

NORTHEAST COMMUNITY COLLEGE



FIRE PREVENTION PLAN

Original: September 1999
Revised: August 2001
Revised: February 2004

NORTHEAST COMMUNITY COLLEGE

FIRE PREVENTION PLAN

Per Administration Policy Code 2070, Environmental Safety and Health, protection of the health and safety of the employees and students of Northeast Community College is an important goal of the Administration. Furthermore, Northeast Community College is committed to achieving compliance with OSHA 29 CFR 1910.38 Employee Emergency Plans and Fire Prevention Plans.

A Fire Prevention Plan has been implemented to accomplish the objectives stated above. The program and plan were developed under the guidance of the Safety Committee. Each employee shall be responsible for compliance with the program.

Dr. Bill Path, President

Date

**NORTHEAST COMMUNITY COLLEGE
FIRE PREVENTION PLAN
TABLE OF CONTENTS**

- 1.0 General
 - 1.1 Regulatory Basis

- 2.0 Potential Ignition Sources
 - 2.1 Welding and Cutting
 - 2.2 No Smoking Policy
 - 2.3 Open Flames
 - 2.4 Space Heaters

- 3.0 Storage and Handling Procedures

- 4.0 Fire Emergency Equipment and Maintenance
 - 4.1 Fire Extinguishers
 - 4.2 Fire Response Procedures
 - 4.3 Sprinkler Systems
 - 4.4 Emergency Lights
 - 4.5 Fire Alarm Systems
 - 4.6 Heat and Smoke Detectors
 - 4.7 Hoods
 - 4.8 Buildings

- 5.0 Housekeeping Preventive Techniques

- 6.0 Training

NORTHEAST COMMUNITY COLLEGE

FIRE PREVENTION PLAN

1.0 General

The Fire Prevention Plan is a written document developed and implemented by Northeast Community College to ensure protection for the faculty and staff of Northeast Community College. The primary goal of this fire prevention plan is to reduce or eliminate fire in the workplace by heightening the fire safety awareness of all employees. Another goal of this plan is to provide all employees with the information necessary to recognize hazardous conditions and take appropriate action before such conditions result in a fire emergency.

1.1 Regulatory Basis

This plan is intended to meet the requirements of the OSHA Standard 29 CFR 1910.38, Employee Emergency Plans and Fire Prevention Plans. A copy of this rule can be found in the Physical Plant office.

2.0 Potential Ignition Sources

- Ensure that utility lights always have some type of wire guard over them.
- Don't misuse fuses. Never install a fuse rated higher than specified for the circuit.
- Investigate any appliance or equipment that smells strange. Space heaters, microwave ovens, hot plates, coffee makers and other small appliances shall be rigidly regulated and closely monitored.
- The use of extension cords to connect equipment to electric outlets shall be prohibited.

The table listed below lists common sources of ignition that cause fires in the workplace, gives examples in each case, and suggests preventive measures.

Sources of Ignition Examples

Sources of Ignition	Examples	Preventive Measures
Electrical Equipment	Electrical defects, generally due to poor maintenance, mostly in wiring, motors, switches, lamps and hot elements.	Use only approved equipment. Follow National Electrical Code. Establish regular maintenance.
Friction	Hot Bearings, misaligned or broken machine parts, poor adjustment.	Follow a regular schedule of inspection, maintenance and lubrication.
Open Flames	Cutting and welding torches, gas and oil burners, misuse of gasoline torches, Bunsen burners.	Follow established welding or laboratory safety precautions. Keep burners clean and properly adjusted. Do not use open flames near combustibles.
Smoking and matches	Dangerous near flammable liquids and in areas where combustibles are stored or used.	Smoke only in permitted areas. Make sure matches are out. Use appropriate receptacles.
Static electricity	Occurs where liquid flows from pipes.	Ground equipment. Use static eliminators. Humidify the atmosphere.
Hot surfaces	Exposure of combustibles to furnaces, electric lamps or irons.	Provide ample clearances, insulation, air circulation. Check heating apparatus prior to leaving it unattended.

2.1 Welding and Cutting

If practical, welding and cutting operations shall be conducted in well-ventilated rooms with a fire-resistant floor.

Welding will not be permitted in or near areas containing flammable or combustible materials (liquids, vapors, or dusts). Welding will not be permitted in or near closed tanks that contain or have contained flammable liquids unless they have been thoroughly drained, purged and tested free from flammable gases or vapors. Welding shall not begin until all combustible materials have been removed at least 35 feet from the affected areas or, if unable to relocate, covered with a fire retardant covering. This also applies to walls, partitions, ceilings, or roofs of combustible materials. Openings in walls, floors, or ducts shall be covered if located within 35 feet of the intended work area. Welding will not be permitted on any closed containers.

