

Purpose

This establishes the Montgomery County Government's (known hereafter as "County") Fire Prevention Policy intended to set procedures that will ensure worker safety while preventing injury, death, and property damage by fire. This plan will also provide employees, reserves, volunteers, and elected officials with information that will assist them in recognizing, reporting, and controlling fire hazards with the Occupational Safety and Health Administration's (OSHA) fire prevention standard, 29 CFR 1910.39.

Scope

This policy applies to all County Departments, employees and operations.

Definitions

Fires are classified according to the type of fuel or material:

- Class A—wood, paper and cloth;
- Class B—flammable gases, liquids and greases;
- Class C—fires in live electrical equipment, or involving materials near electrically powered
- equipment.
- Class D—combustible metals such as magnesium, zirconium, potassium and sodium.

Definitions are published for general information:

- 1. <u>Arson:</u> Arson is the crime of intentionally or maliciously setting fire to structures, wild land areas, cars or other property. Arson often involves fires deliberately set to property of another.
- 2. <u>Cooking Appliances:</u> Cooking appliances include ranges, ovens, microwaves, food boilers, food broilers, toaster ovens, griddles, deep-fry fryers, waffle irons, or any other similar type appliances utilized to heat or cook food for consumption.
- 3. <u>Decorative Materials:</u> Decorative materials include but are not limited to such items as paper products, curtains, draperies, loose fabrics, streamers, cloth, cotton, batting, hay, straw, corn stalks, vines, leaves, trees and moss when in use for decorative effect on wall or ceiling coverings, or when used for acoustical or other affect. This does not include normal floor coverings, ordinary window shades or material one fortieth of an inch or less in thickness applied directly to and adhering tightly to a non-combustible base.
- 4. <u>Emergency Egress:</u> Emergency Egress consists of the aisles, corridors, exit doors, exit stairways, exit passageways and exit discharges from a structure.
- 5. **Exit Stairway:** An exit component, that is separated from all other interior spaces of a building or structure by fire-resistive construction and opening protectives, and provides for a protected path of egress travel in a vertical direction to the exit discharge.
- 6. Exit Sign: A sign that marks the location of exits that lead to the exterior of the building.
- 7. <u>Fire Egress:</u> Fire egress includes aisles, corridors, stairways and other approaches to ramps, exterior doors or other building exits.



- 8. <u>Fire Hazard:</u> Any condition, arrangement, or act which may cause an increase the potential for fire to a greater degree than customarily recognized as normal; or which may obstruct, delay, or hinder, or may become the cause of obstruction, delay or hindrance to the prevention, suppression, or extinguishment of fire.
- 9. <u>Fire Detection Equipment</u>: Any device or sensor that is used to detect heat or smoke caused by combustion. These devices and sensors are usually integrated with a fire alarm system to alert building occupants to evacuate.
- 10. <u>Fire Suppression Equipment:</u> Any device that is used to suppress a fire. This includes fixed building equipment such as fire extinguishers, sprinkler systems and kitchen hood suppression systems as well as mobile equipment used by the fire department.
- 11. <u>Fire Rated Stairwell</u>: An enclosed stairwell with a specific fire rating which connects all floors of a building and provides a ground floor exit.
- 12. <u>Fire Related Violations of Law:</u> Arson and tampering with fire detection or prevention equipment are criminal acts. Anyone caught intentionally setting fires or tampering with / maliciously destroying fire detection or protection equipment will be subject to not only Montgomery County disciplinary action but also prosecution under the law as well.
- 13. <u>Fireworks:</u> Any combustible or explosive composition, any substance, combination of substances, or any article prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration, or detonation.
- 14. <u>Hot Work:</u> Hot Work is any temporary operation that involves the use of devices with flames or other method to produce heat or create sparks. This includes but is not limited to operations such as torch cutting, brazing, grinding, soldering, and welding.
- 15. Occupied Building: Any building in which a person or persons are present.

Responsibilities

The County is responsible for implementing and enforcing this policy. All employees must comply with this policy.

