

CITY AND COUNTY OF DENVER

Fire Prevention / Loss Control Policy		
Occupational Safety and Health Management System No. 65.5.9 This policy was developed and shall be implemented under the authority of Executive Order No. 65 and the Risk Management Office.	January 1, 2008	Prepared / Revised By: Risk Management – Safety Unit

1.0 Introduction

This policy has been developed to promote fire safety and awareness, and is aimed at reducing the risk of fire-related incidents and injuries. With this in mind we will utilize the resources of FM Global, the City's property insurance provider, to protect City assets.

Prevention is the most effective tool against fires. All City employees should be aware of common fire hazards in their respective places of work and residence. Some of the leading fire hazards include smoking materials, open flames, combustible decorations, flammable liquids, furniture and trash.

In order to prevent accidental ignition of these combustible materials, regular maintenance of heat-producing equipment should be performed. Heat producing equipment such as heat exchangers and boilers must be properly maintained and kept clean of flammable residues. In addition, flammables must not be stored in close proximity to heat producing equipment.

In pursuit of effective fire protection and evacuation procedures, fire alarm and detection systems (such as smoke and heat detectors, manually-activated pull stations, sprinkler systems, standpipe systems, fire extinguishers, etc.) are widely used in City and County buildings.

2.0 Scope

The effectiveness of the fire prevention / loss control policy depends upon the active support and involvement of all employees.

City and County employees are required to comply with the procedures outlined in this document. Individual departments / agencies who have an existing Fire Prevention / Loss Control Policy or Program in place may continue to use that program if it provides the same degree of protection.

3.0 Type of Fires

- Type A: Paper, trash, and other loose debris
- Type B: Flammable liquids
- Type C: Fires involving live electrical equipment and circuits
- Type D: Fires involving combustible metals such as magnesium, zirconium, potassium, and sodium

4.0 Fire Extinguishers

Portable fire extinguishers can be very effective for fighting fires in their incipient stages. A person who is well-trained in fire-extinguisher use can save both lives and property. Portable fire extinguishers must be available even when other firefighting measures are available. For extinguishers to be effective in a fire situation, proper selection, inspection and maintenance are essential. Ensure all fire extinguishers are placed in conspicuous locations, clearly visible and easily accessible. Keep all fire extinguishers fully charged and operable, and in their proper locations at all times.

5.0 Responsibilities

5.1. Responsibilities

5.1.1. Management is responsible for the following:

- 1) Reviewing all recommendation provided from FM Global during their inspection process and planning for implementation of the recommendations.
- 2) Ensuring that fire-prevention procedures are established and enforced
- 3) Ensuring that fire suppression systems are inspected regularly and maintained by an trained / authorized person or company
- 4) Ensuring supervisors are trained to use fire extinguisher for incipient fires
- 5) Ensuring employees are trained to use evacuation routes and procedures

5.1.2. Supervision are responsible for the following:

- 1) Monitoring the use of flammable and combustible materials
- 2) Training employees in safe storage, use and handling of flammable and combustible materials
- 3) Ensuring that storage area for flammables and combustibles are maintained properly
- 4) Ensuring proper housekeeping is maintained
- 5) Ensuring that fires suppression systems are inspected regularly and maintained

5.1.3. Employees are responsible for the following:

- 1) Adhering to the department / agency procedures for the safe storage, use and handling of flammable and combustible materials
- 2) Reporting unsafe conditions in violation of the department / agency fire prevention plan
- 3) Following proper housekeeping requirements of the department / agency

6.0 Ignition Sources Requirements

Eliminate all non-essential ignition sources where flammable or combustible materials are used or stored.

For example:

- a) Keep sources of open flame (such as welding and cutting torches, furnaces, matches and heaters) away from operations involving flammables
- b) Do not cut or weld equipment containing flammable liquids unless the equipment has been emptied and purged with a neutral gas such as nitrogen
- c) Prohibit chemical ignition sources (such as DC motors, switches and circuit breakers) in areas where flammable materials are stored or handled
- d) Use only non-sparking tools in areas where flammables are stored or handled
- e) Eliminate the possibility of static sparks—caused by electron transfer between two contacting surfaces—in flammable storage or handling areas

7.0 Required Inspections

Location personnel shall conduct weekly and monthly inspections on all fire protection equipment. Trained / authorized persons shall conduct quarterly, semi-annual and annual inspections. (See Attachments for examples).

8.0 Training

Agency/Department Management shall provide adequate training for designated employees to assist in the safe and orderly emergency evacuation of all employees as well as contractors and visitors.