2.2 No Smoking Policy

Northeast Community College has a specific policy regarding smoking in the workplace. Smoking is prohibited in all college buildings and within college-owned motor vehicles, thus eliminating the health and fire hazard associated with the use of smoking materials.

2.3 Open Flames

Open flames, such as candles, are not permitted in office areas, classrooms or in student housing facilities. Open flames are allowed only in labs where required.

2.4 Space Heaters

Only electric space heaters that have a tip-over switch and are UL listed will be allowed in campus buildings. Space heaters without the switch and/or UL listing will be disposed of immediately as they are considered a fire hazard and not allowed per Norfolk Fire Department.

3.0 Storage and Handling Procedures

The storage of material shall be arranged such that adequate clearance is maintained away from heating surfaces, air ducts, heaters, flue pipes, and lighting fixtures. All storage containers or areas shall prominently display signs to identify the material stored within. Storage of chemicals shall be separated from other materials in storage, from handling operations, and from incompatible materials. All individual containers shall be identified as to their contents.

Only containers designed, constructed, and tested in accordance with the U.S. Department of Transportation specifications and regulations are used for storage of compressed or liquefied gases. Compressed gas storage rooms will be areas reserved exclusively for that purpose with good ventilation and at least 1 hour fire resistance rating. The gas cylinders shall be secured in place and stored away from any heat or ignition source. Pressurized gas cylinders shall never be used without pressure regulators.

A. Ordinary Combustibles

- Wooden pallets will not be stacked over 6 feet tall. If feasible, extra pallets will be stored outside or in separate buildings to reduce the risk of fire hazard.
- Piles of combustible materials shall be stored away from buildings and located apart from each other sufficiently to allow fire fighting efforts to control an existing fire.

B. Flammable Materials

- Bulk quantities of flammable liquids shall be stored outdoors and away from buildings. Smaller quantities are subsequently brought into a mixing room where they are prepared for use. The mixing room shall be located next to an outside wall equipped with explosion relief vents. The room shall also have sufficient mechanical ventilation to prevent the accumulation of flammable vapor concentrations in the explosive range.
- Small quantities (limited to amount necessary to perform an operation for one working shift) of flammable liquids shall be stored in, and also dispensed from, approved safety containers equipped with vapor-tight, self-closing caps, screens or covers.
- Flammable liquids shall be stored away from sources that can produce sparks.
- Flammable liquids shall only be used in areas having adequate and, if feasible, positive ventilation. If the liquid is highly hazardous, the liquid shall only be used in areas with a local exhaust ventilation.

- Flammable liquids shall never be transferred from one container to another by applying air pressure to the original container. Pressurizing such containers may cause them to rupture, creating a serious flammable liquid spill.
- When dangerous liquids are being handled, a warning sign will be posted near the operation, notifying other employees and giving warning that open flames are hazardous and are to be kept away.
- The storage and usage areas will include fire-resistive separations, automatic sprinklers, special ventilation, explosion-relief valves, separation of incompatible materials and the separation of flammable materials from other materials.

4.0 Fire Emergency Equipment and Maintenance

4.1 Fire Extinguishers

All buildings are equipped with ABC fire extinguishers. Fire extinguishers are inspected annually by an outside company and are checked monthly by maintenance personnel to verify availability in case of emergency. Documentation is maintained in the Physical Plant Office.

4.2 Fire Response Procedures

A. Precautions

- Small fires can sometimes be extinguished without evacuation. However, an immediate readiness to evacuate is essential in the event the fire cannot be controlled.
- Fire extinguishers should be used only by trained personnel.
- Never enter a room that is smoke filled.
- Never enter a room containing a fire without a backup person.
- Never enter a room if the top half of the door is warm to the touch.

B. Small Fires - Using a Fire Extinguisher

- Alert all persons in the area and grab the nearest fire extinguisher. Fire extinguishers on campus are ABC type that can be used on wood, paper, liquid and electrical fires.
- While keeping an exit available behind you, bring the extinguisher within six feet of the fire.
- Follow the P-A-S-S procedures to activate the extinguisher.
P - Pull the pin located in the extinguisher's handle.
A - Aim the nozzle, horn or hose at the base of the fire.
S - Squeeze or press the handles together.
S - Sweep from side to side at the base of the fire until it is out.
- After the fire has been completely extinguished, notify the Director of Physical Plant. Complete an Incident/Accident Report.

