

Clarksville-Montgomery County School System
FIRE PREVENTION PROGRAM
OSHA Standard - [Fire Safety Standards](#)

1.0 PURPOSE

This program is directed at ensuring proper handling, storage and use of flammable and combustible materials. It is also shall serve to provide the guidelines and requirements for fire prevention and protection including the safe and proper use of portable fire extinguishers, hoses and other fire protection equipment. In addition, it establishes the criteria and operating procedure for activities involving Hot Work. This program is in compliance and accordance with OSHA 29 CFR [1910.157](#) , [1910.106](#) , [1910.101](#) , [1910.38 \(b\)](#) , [1910.252](#). It outlines the principles and techniques from NFPA Standard No. 10, 30, 51b, 77 and 231.

2.0 SCOPE

The program applies to all Clarksville-Montgomery County School System (CMCSS) employees and contractors handling, storing and using flammable and combustible materials. This program also applies to employees, contractors and individuals potentially using portable fire extinguishers, hoses and other fire protection equipment.

3.0 DEFINITIONS

- **Affected Employee-** Employees and contractors that are working nearby flammable and combustible materials.
- **Boiling Point-**The temperature at which the vapor pressure of a liquid is equal to the external pressure applied to it, which is normally understood to be 14.7 pounds per square inch absolute (psia).
- **Bonding-**The connection of two objects with a metal chain or strap in order to neutralize the static electrical charge between them.
- **Combustible liquids-** Liquids having flashpoints at or above 100° F (37.8° C).
- **Combustion-**This is the self-sustaining process of rapid oxidation of a material, producing heat and light.
- **Emergency Responder-** Designated employees or contractors whom have demonstrated proficiency for responding to and extinguishing incipient type fires with emergency fire equipment.
- **Flammable liquids-**These are liquids having a flash point below 100° F (37.8° C).
- **Flash Point-**The lowest temperature at which sufficient vapors are produced from a flammable liquid to form an ignitable mixture with air near the surface of the liquid.
- **Fire Safety Agent-** Individuals that are trained and qualified to perform testing and maintenance for fire protection equipment including certification where required by the state or province.

- **Fire Watch-** a Qualified Supervisor, Authorized Person or Emergency Responder posted at the hot work job site and remains there for the duration of the job and beyond and to provide assistance with fire control, communication and inspection of the affected area.
- **Grounding-** This is reducing the difference in electrical potential between an item and the ground by the use of a conductor.
- **High Risk Fire Hazards-** Those areas of the site or process having increased risk for causing or contributing to a fire or explosion.
- **Ignition Source-** A method (either purposeful or incidental) in which, provides a means for initiation of self-sustained combustion. Open flames, lightning, smoking, cutting and welding, hot surfaces, chemical and physical-chemical reactions, electrical arcs, equipment that produces sparks, static and friction sparks, or heating elements can act as an ignition sources.
- **Ignition Temperature (Auto-ignition Temperature) -** The temperature in which, a closed or almost closed container must be heated so that when the liquid is introduced into the container, it ignites spontaneously and burns.
- **Non-Combustible-** A material that is incapable of supporting combustion under normal conditions.
- **Safety Can-** An approved container of not more than five (5) gallons capacity, with a spring-closing lid and spout cover and designated so that it will safely relieve internal pressure when exposed to fire.
- **Static Electricity-** An accumulation of electrical charges on opposing surfaces created by the separation of unlike materials or by the movement of surfaces.
- **Standby Fire Protection Equipment-** Fire extinguishers, hoses and the like that is designated and used specifically for performing hot work activities (in addition to fire equipment available on the wall in the area).

4.0 **FLAMMABLE LIQUIDS/COMBUSTIBLE LIQUIDS**

Storage Requirements

- Flammable and combustible liquids and materials should be properly stored, labeled, dispensed, and used.
- Adequate ventilation must be provided to prevent accumulation of residues and vapors from flammable liquids and materials.
- When storing and using flammable and combustible materials, remove all possible sources of ignition.
- Expose only enough solvent, paint, or other combustible or flammable material that is needed for the immediate operation.
- Approved safety cans, properly labeled, must be used to store any flammable liquids such as gasoline, solvents or thinners if the materials are not stored in an approved storage cabinet or storage room.

- Specially designed storage rooms are required for flammable liquid storage when the quantity exceeds the limits for approved storage cabinets. Containers stored in approved storage rooms shall be kept tightly closed.
- Areas where flammable and combustible liquids are stored must be posted as *"DANGER-NO SMOKING, NO OPEN FLAMES"*.