- 1) **Risk Management** is responsible for:
 - A. Developing the written Fire Prevention Plan and reviewing the program annually.
 - B. Developing and overseeing the fire prevention-training program.
 - C. Conducting a fire hazard assessment of the grounds and facilities to identify fire hazards and make recommendations.
 - D. Assisting the departments with the identification of fire hazards and work with supervisors to assure that fire hazards are effectively communicated to employees.
 - E. Assisting the departments with identifying and controlling fuel source hazards and control methods to eliminate or reduce the risks.
 - F. Assuring the proper maintenance of fire control equipment and systems.
 - G. Inspecting the workplace to identify potential problem areas and to ensure compliance with policy.



- H. Working with departments to assure that explosive and flammable materials have safety data sheets (SDSs) and GHS appropriate labels as part of the Hazard Communications Program.
- I. Maintaining plan records.

2) **Department and Supervisors** are responsible for:

- A. Designating a safety coordinator for the department or work location. Responsibilities for this designated person are outlined below.
- B. Conducting fire hazard assessments of their departments and work locations to identify fire hazards.
- C. Identifying and controlling fuel source hazards and control methods to eliminate or reduce fire risk.
- D. Ensuring that employees are aware of fire hazards and proper fire response before working without supervision.
- E. Ensuring that employees receive appropriate fire safety training.
- F. Ensuring that employees understand fire evacuation procedures and departmental assembly areas.
- G. Ensuring that departmental fire control systems, including extinguishers and inspected and in proper working order.
- H. Immediately notifying Risk Management if changes in operation introduce or increase fire hazards.
- I. Enforcing the fire prevention and protection policies.

3) **Employees/Reserves/Volunteers** are responsible for:

- A. If working in an area where fire hazards exist, completing fire prevention training before working without supervision.
- B. Following safe practices to minimize or eliminate fire hazards.
- C. Notifying their supervisor of potential fire hazards.
- D. Adhering to emergency response procedures.
- E. Following county smoking policies.

Procedures

- 1) Reporting a fire: Upon the discovery of smoke and/or flame, regardless of the degree of intensity of the fire the person(s) involved shall immediately initiate the following actions:
 - A. Activate the fire alarm system by pulling a manual pull station or verbally notify the building's occupants of the fire if the alarm system is not functioning.
 - B. Evacuate from the building, report to the pre-designated assembly area, and await further instruction from First Responders.
 - C. Even if the fire alarm system has already been activated, locate the nearest telephone or use a cell phone (at a safe distance from the fire) and contact 9-1-1 to report the fire. When the



- Dispatcher answers the phone, provide them with the nature of the emergency and the exact location (building, floor and room number or area).
- D. The Fire Department Response Protocol shall be followed based on the information received by 9-1-1 regarding fires.
- 2) <u>Fire Prevention Responsibilities</u>: Every member of the County is charged with the responsibility of preventing the occurrence of fires within County offices. Specific guidance is as follows;
 - A. <u>Disposal of waste material</u> Good housekeeping is basic to fire safety and should be a concern in every type of occupancy. Rubbish, trash, waste paper, oily rags, chemical waste or other combustible materials must not be allowed to accumulate in or around any building. Such materials shall be promptly disposed of in the appropriate receptacles that are provided for such use.
 - B. <u>Storage of flammable material</u> Paints, oils, and other flammable liquids and chemicals used for routine maintenance must be stored in approved fire resistant cabinets or remote locations away from other combustibles. Gasoline, kerosene, oily insecticides, and other flammable liquids are not permitted to be stored in occupied buildings.
 - C. <u>Use of flammable and combustible solvents and cleaning materials</u> Solvents or cleaning fluids will not be used in unventilated rooms. Whenever a solvent or cleaning fluid is used, the user will exercise every precaution to prevent an explosion or fire. Flammable liquids will be stored in safety cans and their contents must be properly identified.
 - D. <u>Use of Decorative Materials</u> Decorations are permitted for use in all County buildings with certain restrictions. Decorative materials made of paper products and other combustible materials that are not flame retardant should not be used without the prior approval of Risk Management. Paper decorations should not cover more that 25% of the surface area of any wall or doorway. Decorations may not be placed as to obstruct fire detection or suppression equipment, walkways, aisles, corridors or other means of egress as dictated by NFPA Code, and emergency exit signs may not be obstructed in any way. Combustible materials are prohibited from being hung from the ceiling or covering the light fixtures within residential rooms. Curtains and/or drapes will be restricted to non-combustible materials that do not require periodic flameproofing.
 - E. <u>Smoking</u> Smoking or carrying of a lighted pipe, cigar, cigarette or any other type of smoking paraphernalia or material is prohibited in all County buildings. Smoking is only permitted in approved designated smoking areas.
 - F. Parking of Automobiles –The following fire precautions will be observed:
 - i. Motor vehicles or any other immovable objects shall not obstruct Fire Department inlet connections for sprinkler systems and fire hydrants at any time.
 - ii. When required by Risk Management, approved signs or other approved notices shall be provided for designated fire lanes to identify such lanes or prohibit the obstruction thereof. Signs or notices shall be freestanding signs or marked curbs, sidewalks, or other traffic surfaces that have the words "FIRE LANE—NO PARKING" painted in yellow in an approved size and spacing. Signs or notices shall be