C. Large Fires

- Activate the nearest fire alarm pullstation. The audible and visual alarms in the building will activate simultaneously.
- Alert people in the immediate area to begin evacuation. Assist those with disabilities.
- Close doors to confine the fire.
- Dial 9, 911. Give your name and provide location, telephone number and description of the fire.
- Move to the designated assembly area away and upwind from the building.
- Have persons knowledgeable about the incident and location assist emergency personnel.
- Report this incident to campus security or your supervisor as soon as possible.
- Complete an Incident/Accident Report.

D. Clothing on Fire

- Drop the person to the floor and roll to smother the flames or
- Drench with water if safety shower is immediately available.
- Obtain medical help by dialing 9, 911.

4.3 Sprinkler Systems

Buildings with fire sprinkler systems have the control valves inspected monthly to verify they are in the fully open position. All piping, valves and heads are inspected annually by a certified sprinkler company. Documentation is maintained by the Physical Plant Office.

4.4 Emergency Lights

Emergency lights have a 30 second functional test monthly. Testing is performed by personnel in the Physical Plant Department. Documentation is maintained in the Physical Plant Office.

4.5 Fire Alarm Systems

The fire alarm systems are tested annually by a certified company. Documentation is maintained in the Physical Plant Office.

4.6 Heat and Smoke Detectors

Heat and smoke detectors are tested annually and sensitivity tested/cleaned biennial by a certified company. Documentation is maintained in the Physical Plant Office.

4.7 Hoods

Hoods are located in the kitchen areas of the Student Center and Lifelong Learning Center. Hoods are inspected biannually by a certified company. Documentation is maintained in the Physical Plant Office.

4.8 Buildings

All buildings are inspected for fire hazards annually by the Norfolk Fire Department. Infractions are written up and corrections are made by Physical Plant or department personnel. After corrections are made, the Fire Department comes back out to make sure the infractions are corrected.

5.0 Housekeeping Preventive Techniques

The following are housekeeping techniques and procedures to prevent occurrences of fire.

- Keep storage and working areas free of trash.
- Place oily rags in covered containers and dispose of daily.
- Do not use gasoline or other flammable solvent or finish to clean floors.
- Use noncombustible oil-absorptive materials for sweeping floors consisting of sawdust or some other combustible material treated with oil.
- Dispose of materials in noncombustible containers that are emptied daily.
- Remove accumulation of combustible dust.
- Don't refuel gasoline-powered equipment in a confined space, especially in the presence of equipment such as furnaces or water heaters.
- Don't refuel gasoline-powered equipment while it is hot.
- Follow proper storage and handling procedures.
- Ensure combustible materials are present only in areas in quantities required for the work operation.
- Clean up any spill of flammable liquids immediately.
- Ensure that if a worker's clothing becomes contaminated with flammable liquids, these individuals change their clothing before continuing to work.
- Post "No Smoking" caution signs near the storage areas.
- Report any hazardous condition, such as old wiring, worn insulation and broken electrical equipment to the supervisor.
- Keep motors clean and in good working order.
- Don't overload electrical outlets.
- Ensure all equipment is turned off at the end of the work day.
- Maintain the right type of fire extinguisher available for use.

- Use the safest cleaning solvents (nonflammable and nontoxic) when cleaning electrical equipment. Such solvents include inhibited methyl chloroform, or a blend of stoddard solvent and perchloroethylene.
- Ensure that all passageways and fire doors are unobstructed. Stairwell doors shall never be propped open, and materials shall not be stored in stairwells.
- Periodically remove overspray residue from walls, floors and ceilings of spray booths and ventilation ducts.
- Remove contaminated spray booth filters from the building as soon as replaced, or keep immersed in water until disposed.
- Don't allow materials to block automatic sprinkler systems, or to be piled around fire extinguisher locations. To obtain the proper distribution of water, a minimum of 18 inches of clear space must be maintained below sprinkler deflectors. If there are no sprinklers, a 3 foot clearance between piled material and the ceiling must be maintained to permit use of hose streams. These distances must be doubled when stock is piled higher than 15 feet.
- Check daily for any discarded lumber, broken pallets or pieces of material stored on site and remove properly.
- Repile immediately any pile of material which falls into an aisle or clear space.
- Use weed killers that are not toxic and do not pose a fire hazard.

6.0 Training

All employees shall be instructed on the locations and proper use of fire extinguishers in their work areas. Employees shall also be instructed as to how to operate the buildings fire alarm system, and be familiar with evacuation routes. The training of all employees shall include the locations and types of materials and/or processes which pose potential fire hazards. The training program shall also emphasize the following:

1. Use and disposal of smoking materials
2. The importance of electrical safety
3. Proper use of electrical appliances and equipment
4. Unplugging heat-producing equipment and appliances at the end of each work day
5. Correct storage of combustible and flammable materials
6. Safe handling of compressed gases and flammable liquids (where appropriate)