Suffolk County Community College

Fire Prevention Plan

29 CFR 1910.39(b)



August 2012 Version 1.2 (3/18)

Version 1.2 **Fire Prevention Plan**

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I. OBJECTIVE

The purpose of this Fire Prevention Plan is to identify and reduce/eliminate the causes of fire, prevent loss of life and property by fire, and to comply with the Occupational Safety and Health Administration's (OSHA) standard on fire prevention, 29 CFR 1910.39(b). It provides employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards. The *Emergency Action Plan* (29 CFR 1910.38(b)) part of this regulation is covered by the College's *Emergency Guide*.

II. BACKGROUND

Suffolk County Community College is committed to minimizing the threat of fire to students, employees, guests, and property. Suffolk County Community College complies with all applicable laws, regulations, codes, and good practices pertaining to fire safety and prevention. This Fire Prevention Plan serves to reduce the risk of fires at all of the College's Facilities in the following ways:

- A. identifies materials that are potential fire hazards and their proper handling and storage procedures;
- B. identifies potential ignition sources and the proper safety procedures of those materials;
- C. describes fire protection equipment and/or systems used to control fire hazards;
- D. identifies persons responsible for maintaining the equipment and systems installed to prevent or control ignition of fires;
- E. identifies persons responsible for the control and accumulation of flammable or combustible material;
- F. describes good housekeeping procedures necessary to insure the control of accumulated flammable and combustible waste material and residues to avoid a fire emergency; and
- G. provides training to employees with regard to fire hazards to which they may be exposed.
- H. discusses preventative maintenance on heat-producing equipment.

Location of plan

This plan will be kept on the College's website in the "Public Safety" page as well as in the College Assistant Director of Public Safety and Environmental Health's Office.

III. ASSIGNMENT OF RESPONSIBILITY

Fire safety is everyone's responsibility. All employees should know how to prevent and respond to fires, and are responsible for adhering to the College's policies regarding fire emergencies (see Emergency Guide).

A. <u>Authority and Policy Establishment</u>

The College President determines Suffolk County Community College's fire prevention and protection policies. The President will provide adequate controls to provide a safe workplace, and will provide adequate resources and training to its employees to encourage fire prevention and the safest possible response in the event of a fire emergency.

B. <u>Plan Administrator</u>

The College Assistant Director of Public Safety and Environmental Health (or his/her designee) shall manage the Fire Prevention Plan for Suffolk County Community College, and shall maintain all records pertaining to the plan. The Plan Administrator shall also review the Plan annually, and make any necessary corrections.

C. Enforcement

Each Building Administrator is responsible for notifying the Director of Fire and Public Safety (or his/her designee) when changes in operation increase the risk of fire. Building Administrators and the Office of Fire and Public Safety are also responsible for enforcing Suffolk County Community College's fire prevention and protection policies.

D. <u>Employees</u>

All employees shall:

- Conduct operations safely to limit the risk of fire.
- Report potential fire hazards to their supervisors.
- Follow fire emergency procedures

IV. PLAN IMPLEMENTATION

A. <u>Good Housekeeping</u>

To limit the risk of fires, employees shall take the following precautions:

- 1. Minimize the storage of combustible materials.
- 2. Make sure that doors, hallways, stairs, and other exit routes are kept free of obstructions.
- 3. Dispose of combustible waste in covered, airtight, metal containers.
- 4. Use and store flammable materials in well-ventilated areas away from identified ignition sources.
- 5. Use nonflammable products whenever possible.
- 6. Keep incompatible (i.e., chemically reactive) substances away from each other.
- 7. Perform "hot work" (i.e., welding, cutting, grinding, working with an open flame etc.) in controlled and well-ventilated areas, observing all proper safety precautions.
- 8. Keep equipment in good working order (i.e., inspect electrical wiring and appliances regularly and keep motors and machine tools free of dust and grease.
- 9. Ensure that heating units are safeguarded.
- 10. Report all gas leaks immediately. The Director of Plant Operations shall ensure that all gas leaks are repaired immediately upon notification.
- 11. Repair and clean up flammable liquid leaks immediately.
- 12. Keep work areas free of dust, lint, sawdust, scraps, and similar material.
- 13. Do not rely on extension cords if wiring improvements are needed, and take care not to overload circuits with multiple pieces of equipment.
- 14. Turn off electrical equipment when not in use.
- B. <u>Maintenance</u>

Each Department will ensure that its fire and safety equipment is maintained according to manufacturers' specifications. Suffolk County Community College will also comply with requirements of the National Fire Protection Association (NFPA) codes for specific equipment. Only properly trained individuals shall perform maintenance work.