maintained in a clean and legible condition at all times and replaced when necessary to provide adequate visibility.

- G. <u>Fire Egress</u> Egress areas within County buildings will be kept free of obstruction at all times to ensure their immediate use in case of an emergency. During inclement weather, snow and ice will be kept clear of entrances and exits by facilities or contracted personnel, with periodic inspections to ensure that this has been accomplished.
- H. <u>Fire Exit Signage</u> All exits will be properly marked with an illuminated "EXIT" sign on the inside surface above the door leading to the exterior of the building.
- I. The Use and Storage of Compressed Gases:
 - i. Where oxygen is being used, it is the responsibility of the user to insure that cylinders are securely strapped to an immovable object or to a wall and to insure that the following sign is prominently displayed: "OXYGEN IN USE-NO SMOKING"
 - ii. Where oxygen or other compressed gas is being stored, cylinders will be securely strapped to the wall or placed in regular conveyor carts designed for storage purposes.
 - iii. Storage areas for flammable gases and gas cylinders shall be designated as "No Smoking" areas, with appropriate signage designating same.
 - iv. Compressed air or gas cylinders, which have not been subjected to hydrostatic tests within the past five years, shall not be used. It is the responsibility of the user to check the last testing date. Markings are branded on steel cylinders in one-half inch figures, indicating the month and year within 10 inches of the neck of the cylinders and immediately under the valve, e.g. "6-80" indicate that the cylinder was tested in June 1980.
- J. <u>Stocking of Supplies</u> Storage of materials in any building shall not be higher than thirty (30) inches below ceiling/joists and shall not exceed designed structural floor load capacity. A minimum sprinkler head clearance of 18" shall also be maintained per NFPA standard.
- K. <u>Hot Work</u> All work that is done at County properties that meets the definition of hot work will require a hot work permit. These permits can be obtained through Risk Management. The Hot Work Policy governs this type of work.
- L. <u>Flammable Liquids</u> Flammable liquids shall only be stored in containers and cabinets specifically approved for that use. The use of gasoline as anything other than a motor fuel is prohibited and the storage or use inside buildings other those designated by Risk Management is strictly forbidden. Flammable liquids, such as gasoline, must be disposed of per the State of Tennessee's Environmental Protection Policy.
- M. <u>Fireworks</u> The sale, possession, or use of Fireworks on County property is prohibited unless approved in advance by the Risk Management Department representing the municipality in which the fireworks will be used.
- N. <u>Fire Rated Stairwells</u> Fire rated stairwells will be kept clear at all times. The storage of bicycles or any other materials or equipment shall not be permitted. Bicycles found in areas of egress and areas designated for the use of physically disabled persons will be removed. Postings of any kind are prohibited in fire rated stairwells.



