

Fire Protection Systems**Inspection, Testing, and Maintenance
Policies and Procedures**

It will be the policy of the Organization and/or Facility that all fire protection systems and equipment shall be inspected, tested and maintained according to all required codes and regulations that have been adopted by State and Local Authorities.

Whenever systems are being inspected, tested and maintained, the proper precautions, safe guards and notifications shall be implemented.

Notifying consumers, staff, Central Stations, Fire Marshals, Fire Departments and Maintenance Personal shall be required.

If any fire protection system becomes inoperative, again, the required notifications shall be made. On-call personal shall be notified so that service contractors can be contacted to make repairs to the effected system(s).

If a fire watch is required, due to a system being down for more than four (4) hours, a watch shall be established according to the prescribed guidelines.

A review of all contractor service reports shall be conducted before signing-off to ascertain compliance with the requirements.

Upon completion of all servicing/repairs being conducted on fire protection system(s), re-notification that all systems are back in service shall be forwarded to all of the required agencies.

Automatic Sprinkler Systems

Inspection, Testing, and Maintenance

Policies and Procedures

1. A *qualified contractor or owner's representative shall inspect the facility's sprinkler system.

***Qualified.** Having adequate knowledge of the installation, construction, or operation of apparatus and the hazards involved.

NFPA 25, Sec. 1-5, 1998

2. The system shall be inspected on a quarterly basis (four [4] times a year), in which the alarm devices (water flow alarm, smoke detector) shall be tested to assure their function. A main drain test shall be conducted on an annual basis as one of the quarterly inspections.
3. A complete walk-thru of the sprinkler system by the contractor & owner rep. shall also be conducted at this time. Any obstructions of sprinkler heads and damaged to the system shall be identified at this time and documented on the report.
4. The required sprinkler report shall be completed and a copy left at the facility. Any issues that are documented on the report shall be reviewed at this time and a revisit shall be scheduled to fix/repair those items.

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- If the facility is equipped with a fire pump, an annual inspection shall be conducted. The required flow chart paperwork shall be completed and left at the facility.
 - Also, depending on the type of pump (electric, diesel, steam), weekly churn tests shall be conducted to assure function when needed.
 - Also, the gauges on the sprinkler system shall be inspected on a monthly basis and re-calibrated every five (5) years.
 - Also, a box with spare sprinkler heads and a wrench shall be mounted on the wall in close proximity to the main sprinkler valve.
 - If the facility has a hood suppression system equipped with a sprinkler head, it shall be changed on an annual basis.
 - Dry pipe systems shall have pitch & obstruction testing every five (5) years.

Fire Alarm System Inspections

Inspection, Testing, and Maintenance

Policies and Procedures

1. A qualified* service contractor or owner's representative shall inspect the facility's fire alarm system.

***Qualified.** Service personnel shall be qualified and experienced in the inspection, testing, and maintenance of fire alarm systems. Examples of qualified personnel shall be permitted to include, but shall not be limited to, individuals who are:

- (a) Factory trained and certified.
- (b) National Institute for Certification in Engineering Technologies fire alarm certified.
- (c) International Municipal Signal Association fire alarm certified.
- (d) Certified by a state or local authority.
- (e) Trained and qualified personnel employed by an organization listed by a national testing laboratory for the servicing of fire alarm systems.

