased occupancies identified previously in this manual.

The AHJ has the authority to grant a fire safety certification approval, abate hazardous conditions, shut down an operation, evacuate a building, perform life safety inspections, etc.

It is the responsibility of WSU FP&M Division to advise all contractors and internal tradespersons that, when a project is 50% completed and at 100% completion, fire-safety certification inspections are required by ERM Fire Marshal and the SOM, BFS. For projects which are not under the jurisdiction of SOM, BFS, only ERM Fire Marshal shall be

contacted. No fire safety certification approval will be granted unless these inspections are performed. At the 100% inspection, all fire alarm, fire protection/suppression, and fire detection systems must be tested in the presence of ERM Fire Marshal and/or SOM Fire Marshals. No fire-safety certification approval will be granted without receipt of final electrical approval.

Any person or entity seeking to inspect any Wayne State University building shall be referred to ERM Fire Marshal. No fire-safety inspections of Wayne State University occupancies shall be performed without the notification and/or approval of the ERM Fire Marshal.

Fire Alarm Reporting

All WSU owned facilities with a fire alarm, fire protection/suppression, or fire detection system must send a signal to the WSU Police Department. Such systems must meet the requirements of the Michigan Fire Prevention Code and those fire safety rules adopted by the State of Michigan's Fire Safety Board from the NFPA Codes and Standards. Further WSU requirements can be found at the Office of Design and Construction Services, FP&M.

When actuated, a building's fire alarm system must activate audible and visual signals at the WSU Police Department who will respond to all fire supervisory, fire trouble and fire alarm events.

- ◆ Upon arrival at the facility, or during investigation of the alarm condition, the responding WSU Police Officer will determine if the Detroit Fire Department must be contacted.

- ◆ Any employee, student, visitor, etc., must contact WSU Police at 577-2222 upon discovery of a developing fire in or around WSU facilities.
- ◆ Upon actuation of the building fire alarm system, all occupants must immediately evacuate. Those persons who refuse to evacuate (including unannounced evacuation drills) could receive a citation by the WSU Police Department.
- ◆ It is the responsibility of the WSU Police Department and/or the Detroit Fire Department to remove mobility-impaired persons from areas of refuge and area of rescue within university facilities.
- ◆ The WSU Police Department will be in charge of any emergency condition in/around WSU facilities, unless relieved by the Detroit Fire Department supervisor.
- ◆ All evacuating personnel from a WSU facility must report to the outside meeting assembly area as per the building's evacuation plan.
- ◆ No person shall re-enter a WSU facility until the WSU Police Department has given permission to do so.
- ◆ No WSU facility fire alarm system shall be silenced or reset, except by the WSU Police Department, FP&M Plant Operations & Maintenance personnel (electricians, building engineers) or the ERM Fire Marshal.
- ◆ When responding to any WSU facility for a non-fire emergency condition, the Police Department or Environmental Health & Safety Emergency Director will have the authority to actuate a fire alarm system for evacuation purposes.

Emergency Evacuation Procedures

Each University owned or leased facility must have an emergency evacuation plan/procedure(s) specific to that location. It is the responsibility of the highest- ranking

individual user (i.e., dean, vice president, etc.) to develop and post such plan/procedure(s), which address the following:

- ◆ Written emergency evacuation procedures must be developed for all University buildings. Copies of the procedures and all revisions must be directed to ERM, who will review and maintain same.
- ◆ Distribute evacuation procedures to the building occupants and post procedures throughout the building.
- ◆ Facilitate necessary training of floor monitors.
- ◆ Conduct a minimum number of evacuation drills as follows:
 - Resident Halls = 3 per year
 - All other buildings = 1 per year

Note: Written documentation of each evacuation drill conducted must be directed to ERM for record keeping purposes.
- ◆ Identify all persons with specific requests within each building.
- ◆ Identify any persons who requested specific assistance and prepare a dated list with the names and work sites of those individuals. This list is to be provided to the Building Coordinators/Alternate Coordinators and Community Directors, and made available during an emergency.
- ◆ Clearly identify the responsibilities of building occupants in assisting persons with specific requests in evacuation.
- ◆ It is the responsibility of the Building Coordinator and Community Director to Provide the responding WSU Police Department and Detroit Fire Department Personnel with the list and location of persons who requested specific assistance.