- O. <u>Fire Exit Doors</u> Jamming, blocking, decorating, or propping materials against fire exit doors is prohibited. Fire doors will be kept closed at all times unless connected to an approved hold-open device interfaced with the building's fire alarm system.
- P. <u>Candles and other open flame devices</u> The presence or use of incense burners, candles or any other device with an open flame is prohibited in all County facilities. The use of candles and other open flame devices is restricted in all other facilities.
- Q. The County Department of Health governs charcoal and Propane Grills Food preparation and handling procedures and the required licensing for these issues must be obtained through their agency.
 - i. Barbecue grills must be at least ten feet away from any type of activity or combustible materials. A roped off area or some other means of physically separating the barbecue grill area from the other activities will reduce the chances of an accidental fire or a burn injury from occurring.
 - ii. On-site fire extinguishing equipment to deal with a fire emergency must be present. Two fire extinguishers shall be left near the grills throughout the burning phase for fire emergency response. Risk Management will assign fire extinguishers for this purpose. Extinguishers placed for general use inside of buildings are not to be removed for use with grilling.
 - iii. A designated County employee, reservist, or volunteer shall be present at all times to provide a fire watch and to observe the grill(s) while they are in use. The designee shall be trained in the use of portable fire extinguishers.
 - iv. For charcoal grills, only self-lighting charcoal can be used as the fuel source. The use of charcoal lighter fluid, wood, paper or other combustible material to start the fire is prohibited. When done grilling, extinguish the fire and dispose of the charcoal residue by sprinkling the charcoal with water out of a bucket by hand. Stir the charcoal with a wooden stick while applying the water to saturate all the hot coals. Repeat the above procedure until the fire has been completely extinguished. The extinguished charcoal shall be allowed to sit for twenty (20) minutes before disposing of the fire residuals into a metal can.
 - v. Both charcoal and propane fired grills are to be left in a well-ventilated area after their use to allow the grill to cool down to a safe temperature before being stored.
 - vi. The person responsible for the event shall be the one responsible for obtaining the permit and will also insure that an attendant is present at all times while the fire is lit.
- R. <u>Outdoor Burning</u> The outdoor burning of combustible materials either natural or man-made to include hay, straw, leaves, twigs, brush, wood, lumber, paper, cardboard, manufactured fire logs or other similar natural or man-made materials in any manner, is restricted on County property, including burning for recreational or ceremonial purposes.
 - i. Outdoor burning exceptions:
 - 1. The use of cooking grills fueled by propane or self-lighting charcoal are permissible as long as the guidelines are complied with.
 - 2. Manufactured fire pits that are fueled using Natural Gas or Propane and that are designed to produce a flame without the use of any combustible materials as described above, will be authorized for recreational use without permit.



Manufactured fire pits that use wood are also authorized for use with the following restrictions;

- 3. Fire pit equipment specifications must be provided to Risk Management and receive approval prior to use.
- 4. The fuel source for the fire pit must be capable of being secured in such a fashion that the fire pit cannot be operated without authorization.
- 5. While in use, no other combustible materials may be introduced into the flame and people must keep back a minimum of three feet from the flames while the fire pit is lit.
- S. Reporting Potential Fire Hazards During normal business hours, Risk Management shall be notified of any potential fire hazards that are observed. Such hazards include but are not limited to; defective electrical wiring or fixtures, defective natural gas pipes or appliances, improper use or storage of flammable liquids or chemicals, excessive buildup of trash or other combustible materials and defective fire detection or suppression equipment. Risk Management will then be responsible for notifying the appropriate personnel to address the hazard. After normal business hours, on weekends and on holidays, 9-1-1 should be notified of these types of hazards and Fire Department shall be responsible for notifying the appropriate personnel from Risk Management to address the hazards.

Fire Hazards

The following section addresses workplace fire hazards at County facilities and the procedures for controlling the hazards.

Electrical Fire Hazards

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.