V. TYPES OF HAZARDS

The following sections address the major workplace fire hazards at Suffolk County Community College's facilities and the procedures for controlling the hazards.

A. <u>Electrical Fire Hazards (Class C fires)</u>

Electrical system failures and the misuse of electrical equipment are leading causes of workplace fires. Fires can result from loose ground connections, wiring with frayed insulation, or overloaded fuses, circuits, motors, or outlets. To prevent electrical fires, employees shall:

- 1. Make sure that worn wires are replaced.
- 2. Use only appropriately rated fuses.
- 3. Never use extension cords as substitutes for wiring improvements.
- 4. Avoid overloading the building's electrical system by plugging in too many pieces of equipment.
- 5. Use only approved extension cords [i.e., those with the Underwriters Laboratory (UL) or Factory Mutual (FM) label].
- 6. Check wiring in hazardous locations where the risk of fire is especially high.
- 7. Check electrical equipment to ensure that it is either properly grounded or double insulated.
- 8. Ensure adequate spacing while performing maintenance.
- 9. Do not plug multiple surge protectors together ("daisy chain")

B. Portable Heaters

Portable heaters are **not** recommended. Should a portable heater be required, its use must be approved (in writing) by the Director of Public and Fire Safety. Portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over. There shall be adequate clearance between the heater and combustible furnishings or other materials at all times. Its use shall be kept to a minimum, and it will not be left on unattended.

C. Corridor Fire Hazards

It is critical to keep the hallways in a safe condition, as these are the primary evacuation route for most staff and guests. To prevent problems, all staff members shall ensure that:

- 1. Hallways are kept clear of obstructions.
- 2. Exits are clearly marked, and kept free of obstructions at all times. No emergency exit door may be locked or barred in a manner that prevents escape in times of emergency.

D. Office Fire Hazards

Fires in offices have become more likely because of the increased use of electrical equipment, such as computers and fax machines. To prevent office fires, employees shall:

- 1. Avoid overloading circuits with office equipment.
- 2. Turn off nonessential electrical equipment at the end of each workday.

- 3. Keep storage areas clear of rubbish.
- 4. Ensure that extension cords are not placed under carpets.
- 5. Ensure that trash and paper set aside for recycling is not allowed to accumulate.

E. Hot Work (Cutting, Welding, and Open Flame Work)

The unit Supervisor will ensure the following:

- 1. All necessary hot work permits have been obtained prior to work beginning.
- 2. Cutting and welding are done by authorized personnel in designated cutting and welding areas whenever possible.
- 3. Adequate ventilation is provided.
- 4. Fire watch has been established (properly trained and equipped).
- 5. Torches, regulators, pressure-reducing valves, and manifolds are UL listed or FM approved.
- 6. Oxygen-fuel gas systems are equipped with listed and/or approved backflow valves and pressure-relief devices.
- 7. Cutters, welders, and helpers are wearing eye protection and protective clothing as appropriate.
- 8. Cutting or welding is prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering.
- 9. Confined spaces such as tanks are tested to ensure that the atmosphere is not over ten percent of the lower flammable limit before cutting or welding in or on the tank.
- 10. Small tanks, piping, or containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.

F. Flammable and Combustible Materials

Certain types of substances can ignite at relatively low temperatures or pose a risk of catastrophic explosion if ignited. Such substances obviously require special care and handling.

1. Class A combustibles. (Class A Fires)

These include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in areas such as offices.

To handle Class A combustibles safely:

- a. Dispose of waste daily.
- b. Keep trash in metal-lined receptacles with tight-fitting covers (metal wastebaskets that are emptied every day do not need to be covered).
- c. Keep work areas clean and free of fuel paths that could allow a fire to spread.
- d. Keep combustibles away from accidental ignition sources, such as hot plates, soldering irons, or other heat- or spark-producing devices.
- e. Store paper stock in metal cabinets.

- f. Store rags in metal bins with self-closing lids.
- g. Do not order excessive amounts of combustibles.
- h. Make frequent inspections to anticipate fires before they start.

Water, multi-purpose dry chemical (ABC), and halon are approved fire extinguishing agents for Class A combustibles.

