

**UNIVERSITY OF ROCHESTER
ENVIRONMENTAL HEALTH & SAFETY**

Policy No.: FS005	Approved by: Mark Cavanaugh
Title: Fire Extinguisher Inspections	Date: 11/19/2020
Revision No.: 2	Page 1 of 4
Prepared by: Brian Prinzing	

I. PURPOSE

Portable fire extinguishers shall be inspected and maintained to ensure that they are properly located and are operational in accordance with NFPA standards.

II. PERSONNEL AFFECTED

EH&S Fire Safety Inspector, Fire Safety Specialist, Facilities, Central Utilities, LLE Maintenance, Lab Technicians, and Contractors.

III. DEFINITIONS

Class A fire - a fire involving ordinary combustible materials such as wood, paper, cloth.

Class B fire - a fire involving flammable or combustible liquids, flammable gases, greases and similar materials.

Class C fire – a fire involving energized electrical equipment where safety requires the use of electrically nonconductive extinguishing media.

Class D fire – a fire involving combustible metals such as aluminum, magnesium, titanium, zirconium, sodium, lithium, and potassium.

Class K fire – a fire involving a cooking grease usually found in commercial cooking applications

Monthly Inspection - a “quick check” that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguishers are fully charged, completely visible, fully accessible, and operable. This is done by seeing that it is in its designated place, that it has not been actuated or tampered with, and that there is no obvious or physical damage of condition to prevent operation.

Annual Inspection - a “thorough examination” of the extinguisher. It is intended to give maximum assurance that an extinguisher will operate effectively and safely. It includes a thorough examination and performs any necessary repairs or replacement of an extinguisher. It will normally reveal the need for hydrostatic testing, or six-year maintenance. Annual inspections are to be performed by a trained inspector in accordance with NFPA-10

IV. RESPONSIBILITIES

EH&S oversees that all extinguishers are inspected on a monthly basis, and that annual maintenance is performed every year. The Fire Safety Inspector is responsible for the majority of the University of Rochester, including River Campus, South Campus, the Medical Center, Eastman School of Music, and the Mount Hope Properties.

For off-site locations the landlord or building owner will be responsible for performing the monthly inspection and having a qualified vendor perform the annual inspection. For certain

**UNIVERSITY OF ROCHESTER
ENVIRONMENTAL HEALTH & SAFETY**

Policy No.: FS005	Approved by: Mark Cavanaugh
Title: Fire Extinguisher Inspections	Date: 11/19/2020
Revision No.: 2	Page 2 of 4
Prepared by: Brian Prinzing	

article 28 locations, the occupant will be responsible for performing the monthly extinguisher inspection for only the extinguishers in that space. EH&S will be responsible for performing the annual inspection for those extinguishers.

Facilities shop personnel will be responsible for performing monthly inspections on extinguishers located in facilities shops, work carts, and in facilities work vehicles while following the university's quick check procedure (Appendix A). EH&S will be responsible for performing the annual inspection for those extinguishers. Facilities and Public Safety employees are responsible for contacting Fire Safety (x 5-3243) when an extinguisher needs to be replaced.

Laboratory personnel will be responsible for performing monthly inspections on extinguishers located in their respective labs following the university's quick check procedure (Appendix A). EH&S will be responsible for performing the annual inspection for those extinguishers. Lab managers are responsible for contacting Fire Safety (x 5-3243) when an extinguisher needs to be replaced

Extinguisher Obstructions- All extinguisher shall have an unobstructed clearance of 18inches around extinguisher and have visible signs indicating location of extinguisher in event of extinguisher not being easy visible. Exceptions will be made by University Fire Marshal's office upon request.

V. PROCEDURES

A. Monthly Maintenance Inspection - Refer to Appendix A:

<http://www.safety.rochester.edu/fire/ExtinguisherQuickChecks.html>

After the inspection is complete, initial and date the tag on the back of the extinguisher.