- 1. To prevent electrical fires, employees will:
 - A. Make sure worn wires are replaced.
 - B. Use only appropriately rated fuses.
 - C. Never use extension cords as substitutes for permanent wiring.
 - D. Use only approved extension cords.
 - E. Check wiring in hazardous locations where the risk of fire is especially high.
 - F. Check electrical equipment to ensure it is properly grounded or double insulated.
 - G. Ensure adequate spacing during maintenance.
 - H. Turn off electrical equipment when it is not being used.
 - I. Not work near exposed and energized circuits unless they are specifically trained for this hazard and are wearing appropriate PPE.
 - J. Ensure that equipment is in proper working order, free from grease, and dust before operating.



2. Electrical Wiring:

Maintenance Personnel must:

- A. Replace worn wires.
- B. Assure that circuits are not overloaded.
- C. Whenever possible, improve the wiring rather than relying on extension cords.
- D. Assure that extension cords are FM-Approved or UL-listed and that fuses are rated appropriately.

3. Machine and Equipment Safety:

Maintenance Personnel must:

- A. Make sure that electrical equipment is grounded or double insulated, as needed.
- B. Follow the NFPA's requirements.
- C. Assure that heating units and other hot machinery are safeguarded.

4. <u>Inspections and Maintenance of Equipment:</u>

Maintenance Personnel must:

- A. Assure that regular inspection and maintenance is performed on equipment and its safeguards, following manufacturer's specifications.
- B. Assure that qualified individuals perform maintenance only.
- C. Regularly inspect for faulty ground connections, frayed wiring, and overloading.
- D. Assure equipment is free of dust and grease.

Portable Heaters

- 1. Before use, any portable electric space heater shall be inspected for the following:
 - a. Portable electric space heaters shall bear a UL listing label.
 - b. Before being used, portable electric space heaters shall be inspected by Facilities or Risk Management/safety coordinator to ensure that the amperage draw will not overload the electrical circuit intended to power the heater.
 - c. Portable electric space heaters shall not have worn or damaged electrical cords, and the plugs shall be in good condition.
 - d. Portable electric space heaters shall have a low center of gravity and shall contain a mechanism whereby the heater shuts off automatically if tipped over.

Office Fire Hazards

Office electrical equipment can occasionally cause fires. In order to reduce this risk,

Employees must do the following:

- 1. Avoid an electrical overload.
- 2. If possible, shut down electrical equipment at the end of the day.



- 3. Do not place extension cords under carpets.
- 4. Remove clutter and fuel sources from work and storage areas, and assure that trash is emptied regularly.

Cutting, Welding, and Open-Flame Work

The Department Safety Coordinator will ensure the following:

- 1. All necessary hot work permits have been obtained before work begins.
- 2. Cutting and welding are done by authorized personnel in designated areas whenever possible.
- 3. Adequate ventilation is provided.
- 4. Torches, regulators, pressure-reducing valves, and manifolds are UL-listed or FM approved.

	Mark for U.S.	Mark for Canada	Mark for U.S. / Canada
Listing mark	UL	CUL	CUL US
Recognition mark	.71	c. FL	c. FLL us

a.

- 5. Oxygen-fuel gas systems are equipped with listed or approved backflow valves and pressure-relief devices.
- 6. Cutters, welders, and helpers are wearing eye protection and protective clothing, as appropriate.
- 7. Cutting or welding is prohibited in sprinkled buildings while sprinkler protection is out of service.
- 8. Cutting or welding is prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations in confined spaces.
- 9. Cutting or welding is prohibited on metal walls, ceilings, or roofs built of combustible sandwichtype panel construction or combustible covering.
- 10. Confined spaces, such as tanks, are tested to ensure that the atmosphere is not more than 10 percent of the lower flammable limit before cutting or welding in or on the tank.
- 11. Small tanks, piping, or containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.
- 12. Fire watch has been established.

Flammable & Combustible Materials & Liquids

The Department Safety Coordinator will regularly evaluate the presence of combustible materials at the work location.