The following guidelines are provided to assist in the development of emergency evacuation procedures, but each highest-ranking individual user or designated individual must develop a procedure specific to their building.

- ◆ Appoint floor monitors for each building. The number of floor monitors will vary from floor to floor. However, there should be a monitor assigned to each exit on each floor. The minimum number of monitors will vary depending on the size of the building.
- ◆ Inform floor monitors of their responsibilities as follows:
 - Learn the location of fire alarm pull stations, fire stair exits and fire extinguishers on the assigned floor.
 - Learn the location of two-way communication systems at or near elevator lobbies and areas of refuge.
 - Direct building occupants to the nearest exit in the event of an emergency.
 - Check all area of rescue stations (elevator lobbies) for persons requesting evacuation assistance.
 - Check all areas of the assigned floor to ensure that all occupants have evacuated.
 - Assist any persons with specific requests to the designated area of refuge.
 - Report to the outside assembly area(s) and inform the Building Coordinator and Community Director of the location of each person within an area of refuge. Assist in taking a head count.
 - Be prepared to provide the roster of persons with specific requests to the responding emergency agency (WSU Police Department, Fire Department, etc.).

- ◆ Consult the emergency evacuation floor sign to identify the outside assembly area.
- ◆ Identify the area(s) that occupants are to proceed to in the event of a non-fire emergency situation (i.e. tornado, severe weather, civil unrest, etc.).
- ◆ Consult the emergency evacuation sign to identify the “area of refuge” used for persons with specific requests. This is a room of fire-rated construction, or an enclosed emergency exit stairwell.

All WSU owned/leased assembly occupancies, as defined by the Michigan Fire Prevention Code, must have an occupant load sign posted within each room/area. Assembly occupancies must have emergency evacuation signs posted on each floor.

Note: It is the responsibility of the ERM Fire Marshal, in conjunction with the FP&M Division, to incorporate “professionally designed” emergency evacuation signs at WSU owned/leased assembly occupancies.

Building Occupant Responsibilities

When a fire alarm activates at any WSU owned/leased facility, **everyone must immediately leave the building** in an orderly manner by means of the nearest exit. Under no circumstances are any personnel (excluding the Police Department, Environmental Health and Safety, Detroit Fire Department) to remain in the building. WSU Police Department has the authority to issue citations for those refusing to evacuate. Evacuation of the building must include:

- ◆ Close the office, classroom, and lab door as you leave.
- ◆ Leave the building via the nearest available exit. Always know a secondary means of egress to use in the event your first choice is unattainable.

- ◆ Use the stairwells to evacuate (**do not use elevators**). Once in the stairwell, check to see that the door closed and proceed down to the level of exit discharge.
- ◆ If the facility is of a high-rise occupancy (75' or 7 stories above grade) evacuation procedures are announced by the fire alarm system as follows: evacuate fire floor; one floor above; one floor below.
- ◆ Do not re-enter any facility until advised by the WSU Police Department.
- ◆ Building Floor Monitors who are responsible for evacuation of a particular floor, should assist persons with specific requests into the “**area of refuge**” after all persons on that floor have evacuated.
- ◆ All persons who requested specific assistance that are above the level of exit discharge, must be located to an “**area of refuge**” which is a fire-rated room or an enclosed fire exit stairwell.
- ◆ Unless a department has special evacuation equipment, (i.e. emergency evacuation chair/sled), the responsibility for removal of persons with specific requests rests with the WSU Police Department, or the Detroit Fire Department.