Training shall include but is not limited to the following:

Class A - Ordinary Combustibles

- Ordinary storage areas
- Warehouses
- Trash

Class C - Electrical Equipment

- Electrical control rooms
- Motors
- Wiring
- Transformers
- Switch gear

Fire Extinguisher Types

- Dry Chemical - BC or ABC
- Carbon Dioxide - CO₂
- Air Pressurized Water (APW)
- Met-L-X Dry Powder (Class D)

Class B - Flammable Liquids

- Gasoline
- Mill sludge
- Coatings/solvents
- Hydraulic oils
- Lubricating oils

Class D - Combustible Metals

- Aluminum
- Magnesium
- Metal alloy parts

Fighting Class D Fires

- Don't disturb burning material
- Use appropriate extinguisher
- Be careful discharging extinguisher as material may disperse
- Allow to burn & call Fire Department

Fire Extinguisher Rules

- Only use for extinguishing fires
 - Don't move mounted extinguishers
 - Never disconnect fire hoses
 - Use the PASS method
- Pull
-Aim
-Squeeze
-Sweep

If you see a fire:

- Always call 911 to report fire
- You may attempt to put out fire with ONE extinguisher
 - If fire is small
 - If you have clear exit
 - If you have attended extinguisher training

If you are unable to extinguish the fire

- Confirm 911 called
- Activate nearest pull station
- Prepare area for emergency responders

Attachment One

FIRE PROTECTION EQUIPMENT INSPECTION

Check Item - Weekly	Description
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	Visual inspection (sealed)
2. Public water	Visual inspection
3. Special extinguishing system	Visual inspection

Check Item - Monthly	Description
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	1. Visual inspection (locked or tampered)
2. Fire Department Connections	1. Visual inspection
3. Sprinkler, Water Spray System	1. Visual inspection
4. Portable Fire Extinguishers	1. Visual inspection
5. Automatic detection systems, manual fire alarm systems	1. Visual inspection 2. Testing of Local and Remote Alarms

Check Item - Quarterly	Description
1. Sprinkler, Water Spray System	1. Water flow testing

Check Item - Semiannually	Description
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	1. Testing of Supervisory Alarms
2. Sprinkler, Water Spray System	1. Testing of Supervisory Alarms
3. Automatic detection systems, manual fire alarm systems	1. Testing of Supervisory Alarms

Check Item - Annually	Description
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	1. Physical Operation of Valves 2. Equipment Maintenance Functions
2. Fire Department Connections	1. Equipment Maintenance Functions
3. Public water	1. Water Flow Testing
4. Special extinguishing system	1. Testing of Supervisory Alarms 2. Testing of Operation Mechanism 3. Equipment Maintenance Functions
5. Sprinkler, Water Spray System	1. Dry Pipe Valve Testing 2. Deluge Valve Testing 3. Drain Test
6. Portable Fire Extinguishers	1. Equipment Maintenance Functions

Reference: [NFPA 30-Flammable Gas](#)

Attachment Two

FIRE PROTECTION EQUIPMENT INSPECTION

DATE COMPLETE: _____ **INSPECTED BY:** _____

Check Item - Monthly	Description	OK	NOT OK
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	Visual inspection (locked or tampered)	<input type="checkbox"/>	<input type="checkbox"/>
2. Fire Department Connections	Visual inspection	<input type="checkbox"/>	<input type="checkbox"/>
3. Sprinkler, Water Spray System	Visual inspection	<input type="checkbox"/>	<input type="checkbox"/>
4. Portable Fire Extinguishers	Visual inspection	<input type="checkbox"/>	<input type="checkbox"/>
5. Automatic detection systems, manual fire alarm systems	Visual inspection	<input type="checkbox"/>	<input type="checkbox"/>

Attachment Three

FIRE PROTECTION EQUIPMENT INSPECTION

DATE COMPLETE: _____ INSPECTED BY: _____

Check Item - QUARTERLY	Description	OK	NOT OK
1. Sprinkler, Water Spray System	Water Flow Testing	<input type="checkbox"/>	<input type="checkbox"/>

FIRE PROTECTION EQUIPMENT INSPECTION

DATE COMPLETE: _____ **INSPECTED BY:** _____

Check Item – Semi-annually	Description	OK	NOT OK
1. Control valves; includes water supply, sprinkler system, sectional valves (sealed)	Testing of Supervisory Arms	<input type="checkbox"/>	<input type="checkbox"/>
2. Sprinkler, water spray system	Testing of Supervisory Arms	<input type="checkbox"/>	<input type="checkbox"/>
3. Automatic detections system, manual fire alarm system	Testing of Supervisory Arms	<input type="checkbox"/>	<input type="checkbox"/>

FIRE PROTECTION EQUIPMENT INSPECTION

DATE COMPLETE: _____ INSPECTED BY: _____

Check Item - Annually	Description	OK	NOT OK
Control valves; includes water supply, sprinkler system, sectional valves (sealed)	1. Physical Operation of Valves	<input type="checkbox"/>	<input type="checkbox"/>
	2. Equipment Maintenance Functions	<input type="checkbox"/>	<input type="checkbox"/>
Fire Department Connections	1. Equipment Maintenance Functions	<input type="checkbox"/>	<input type="checkbox"/>
Public Water	2. Water Flow Testing	<input type="checkbox"/>	<input type="checkbox"/>
Special Extinguishing System	1. Testing of Supervisory Alarms	<input type="checkbox"/>	<input type="checkbox"/>
	2. Testing of Operation Mechanism	<input type="checkbox"/>	<input type="checkbox"/>
Sprinkler, Water Spray System	1. Dry Pipe Valve Testing	<input type="checkbox"/>	<input type="checkbox"/>
	2. Deluge Valve Testing	<input type="checkbox"/>	<input type="checkbox"/>
Portable Fire Extinguishers	1. Up-to-date outside service inspection	<input type="checkbox"/>	<input type="checkbox"/>