



County of Henrico Human Resources

| Verification | Originator | Revised | Issued |
|--------------|-----------------|-----------------|-----------------|
| Initials | Risk Management | Risk Management | Risk Management |
| Date | 05/01/2015 | 06/30/2017 | 05/01/2018 |

Safety/Loss Prevention Manual Chapter 16 Portable Fire Extinguishers

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| Area of Application: | County of Henrico General Government & Schools |
| Document Location: | http://employees.henrico.us/info/safety-manual/ |
| Revisions | |
| Rev. No. | Date Description |
| 001 | 06/30/2017 Definitions added. |
| 002 | |

Purpose:

This chapter provides guidance for the selection and distribution of portable fire extinguishers for County of Henrico employees and contractors authorized to use them. This chapter helps to ensure the County complies with Virginia Occupational Safety & Health (VOSH) Standard 29 CFR 1910.157, Portable Fire Suppression Equipment.

Scope:

This chapter applies to County employees and contractors working on sites maintained by the County of Henrico; and any County vehicle equipped with a portable fire extinguisher.

Program Administration:

With guidance from Risk Management, departments that have authorized portable fire extinguisher use will implement a Portable Fire Extinguisher Program using the template found on the County's Employee Portal Safety Page. This Program meets the requirements of Chapter 16 of the Safety Manual and the VOSH Portable Fire Suppression Equipment Standard.

General Requirements:

- A. A fire extinguisher rated not less than 2A*, shall be provided for each 3,000 square feet of the protected building area, or major fraction thereof.
- B. Travel distance to the nearest fire extinguisher shall not exceed 75 feet.
- C. One or more fire extinguishers rated not less than 2A, shall be provided on each floor.
- D. In multi-story buildings, at least one fire extinguisher will be located adjacent to the stairways.
- E. A fire extinguisher rated less than 10B will be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids; or 5 lbs. of flammable gas are being used on the job site. This requirement does not apply to the integral fuel tanks of motor vehicles.
- F. Fire extinguishers used to provide suppression for Class B type fires will be located so as the travel distance from any protected area to the fire extinguisher shall not exceed 50 feet.
- G. Fire extinguishers used to provide suppression for K-Class fires shall be placed in each commercial kitchen facility.

* NOTE: The "A" rating on a fire extinguisher is water equivalency. Each "A" is equivalent to 1¼ gallons of water. A 2A extinguisher is equal to 2½ gallons of water for firefighting.



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Classes of Fires:

- Class A Fires - Fires involving ordinary combustible materials. (wood, cloth, cardboard, etc.)
- Class B Fires - Fires involving flammable liquids (oil, gasoline, solvents, oil-based paints, etc.)
- Class C Fires - Fires involving energized electrical equipment (panel boxes).
- Class D Fires - Fires involving combustible metals (magnesium, sodium, etc.)
- Class K Fires - Fires involving cooking media (grease, oils, fats.)

Procedures:

- A. Portable fire extinguishers shall be mounted, located and identified, so they are readily accessible without subjecting employees, and others, to injury.
- B. Extinguishers that weigh less than 40 lbs. will be installed so that the crest of the extinguisher is no more than five (5) feet higher than floor level.
- C. Extinguishers that weigh more than 40 lbs. will be so installed so the crest of the extinguisher is no more than three and one-half (3 ½) feet higher than floor level.
- D. Portable fire extinguishers will be maintained in a fully charged and operable condition.
- E. Extinguishers shall be kept in their designated locations at all times, except during use.
- F. Portable fire extinguishers shall be easily identified from a reasonable distance.
- G. All County construction and maintenance vehicles shall have a portable fire extinguisher stored safely, and readily accessible to the driver.
- H. Portable fire extinguishers shall be inspected visually each month:
 - 1. The monthly check shall include:
 - a. Fire extinguishers are properly mounted or stored in assigned places,
 - b. Fire extinguishers are not blocked or hidden, and no items have been hung on them;
 - c. Pressure gauges shows adequate pressure (arrow is located in green section of dial),
 - d. Plastic seals and tamper indicators are not broken or missing,
 - e. Fire extinguisher shows no visual sign of damage or abuse,
 - f. Nozzle is free of blockage,
 - g. Instructional plate is facing outward.
 - 2. Monthly inspections will be recorded on the tag attached to the unit (if present) and kept affixed to the extinguisher. Otherwise, use the record sheet provided in the County's written Portable Fire Extinguisher Program to document the monthly inspections.

An annual maintenance inspection shall be performed on each extinguisher by a certified person, or a qualified contractor, as defined in NFPA-10 7.1.2.1. Every 6 years, stored pressure fire extinguishers that require a 12-year hydrostatic test (e.g. dry chemical extinguishers) must be emptied and proper maintenance procedures performed [see NFPA 10(98), Sec. 4-4.3]. This maintenance must be performed by an approved extinguisher servicing company.

Training and Education:

A. General

- 1. When employees are expected to use portable fire extinguishers to fight incipient stage fires, a training program to familiarize employees with fire extinguisher use will be provided at hire, and annually thereafter. Training records may be filed with the Portable Fire Extinguisher Program, or by using an on-line system.



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2. Departments that **do not** expect employees to use fire extinguishers for incipient stage fires shall develop and implement a written fire safety policy that requires the immediate and total evacuation of the workplace upon sounding of a fire alarm system and which includes an Emergency Action Plan and a fire prevention plan which meets the requirements of 29 CFR 1910.38 and 29 CFR 1910.39. [29 CFR 1910.157(b)(1)].

Contact Risk Management for questions regarding fire extinguisher training requirements, or fire emergency planning.

B. Emergency Action Plan Team Members:

1. Shall be provided with hands-on training in extinguishing an incipient stage fire.
2. Training will be coordinated through the Henrico County Fire Training Center; performed by Fire Department training staff.
3. Annual Portable Fire Extinguisher Training will include, but is not limited to, the following:
 - a. Understanding fire classifications (Types A, B, C, D, and K.)
 - b. Understanding whether a fire is incipient stage, and how to respond accordingly.
 - c. Differences between fire extinguishers.
 - d. How to operate fire extinguishers (P-A-S-S method).
 - e. How to extinguish fires (**hands-on training will be provided only for Emergency Action Plan Team Members**).

Disclaimer:

Although every effort has been made to ensure this chapter addresses all applicable regulations, it is the Department's responsibility to ensure all rules and regulations are followed.