Identification of Essential or Critical Processes

All chemical, medical, and scientific laboratories at WSU owned/leased facilities must comply with the Michigan Fire Prevention Code and the fire safety rules adopted by the SOM Fire Safety Board from the NFPA codes and standards; Michigan Occupational Safety & Health Administration; and policies/procedures enacted by the WSU Office of Environmental Health & Safety, which can be found at www.oehs.wayne.edu.

The Office of Environmental Health & Safety will perform audits and inspections of all laboratories that perform essential, or critical processes that are hazardous to life safety.

Consult with the Office of Environmental Health & Safety for the following applicable procedures: Chemical Hygiene Plan, Bloodborne Infectious Disease Exposure Control Plan, Emergency Contingency Plan, Radiation Control/Health Physics Plan, and Lockout, Tagout Plan.

With respect to fire safety, the following general requirements must be adhered to:

1. Shut down any experiments, procedures, etc. that should not be left unattended.
2. Ensure that all burners, furnaces, open flame devices, etc., are placed on a non-combustible surface and that same is clear from combustible materials and never left unattended.
3. Emergency procedure plans must be posted on the back of each door. This plan must state what to do and who to contact in the event of an emergency. It must provide a route of travel to exits so occupants evacuate the building in a safe, orderly, and timely manner. Assistance in developing emergency procedure plans can be obtained from the ERM Fire Marshal.
4. Chemicals must be dispensed within laboratory fume hoods only. Fume hoods are not to be used for storage.
5. In an emergency, all electrical equipment must be disconnected at the main breaker (electrical panel) by the building engineer. When maintenance is to be performed on an electrically powered machinery, contact the Office of Environmental Health & Safety for Lockout, Tagout requirements.
6. Any laboratory, which stores and/or uses peroxides or peroxide forming chemicals must inform the Office of Environmental Health & Safety. Special

precautions must be taken when using peroxides due to its explosive nature and sensitivity to shock, friction, sparks and heat.

7. Any laboratory which stores and/or uses combustible metals must inform the Office of Environmental Health & Safety and ERM Fire Marshal. Arrangements for a Class D fire extinguisher(s) shall be through the ERM Fire Marshal.
8. All laboratories must maintain a chemical inventory as required by Sara Title III, (Michigan Firefighters Right-to-Know), Emergency Planning and Community Right to Know Act.

Identification of Hazardous Materials

All chemical, medical, and scientific laboratories at WSU owned/leased facilities must comply with the Michigan Fire Prevention Code and the fire safety rules adopted by the SOM, Fire Safety Board from the NFPA codes and standards; Michigan Occupational Safety & Health Administration; and policies/procedures enacted by the WSU Office of Environmental Health & Safety, which can be found at www.oehs.wayne.edu.

It is the responsibility of the Office of Environmental Health & Safety in conjunction with the Principal Investigator to identify all hazardous materials within WSU laboratories. Identification of any hazardous materials by the Office of Environmental Health & Safety will allow WSU to remain compliant with SARA Title III Act (Michigan Firefighters Right-to-Know).

The following fire safety general requirements with respect to hazardous materials including flammable/combustible chemicals/liquids must be adhered to:

1. Chemicals (volatile and toxic) must be dispensed within laboratory fume hoods only. **Fume hoods are not to be used for storage.**
2. Safe and proper procedures must be adhered to when using chemical fume hoods, and the fume hood sash must be kept closed when not in use.
3. Chemical inventory lists must be placed on the exterior side of storage cabinets, refrigerators/freezers, etc. Inventory list must include the date chemicals were received and the date to be discarded. Consult with the Office of Environmental Health & Safety for further information.
4. All chemicals must be properly labeled, tagged for disposal and those which are flammable, must be stored in flammable liquid cabinets or flammable liquid (explosion proof) refrigerator and freezers.
5. Flammable/combustible chemicals must be kept in original containers or in approved safety containers. Consult with the Science Storeroom for specific information regarding storage cabinets and safety containers.
6. No more than the maximum quantity of flammable and combustible chemicals must be stored in flammable liquid storage cabinets (label inside cabinet denotes maximum quantity allowed) in any laboratory.
7. Incompatible materials must be separated to prevent accidental contact with one another. Contact the Office of Environmental Health & Safety to determine which chemicals are incompatible.
8. Flammable and combustible chemical storage rooms must comply with the Michigan Fire Prevention Code and requirements set forth by ERM Fire Marshal.