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. <u>Class A Combustibles</u> These include common combustible materials (wood, paper, cloth, rubber, and plastics) that can act as fuel and are found in nonspecialized areas, such as offices. To handle and store 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. Frequently inspect areas where combustibles are kept.

Extinguishing Class A Combustible Fires

Water, multi-purpose dry chemical (ABC), and halon 1211 are approved fire extinguishing agents for Class A combustibles.

- 2) <u>Class B Combustibles</u> include flammable and combustible liquids (oils, greases, tars, oil-based paints, and lacquers), flammable gases, and flammable aerosols.
 - A. Storage of Class B Combustibles
 - i. Store Class B combustibles (combustible liquids, and flammable liquids, gases, and aerosols) in approved cabinets or rooms that are far from ignition sources and are well-ventilated.
 - ii. Store flammable and combustible liquids in approved, sealed containers or tanks.
 - iii. Store Class B combustibles away from exits and stairs.
 - iv. Segregate oxygen cylinders from fuel-gas cylinders and combustible materials with the appropriate distance or barriers.
 - v. Segregate combustible and flammable materials from cylinders, and segregate cylinders and combustible materials from stairs, aisles, and elevators.
 - vi. Sufficiently vent atmospheric storage tanks.
 - B. Handling Class B Combustible liquids
 - i. Never handle Class B Combustibles near stairs or exits.
 - ii. Do not use flammable liquids for indoor cleaning, except for in approved machines.
 - iii. Keep heat, flame, smoke, ignition sources, and hot work far from Class B combustibles.
 - iv. Assure that electrical equipment near Class B combustibles is safe.
 - C. Dispensing Class B Combustible liquids
 - i. Only use approved pumps.



- ii. Dispense using suction from the top, not pressure to dispense liquids from tanks, drums, barrels, or similar containers (or use approved self-closing valves or faucets).
- iii. Always ground flammable liquid dispensing containers, such as drums, during dispensing.
- iv. The receiving container must either be connected to the grounded dispensing container or otherwise grounded.
- D. Extinguishing Class B Combustible Fires
 - i. Employees working with Class B combustibles should know the location of and how to use the nearest portable fire extinguisher rated for Class B fire.
 - ii. Do not use water to extinguish Class B fires caused by flammable liquids. Water can cause burning liquid to spread, making the fire worse.
 - iii. To extinguish a fire caused by flammable liquids, exclude the air around the burning liquid.
 - iv. The following fire-extinguishing agents are approved for Class B combustibles: carbon dioxide, multi-purpose dry chemical (ABC), halon 1301, and halon 1211. (NOTE: Halon is an ozone-depleting substance and is no longer being manufactured. Existing systems using halon can be kept in place, but employers must post signs indicating where halon or other agents that pose a serious health hazard are used.)

Ventilation

Maintenance Personnel is responsible for:

- 1. Monitoring the air to check for flammable or explosive gases or vapors.
- 2. If necessary, purging and inverting the atmosphere.
- 3. Supplying adequate ventilation in areas where flammable materials are used, where they are stored, and as needed to control combustible solids.

Training & Recordkeeping

- 1. <u>Training</u>: All employees have a right to know about the fire hazards associated with the specific materials and processes to which they are exposed.
 - A. The Risk Director along with designated Department Representatives are responsible for training new employees on basic fire prevention and documenting this training.
 - B. Supervisors are responsible for training employees about the fire hazards they will be exposed to and documenting this training.
 - C. Employees are trained at their initial assignment, every year, and if work processes change.
 - D. Employees will also be trained in the following areas:



- i. How to recognize fire hazards.
- ii. The Fire Prevention Plan policy contents and how to access it.
- iii. The SDSs and labeling for the flammable and combustible materials that employees work with, as well as for other hazardous chemicals.
- iv. County's Emergency Action Plan, which includes how to respond to a fire or other emergency, whom to notify, evacuation routes, and where to assemble.
- v. Training on Fire Extinguisher Use. County allows employees to use portable fire extinguishers only if they have been properly trained.
- 2. <u>Recordkeeping</u>: Training records shall be forwarded to Risk Management for inclusion in the employees training file.