B. Annual Maintenance Inspection

Annual maintenance will involve a thorough examination of the fire extinguisher shell and its external mechanical parts. The maintenance will include the following:

1. All monthly inspection items
2. Inspection of the hose and nozzle for cracks, blockages, or other damage.
3. Inspection of extinguisher shell for corrosion, dents, or other damage.
4. All 6-year maintenance and hydro's dates are within the approved parameters
5. All extinguishers are weighed to ensure no weight deviation greater than 10%
6. After the inspection is complete, initial and date the tag on the back where it states "annual inspection"

**UNIVERSITY OF ROCHESTER
ENVIRONMENTAL HEALTH & SAFETY**

Policy No.: FS005	Approved by: Mark Cavanaugh
Title: Fire Extinguisher Inspections	Date: 11/19/2020
Revision No.: 2	Page 3 of 4
Prepared by: Brian Prinzing	

C. Conductivity testing:

1. A conductivity test shall be conducted annually on all carbon dioxide hose assemblies.
2. Carbon dioxide hose assemblies that fail the conductivity test shall be replaced.
3. Carbon dioxide hose assemblies that pass a conductivity test shall have the test information recorded on a suitable metallic label or equally durable material that has a minimum size of ½ in. x 3 in. (13 mm x 76 mm).
4. The label shall be affixed to the hose by means of a heatless process.
5. The label shall include the following information.
 - a) Month and year the test was performed, indicated by perforation, such as done by a hand punch.
 - b) Name of initials of person performing the test and the name of the agency performing the test.

D. Extinguisher Service Requirements

1. Extinguishers shall be serviced and/or hydrostatically tested by a reputable company, according to the following table:

TYPE	RECHARGE	HYDRO TEST
Pressure Water	5 years	5 years
CO2	5 years	5 years
Dry Chemical (stainless steel shell)	5 years	5 years
Dry Chemical	6 years	12 years
Halon	6 years	12 years
Wetting Agent	5 Years	5 Years

2. When inspection or maintenance of any extinguisher reveals a deficiency in operating condition, the following corrective actions are to be taken immediately.
 - a) A spare extinguisher of the same type and equal or greater rating shall replace the extinguisher.
 - b) Defective extinguishers are to be marked as such and placed in appropriate place until repair and/or recharging is performed.
3. Maintaining the following records will provide documentation of inspection and maintenance
 - a) The fire extinguisher checklist, which contains the location of each fire extinguisher, its weight, type, and dates of inspections; and annual maintenance.

**UNIVERSITY OF ROCHESTER
ENVIRONMENTAL HEALTH & SAFETY**

Policy No.: FS005	Approved by: Mark Cavanaugh
Title: Fire Extinguisher Inspections	Date: 11/19/2020
Revision No.: 2	Page 4 of 4
Prepared by: Brian Prinzing	

- b) A fire extinguisher inspection record tag is attached to each extinguisher and provides the following information:
 - (1) The date the extinguisher was inspected.
 - (2) The initials of the person performing the inspection.
- c) Also keep electronic records for extinguisher inspections and inventory. These records should contain extinguisher location, type, brand, serial number, hydro date, six-year maintenance if applicable, hydro due date, date of last annual inspection, weight, year of manufacture and date of last monthly inspection. If you change out an extinguisher, be sure to add that extinguisher and all of its information into the proper place in your electronic records.

VI. REFERENCES
NFPA 10

VII. APPENDICES/FORMS
River Campus Portable Fire Extinguisher “Quick Checks” procedure –
<http://www.safety.rochester.edu/fire/ExtinguisherQuickChecks.html>

VIII. REVISION HISTORY

Date	Revision No.	Description
8/10/2009	New	Initial development of this policy
8/21/2013	1	Addition of extinguisher obstructions and clarified facilities responsibilities
8/21/2017	2	Procedure enhancements and clarifications
11/19/2020	2	3 Year review