Holiday Decorations

In order to maintain fire safety during holiday seasons, the following requirements must be adhered to with respect to owned/leased occupancies:

1. No natural tree, wreath, roping or similar decorations shall be used in any building.
2. The following materials may not be used for decorations as they are inherently combustible: bamboo, cedar trees or branches, corn stalks or shucks, cotton or confetti, dry moss or leaves, flammable powders or liquids, hay or straw (loose or baled), paper streamers, plastic sheeting or pellets, sawdust, tumbleweeds, wood bark or shavings.
3. Tree decorations must be of a non-combustible material such as metal, glass, etc.
4. Artificial trees/plants labeled as flame retardant by the manufacturer are permitted.
5. No thin or fragile decorations made of combustible materials shall be used for artistic, or decorative enhancement that could produce a quick or fast burning fire.
6. The use of open flame devices, i.e. candles, for lighting or decorative enhancement is prohibited.
7. Artificial trees/plants and decorations shall not obstruct exits, corridors, aisle ways, and emergency light units.
8. No decorations shall be placed on fire sprinkler heads or piping.
9. Electric light sets (if permitted by highest ranking individual user) shall bear the Underwriter Laboratories or Factory Mutual certification seal.

10. No more than 3 sets of electric lights should be plugged into an extension cord, which bears the Underwriter Laboratories or Factory Mutual certification seal.

Electrical Safety

WSU in all matters of electrical safety will comply with the National Electrical Code, NFPA Standard #70. In all matters of construction, alteration, repair, renovation, maintenance, and special event programs within WSU owned/leased facilities, the current edition of the National Electrical Code will be the code of jurisdiction.

The following requirements shall be adhered to with respect to general electrical safety issues:

1. Departments and units must report all electrical installations, repairs, and maintenance of energized electrical equipment to the FP&M Service Center.
2. Ensure that electrical equipment, appliances, cords, and adapters are in good condition; used as designed and recommended by the manufacturer; identify the Underwriter Laboratories or Factory Mutual certification seal.
3. Do not use extension cords as permanent wiring for electrical appliances. Contact the FP&M Service Center to request installation of electrical outlets.

Power Strips/Surge Protectors

1. Do not overload electrical outlets. Ensure that electrical surge protectors/suppressors for the appropriate equipment are used.
2. Use only surge protectors that have a built-in circuit breaker.

3. Electrical surge protectors should identify the Underwriter Laboratories or Factory Mutual certification seal.
4. Do not plug one surge protector into another surge protector.
5. Electrical equipment with frayed wires shall be disconnected and repaired immediately by contacting the FP&M Service Center.

Space Heaters

Space heaters are prohibited within WSU buildings. Refer to the Administration Policy and Procedures Manual, Section 2.2.1.

Open Flames and Candles

The definition of an open flame for this category constitutes any lighting or heat-generating device which produces a flame that is not protected. Some examples are wax candles, tiki lamps, oil lamps, torches, etc. Open flame devices are strictly prohibited within WSU facilities. Authorization must be requested from ERM Fire Marshal for candle use in theatrical events. Authorization must be requested from University Housing Authority for candle use in religious ceremonies within University residential buildings.

The following requirements must be adhered to with respect to candle fire safety:

1. Candles must be placed on a non-combustible, flat surface.
2. Candle flames must be protected from combustible materials such as drapes, curtains, clothes, wall coverings, etc.
3. Candles must not be left unattended while burning.
4. Candles must be doused with water prior to disposal.

Heat Producing Appliances

If permitted by the highest-ranking individual user of a building, coffee makers, hot plates, toaster ovens, microwave ovens, etc. must identify the Underwriter Laboratories or Factory Mutual certification seal.