7.0 USAGE REQUIREMENTS

- *NO SMOKING* must be observed at all times when using flammable/ combustible liquids. (Refer to [HUM-A028](#) Use of Tobacco Products on School System Premises)
- No more than one (1) quart of flammable or combustible liquid is to be used at a workstation at any given time.
- No open containers of flammable liquids must ever be transported by vehicle. Fire extinguishers must be on any vehicle where flammable liquids are transported.
- Keep paint cans, mold release, isopropyl alcohol, acetone, or other flammable liquid containers tightly closed when not in use.
- When dispensing flammable liquids, bonding and grounding procedures shall apply.
- Flammable and combustible dispensing containers shall be kept at a safe distance from open flames or other ignition sources.
- Workstations shall be kept clear of clutter and debris.

8.0 INSPECTIONS

- Designated bulk flammable and combustible storage areas shall be inspected monthly by the department supervisor or their designee.
- The following criteria shall be used for performing inspections:
 1. Drum/container condition
 2. Label condition
 3. Identification as to container contents
 4. Signs for container leaks
 5. Product Spills
 6. Bonding and grounding requirements
 7. Loose bungs, caps or covers

9.0 COMPRESSED AND LIQUIFIED GASES

- Cylinders shall not be dragged or rolled at any time.
- Use a handcart or truck specially designed for transferring cylinders.
- Store cylinders upright and secure them to wall or bench tops during storage and use.
- Store in a dry, cool and well-ventilated areas, protected from weather, and away from flammable materials.

- Post *NO SMOKING SIGN* in a conspicuous location within an approved storage area.
- Separate fuel and oxidizing gas cylinders by at least 20 feet or a firewall.
- Cylinder caps shall be in place on cylinders not in use or without a regulator.
- Do not change, modify, repair, or tamper with the pressure relief devices on cylinders.

10.0 GENERAL FIRE PREVENTION / PROTECTION RULES

- Emergency aisles and doors shall be kept clear, unobstructed and operating at all times.
- The use of portable heaters is discouraged.
- Flammable and combustible debris shall be immediately and properly disposed of in accordance with the applicable waste management procedures. Flammable and combustible debris shall never be allowed to accumulate in an unauthorized area or container.
- Wooden pallets shall not be stacked higher than six (6) feet from grade.
- Trash shall not be accumulated or stored in areas where there are ignition sources.

11.0 FIRE EXTINGUISHERS

Fire Classification:

- **Class A Fire**-A fire involving ordinary combustible materials such as wood, cloth and paper, and some rubber and plastics.
- **Class B Fire**-A fire involving flammable or combustibles liquids, flammable gasses, greases and similar materials, and some rubber and plastics.
- **Class C Fire**-A fire involving energized electrical equipment where safety to the employee requires the use of electrically nonconductive extinguishing media.
- **Class D Fire**-A fire involving combustible metals such as magnesium, titanium, zirconium, sodium or potassium.

12.0 CLASSIFICATION AND TYPES

- **Class A Extinguisher** - Pressurized water, foam, or multi-purpose dry chemicals such as sodium bicarbonate, monoammonium phosphate, potassium bicarbonate, or potassium chloride.
- **Class B Extinguisher** - Carbon dioxide (CO₂), foam, or dry chemicals such as sodium bicarbonate, monoammonium phosphate, potassium bicarbonate, or potassium chloride.
- **Class C Extinguisher** - Carbon dioxide (CO₂) or dry chemicals
Such as sodium bicarbonate, monoammonium phosphate, potassium bicarbonate, or potassium chloride.
- **Class D Extinguisher** - Dry powders such as graphite, sand, and soda

ash, sodium chloride, talc, or dolomite.

13.0 INSPECTIONS

Frequency:

- All fire extinguishers are to be inspected monthly by the Lead Custodian, Building Administrator assigned to the building, or his or her designated employee. (Refer to [OPS-P006](#))
- Fire Extinguishers are to be hydrostatically tested by an authorized Fire Safety Agent.

Criteria:

- Extinguisher shall be fully charged and operational. If not fully charged or extinguisher has been discharged, immediately remove from service and contact the Fire Safety Agent.
- Inspection tag and pull tie shall be affixed and in good condition. The tie shall be placed through the pull pin.
- Pull pin shall be in proper position through the handle to prevent accidental or inadvertent discharge of extinguisher contents.
- The qualified person shall sign off inspection tag after each monthly visual inspection.
- Ensure fire extinguishers are mounted so that the top of the extinguisher is not more than five feet from the floor or bottom of the working platform.
- Ensure fire extinguishers are visible by using locator signs or markings.

Associated Documents: [HUM-A028](#) Use of Tobacco Products on School System Premises
 [OPS-P006](#) Custodial Fire and Safety Building Checks Procedure