2. Class B combustibles. (Class B Fires)

These include flammable and combustible liquids (oils, greases, tars, oilbased paints, and lacquers), flammable gases, and flammable aerosols. To handle Class B combustibles safely:

- a. Use only approved pumps, taking suction from the top, to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
- b. Do not dispense flammable liquids into containers unless the nozzle and container are electrically interconnected by contact or by a bonding wire. Either the tank or container must be grounded.
- c. Store, handle, and use Class B combustibles only in approved locations where vapors are prevented from reaching ignition sources such as heating or electric equipment, open flames, or mechanical or electric sparks.
- d. Dispose of oily rags, towels etc. promptly and properly.
- e. Do not use, handle, or store Class B combustibles near exits, stairs, or any other areas normally used as exits.
- f. Do not weld, cut, grind, or use unsafe electrical appliances or equipment near Class B combustibles.
- g. Do not generate heat, allow an open flame, or smoke near Class B combustibles.
- h. Know the location of and how to use the nearest portable fire extinguisher rated for Class B fire.

Water should not be used to extinguish Class B fires caused by flammable liquids. Water can cause the burning liquid to spread, making the fire worse. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), and halon. (**NOTE:** Halon has been determined to be an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place.)

F. Smoking

Smoking is prohibited on College property and in College vehicles.

VI. Fire Protection Equipment

A. <u>Fire Alarms</u>

All of Suffolk County Community College's buildings contain the proper fire detection and alarm systems, as per State Fire Protection Codes.

B. <u>Chemical Suppression System</u> Each of the College kitchens contain a chemical fire suppression system.

C. <u>Fire Extinguishers</u>

All of the College's buildings contain fire extinguishers as required by the regulations. They are of the following types:

Water – for class A fires (wood, paper etc.) Dry Chemical- for class A, B, C fires (any) Compressed Gas (CO₂, N₂)- for class B, C fires.

D. <u>Fire Doors and Barriers</u>

All Buildings are equipped with the required fire doors and barriers. The automatic type will be kept in proper working order. **Fire doors should <u>never</u> be propped or wedged open.**

- E. <u>Emergency doors</u> These doors shall be properly marked, and always kept clear of obstructions.
- F. <u>Sprinklers</u> Many (but not all) buildings are equipped with a sprinkler system
- G. <u>Maintenance of Fire Protection Equipment</u> As indicated, properly certified outside contractors periodically inspect the College's fire protection systems to insure functionality.

VII. MAINTENANCE OF SYSTEMS INSTALLED ON HEAT PRODUCING EQUIPMENT (1910.38(b)(5))

Where required, the College has installed fire suppression hood systems in kitchens. These systems are inspected and cleaned as necessary by a licensed contractor.

VIII. FALSE ALARMS

In the event that a fire alarm is triggered without a real fire (through mistake, malice or equipment fault), notify Public Safety (451-4242) immediately of the false alarm. Please note, however, even if it is a false alarm, the Fire Department

retains authority over the building until the Fire Chief releases it back to the College (see New York State Attorney General's opinion #81-13)

IX. TRAINING

The College President will ensure that all College Staff receive basic fire prevention training annually. Basic Fire Prevention training may be given by any qualified individual (College Director/Assistant Director of Public Safety (or his/her designee), Local Fire Chief, etc). The Department Head may contact the College Assistant Director of Public Safety and Environmental Health (or his/her designee) (851-6771) to conduct the training or make their own arrangements with other qualified individuals.

- A. <u>Fire safety training includes:</u>
 - 1. Fire Prevention Plan- where is it and what does it say.
 - 2. What to do if employee discovers a fire
 - How to raise the alarm
 - How to recognize fire exits
 - Evacuation routes
 - Assisting persons with disabilities
 - Measures to contain fire (e.g., closing office doors, windows, etc. in immediate vicinity)
 - Immediate evacuation
 - Assembly areas
 - Return to building after the "all-clear" signal

3) Fire Drills- Public Safety is responsible to ensure that the required number of Fire Drills are conducted and records of same are kept.

IX. PROGRAM REVIEW

In case of fire, the total and immediate evacuation of all students, staff and guests is necessary. Employees are expected to take the personal initiative to learn what is expected of them during a fire to assure their safety. If in doubt, the employee should immediately contact their supervisor, or the College Assistant Director of Public Safety and Environmental Health to learn the proper procedures.

Any employees who do not understand the available training information are encouraged to contact the College Assistant Director of Public Safety and Environmental Health for additional instruction. Because failure to comply with College's policy concerning fire prevention can result in death or injury, not to mention citations and fines, an employee who does not comply with this program may be subject to disciplinary action through established procedures.