Heat producing appliances must be placed on a non-combustible surface and kept 18" away from combustible items; i.e. paper and cloth.

All heat producing appliances must be plugged into electrical surge suppressors.

WAYNE STATE UNIVERSITY HOT WORK PROGRAM

Purpose

The University Fire Safety Manual was developed to prevent the loss of life and property. The purpose of the Hot Work Program section of the Fire Safety Manual is to minimize the effects of loss caused by fire or explosion during the operation of hot work equipment.

Scope and Application

No hot work activity shall be conducted at any WSU facility until a hot work permit has been issued. All hot work activities covered under this program that are performed without the use of a WSU permit shall be stopped by the Authorized Hot Work Representative (AHWR) or ERM Fire Marshal and the equipment will be placed out of service and/or removed from WSU property.

The principal hazard associated with portable hot work equipment is that of an ignition source in and around WSU facilities.

Hot work is defined as any temporary maintenance, renovation, or construction by operation of a gas or electrically powered equipment, which produces flames, sparks, or heat that is sufficient to start a fire or ignite combustible materials.

Some examples of ignition sources are: open flame or torch, brazing or soldering, metals being welded or cut, molten slag or metal from work, sparks from work, dropped hot rivets.

ERM Fire Marshal will grant permit-issuing authority to AHWR within the university. Maintenance contractors (excluding capital projects or major construction) who have been awarded work at WSU will be issued permits directly by ERM Fire Marshal.

The University's construction project specifications must mandate that the awarded contractor for all capital projects must provide evidence of their company's hot work permit program. FP&M Design and Construction Services shall have responsibility for collecting these documents.

The WSU hot work permit program shall provide for the introduction of safety features and safety equipment as well as a pre-inspection of the area prior to any type of hot work activity being performed. The Office of Environmental Health & Safety in conjunction with ERM Fire Marshal will provide training to AHWR who will issue permits to operators of hot work equipment.

An individual within the College of Liberal Arts & Science, College of Engineering, College of Education, College of Fine, Performing & Communication Arts, and FP&M who have been properly trained by the Office of Environmental Health & Safety and ERM Fire

Marshal in accordance with Michigan Occupational Health & Safety Association 29 CFR 1910 and the NFPA 51B, shall be designated in writing and authorized by ERM to inspect hot work sites and issue permits. Those individuals will be titled “Authorized Hot Work Representatives”.

The AHWR shall have the responsibility to ensure that the university’s hot work procedures are adhered to within their respective colleges and departments. If there is any violation, the AHWR shall have the authority to stop the hot work activity and place the equipment out of service and/or removed from WSU property with assistance of WSU Police Department. The following shall apply to all hot work activities performed on WSU property, including such activities performed in “Designated Areas” (maintenance shop areas) of WSU facilities. “Designated Areas” are those that meet the requirements of NFPA Standard 51B.

State of Michigan, Bureau of Fire Services

- ◆ Shall have jurisdictional authority over the university in compliance issues dealing with fire safety.

Enterprise Risk Management

- ◆ Has the overall responsibility of ensuring compliance with the WSU Hot Work Policy.
- ◆ Provides oversight and guidance in the implementation of the program.

Office of Environmental Health & Safety/Enterprise Risk Management

- ◆ Will jointly be responsible for ensuring that AHWR are trained in inspecting sites for hazardous conditions; proper use of gas and electrically powered hot work equipment; and issuing of permits.

Dean of the College of Liberal Arts & Science, College of Engineering, College of Education, College of Fine, Performing & Communication Arts, and the Associate Vice President for FP&M

- ◆ Shall have, respectively, the overall responsibility for ensuring that all "Designated Areas" and cutting/welding personnel are provided with the needed equipment and resources to conduct operations safely.
- ◆ Will appoint an individual(s) to serve as the AHWR(s) from their respective areas and ensure that they receive appropriate training. Notification of the individual(s) appointed shall be reported to the ERM Fire Marshal.
- ◆ Provide that the appointed AHWR(s) will coordinate and issue all hot work permits and perform on-site inspection of all "Designated Areas."

Directors of Design & Construction Services and Plant Operations & Maintenance,

FP&M

- ◆ Shall have the responsibility of overseeing compliance with the university's construction project specifications with respect to all capital projects.
- ◆ Will maintain a copy of the hot works policy, procedures and permits of the general construction contractor for each project awarded. Any safety violations noted by the FP&M AHWR shall be forwarded to the Associate Vice President for FP&M and ERM Fire Marshal.
- ◆ Shall notify ERM's Fire Marshal of any maintenance contractor (excluding capital projects or major construction) who will be performing hot work activities at WSU so

that the Fire Marshal can inspect the work site and issue hot work permits to the maintenance contractor.

- ◆ Shall ensure that hot work permits issued are placed on the hot work equipment. It is the responsibility of the maintenance contractor to provide the needed equipment and resources to conduct safe operations.
- ◆ Shall forward copies of certificates of insurance, confined space entry policy and Lockout, Tagout policy for all maintenance contractors to ERM.
- ◆ Shall coordinate all hot work activity and issue hot work permits for all trades and departments within the FP&M division. The appointed AHWR will issue permits and conduct on-site inspections of all "Designated Areas."

Authorized Hot Work Representative

- ◆ Shall, in conjunction with ERM Fire Marshal and the hot work operator, ensure that all equipment used in the operation is in good working condition; that an appropriate class of fire extinguisher is on hand; that the permit is posted at the site.
- ◆ Shall maintain a safe area throughout the operation, and if at any time during the operation a hazardous condition is noted will ensure that the operation is immediately ceased until the hazard is abated.
- ◆ Shall fully brief hot work operators on the hazards-involved university fire reporting procedures, and building emergency evacuation procedures, with the assistance of ERM Fire Marshal.

Hot Work Equipment Operator

- ◆ It is the responsibility of affected university personnel and maintenance contractor personnel to provide or obtain personal protective equipment. The required personal

protective equipment is dictated by the type of work to be performed and the hazards present during the work. Any questions/concerns regarding personal protective equipment must be directed to the Office of Environmental Health & Safety.

Procedures for Permits

- 1) All hot work permits for operations by university personnel shall be issued by ERM Fire Marshal or an AHWR. Hot work permits for maintenance contractors shall be issued by ERM Fire Marshal.
- 2) Hot work activities shall be permitted in "Designated Areas", after an on-site inspection by the AHWR or ERM Fire Marshal.
- 3) The hot work permit shall be issued in three parts: Part one (hard copy) shall be maintained at the site. The second part (white) shall be kept by the Authorized Hot Work Representatives. The third part (yellow) shall be forwarded to ERM Fire Marshal after issuance.
- 4) Upon completion of the hot work activities, the operator shall sign part one of the permit verifying that the work area is fire safe. The permit shall be forwarded to ERM Fire Marshal after completion of work.
- 5) Hot work permits shall be valid for the time period noted on the form. Valid time periods are:

Daily: Valid from 7a-5p. If the hot work activities extend to another shift or overtime to complete an "emergency situation", the AHWR shall have the discretion to extend time period.

Extended: Valid for a period up to 6 months. College of Liberal Arts & Science, College of Engineering, College of Fine, Performing & Communication Arts shall issue permits

by their respective AHWR who shall have the responsibility to re-inspect site and re-issue permits at the end of that time period.

Maintenance contractors shall be issued permits by ERM Fire Marshal, valid for length of time to complete job or any time therein. The ERM Fire Marshal shall perform periodic visits to the work site to ensure compliance with safety requirement.

- 6) AHWR and ERM Fire Marshal along with the hot work operator/supervisor **shall conduct a safety inspection of the work area prior to issuance of permit.** Such inspections will identify Lockout, Tagout concerns, confined space entry concerns, atmosphere testing (gas) concerns, and shall comply with WSU established policies and procedures. All concerns with respect to atmosphere testing shall be forwarded to Office of Environmental Health & Safety.

Torchiere Halogen Lamps

The United States Consumer Product Safety Commission as well as the National Fire Protection Association have advised that the torchiere style (halogen) lamps pose a serious fire safety hazard due in part to their design as well as the fact that temperatures from halogen bulbs can reach 1200° F. For this reason, torchiere style halogen lamps are prohibited within WSU buildings.

Pyrotechnics

The following applies to all pyrotechnic displays (before a proximate audience on University-owned property), as well as, the NFPA Fire Prevention Code (Standard I) with

amendments which have been adopted by State of Michigan Fire Safety Board, as well as all the NFPA Standards referenced therein.

No pyrotechnic display shall be conducted until a permit is obtained as outlined in Michigan Law, 1931 PA 328, as amended.

The issuing of a permit will be in accordance with all rules and procedures set forth by the State of Michigan State Police, SOM, BFS and the Detroit Fire Department.

The individual handling the pyrotechnics must be a licensed handler of the material to be used and is responsible for the proper storage, transportation, use and disposal of the materials (as required by Michigan State Police, BFS and Detroit Fire Department, Certificate of Fitness), and provide proof of insurance as stated in the WSU Administrative Policy and Procedures Manual.

Pyrotechnic Permit Procedures

A written request must be submitted to ERM Fire Marshal **at least 4 weeks prior to the event**. Include with the request, the permit; type of display; type and amount of materials to be used; current certification by a recognized agency; proof of insurance and the method of transportation and storage.

Approvals for pyrotechnic displays will be granted by Detroit Fire Marshal; ERM Fire Marshal and the WSU Police Department.

A walk-through and a representative demonstration of the pyrotechnic display shall be given to the satisfaction of the ERM Fire Marshal and the WSU Police Department before the display is approved.

The host of the display/event must provide a "fire watch" (the assignment of a person or persons to an area for the express purpose of notifying the WSU Police Department and/or building occupants of an emergency; preventing a fire from occurring; extinguishing small fires; protecting the public from fire or life safety dangers) for the length of the time that the pyrotechnic material is on site until discharged.

Precautions taken by the pyrotechnic representative are the minimum amount of safety precautions, and does not overrule any safety precautions enacted by ERM Fire Marshal and the WSU Police Department.

Special Events

Any type of public assemblage, which is devoted to entertainment and festival affairs that is not a normal occurrence in the day to day environment of a university community, and that is planned in or on WSU building, structures and property is classified as a "special event". The special event will require review by the ERM Fire Marshal to address fire and life safety hazards associated with same. Some examples of special events are concerts, exhibits, fairs, carnivals, tents, etc.

Special events on university property will require the approval of the ERM Fire Marshal and must comply with NFPA Fire Prevention Code (Standard I), with amendments adopted by SOM Fire Safety Board, as well as all NFPA Standards referenced therein.

Procedures

A written request must be submitted to ERM Fire Marshal at least 4 weeks prior to the event. Include with the request, the permit (if required); type of event; products and

materials to be used; credentials of event sponsors, organizers, vendors, etc; proof of insurance (as stated in the WSU Administrative Policy & Procedures Manual); and method of transportation, storage, safety and security for the event.

Approvals for special events may also require the approval of the WSU Police Department. A walk through and/or demonstration of the special event should be given to the satisfaction of ERM Fire Marshal and the WSU Police Department before the event is approved.

The event sponsor, organizer, or vendor must provide all required fire safety certifications of product and materials to ERM Fire Marshal.

Precautions taken by event sponsors, organizer, or vendor shall be considered the minimum amount of safety precautions and shall not overrule any safety precautions enacted by the ERM Fire Marshal and the WSU Police Department.

Emergency Evacuation Drills

In order for emergency evacuation plans/procedures of WSU facilities to work effectively and efficiently in the removal of building occupants during the event of a fire emergency, it is critical that WSU comply with the Michigan Fire Prevention Code, Act 207, and SOM, BFS Form 48 regarding Fire Drills.

This policy requires that all WSU owned resident halls shall have a minimum of 3 fire drills during each school year, as well as documenting the drills. These drills shall be conducted for the purpose of preparing building occupants to learn building layout for alternate exits to allow for proper emergency egress.

University Housing is responsible for scheduling and documenting such drills within resident halls. Emergency Evacuation drill notification shall be made by University Housing to ERM Fire Marshal and the WSU Police Department. Records of all fire drills must be forwarded to ERM Fire Marshal.

Fire Alarm Testing Reports

To comply with NFPA Fire Prevention Code (Standard I) with amendments adopted by the State of Michigan Fire Safety Board, as well as all NFPA standards referenced therein, the University shall document all fire alarm, fire detection, and fire suppression testing of these systems which are to be performed at all WSU owned/leased occupancies.

Such tests will be performed by FP&M personnel and/or approved fire protection vendors to comply with noted codes and standards. When tests of fire alarm, fire detection, and fire suppression systems are conducted, the reports must be forwarded to ERM Fire Marshal. The WSU Police Department is to be notified beforehand of every system test. All test reports must be forwarded to ERM Fire Marshal.

All problems or deficiencies within these reports must be forwarded by ERM Fire Marshal to the appropriate department supervisor (FP&M or Police) for corrective action. All reports (including corrective action documentation) will be maintained by ERM Fire Marshal to satisfy fire code and insurance company requirements.

Life Safety Equipment Inspections

To comply with NFPA Fire Prevention Code (Standard I) with amendments adopted by the SOM, Fire Safety Board as well as all NFPA Standards referenced therein, the University

shall document all inspections and testing of life safety equipment at all WSU-owned occupancies.

Life Safety equipment is defined as fire extinguishers, exit signs, emergency lighting units, and associated peripherals. ERM Fire Marshal will administer the inspection program of life safety equipment and maintain reports to satisfy fire code and insurance company requirements.

A "quick check" inspection of life safety equipment will be performed by ERM personnel following a regimented time schedule. Such inspections will be documented and certain issues of maintenance of equipment will be forwarded to appropriate FP&M personnel for corrective action.

A "quick check" inspection is defined as an inspection to determine if life safety equipment is available and will operate; verify equipment is in its designated place and has not been actuated and/or tampered with; there are no obvious physical impairments or condition to prevent its operation; and actuating "test" buttons to determine operation of equipment.

In all matters of issues related to "missing" life safety equipment, the ERM Fire Marshal will recommend the required and/or appropriate equipment for occupancy and use to FP&M or the affected university department.

Impaired/Out of Service Fire Protection Systems

All fire alarm, fire detection, and fire suppression systems at WSU-owned occupancies, which are impaired and/or taken out of service, must be reported to ERM Fire Marshal.

This policy also applies to those leased locations where WSU provides insurance coverage.

An impairment is defined as the closing of any fire sprinkler control valve to facilitate a repair, renovation or replacement of the fire sprinkler components. Also included in this definition is the draining of a fire sprinkler riser, as well as the closing of "special fire protection valves" (halon, carbon dioxide, FM-200, Novec 1230, and wet chemical extinguishment systems).

An out-of-service fire protection system shall be defined as a complete loss of water to a building; complete shut-down of a system (fire alarm and fire detection) due to repair, renovation, replacement; or a result of a fire incident within a building.

Fire suppression systems that are impaired and/or taken out of service at a university building shall be done in accordance with the university's insurance company requirements, which the ERM Fire Marshal will administer.

When fire alarm or fire detection systems are taken out of service at university buildings, a "fire watch" is to be conducted. (A fire watch is the assignment of a person or persons to an area or building for the express purpose of notifying WSU Police Department and/or building occupants of an emergency; preventing a fire from occurring; extinguishing small fires; and protecting the public from fire or life safety hazards.) The fire watch must be conducted for the length of time that the system(s) are out of service and the building is open to public entry.

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