NFPA 72, Sec. 7-1.2.2, 1996

2. The system shall be inspected on a semi-annual basis (two [2] times a year), with all devices (smoke detectors, horn/strobes, pull stations, batteries, duct smoke detectors, electro-magnetic hold-open devices, panel functions, etc.) being tested at the time of the inspection.
 3. Other devices (fixed-temperature, spot-type, heat detectors) two devices on each circuit shall be tested annually. Other type heat detectors shall be tested each year, with records indicating which detectors have been tested. All heat detectors shall be tested within a five (5) year period.
 4. Sensitivity testing shall be conducted one (1) year after initial installation and then every two (2) years after that. Defective smoke detectors (out of sensitivity range) shall be replaced immediately.
 5. If a smoke detector, after its second testing interval, has remained within its range, can then be tested every five (5) years.
 6. Where the frequency is extended, records of detector-caused nuisance alarms and subsequent trends of these alarms shall be maintained. In zones or in areas where nuisance alarms show any increase over the previous year, calibration tests shall be performed.
 7. A complete walk-thru of the fire alarm system by the service contractor & owner rep. shall also be conducted at this time. Any obstructions of horn/strobes and/or damaged devices of the system shall be identified at this time and documented on the report.
 8. The required fire alarm report shall be completed and a copy left at the facility. Any issues that are documented on the report shall be reviewed at this time and a revisit shall be scheduled to fix/repair those items.
- Note: If the facility has an addressable fire alarm panel, it is recommended that an annual print-out of fire alarm panel activity be provided for review by either State and/or Local Authorities at the facility.

Fire Extinguisher Inspections**Inspection, Testing, and Maintenance****Policies and Procedures**

1. A trained person who has undergone the instructions necessary to reliably perform maintenance and has the manufacturer's service manual shall service the fire extinguishers.
2. All fire extinguisher shall be checked when initially placed inservice and then at thirty (30) day intervals.
3. When inspecting the extinguishers, the following items shall be checked:
 - a) Location in designated space;
 - b) No Obstruction to access of visibility;
 - c) Operating instructions on nameplate legible and facing outward;
 - d) Safety seals and tamper indicators not broken and missing;
 - e) Fullness determined by weighing or "hefting";
 - f) Examination for obvious physical damage, corrosion, leakage, or clogged nozzle;
 - g) Pressure gauge reading or indicator in the operable range or position;
 - h) Condition of tires, wheels, carriage, hose, and nozzle checked (for wheeled units)
 - i) HMIS label in place
4. Upon completing the inspection, if provided, the date and initials of the person performing the inspection shall be written on the tag provided by the service contractor, which performs the annual inspection.
5. Also, if there are deficiencies with any of the extinguishers according to the items being checked, immediate corrective action shall be taken.
6. Maintenance of fire extinguishers shall be performed on an annual basis by a Fire Extinguisher Service Agency or Trained Industrial Safety or Maintenance Personnel.

Kitchen Hood Extinguishment Systems & Cleaning Inspections**Inspection, Testing, and Maintenance****Policies and Procedures**

1. An inspection and servicing of the fire-extinguishing system and listed exhaust hoods containing a constant or fire-actuated water system shall be made at least every 6 months by properly trained and qualified persons.
2. All actuation components, including remote manual pull stations, mechanical or electrical devices, detectors, actuators, and fire-actuated dampers, shall be checked for proper operation during the inspection in accordance with the manufacturer's listed procedures.
3. Hoods, grease removal devices, fans, ducts, and other appurtenances shall be cleaned to bare metal at frequent intervals prior to surfaces becoming heavily contaminated with grease or oily sludge. Fusible links (including fusible links on fire-actuated damper assemblies) and automatic sprinkler heads shall be replaced at least annually, or more frequently if necessary, to ensure proper operation of the system.
4. When a vent cleaning service is used, a certificate showing date of inspection or cleaning shall be maintained on the premises. After cleaning is completed, the vent cleaning contractor shall place or display within the kitchen area a label indicating the date cleaned and the name of the servicing company. It shall also indicate areas not cleaned.
5. When cleaning procedures are completed, all electrical switches and system components shall be returned to an operable state. All access panels (doors) and cover plates shall be replaced. Dampers and diffusers shall be positioned for proper airflow.

Fire Watch Guidelines**Policies and Procedures**

1. Where a required automatic sprinkler system or fire alarm system is out of service for more than 4 hr in a 24-hr period, the authority having jurisdiction shall be notified, and the building shall be evacuated or an approved fire watch shall be provided for all parties left unprotected by the shutdown until the sprinkler or fire alarm system has been returned to service.
2. A fire watch should consist of trained personnel who continuously patrol the effected area. Ready access to fire extinguishers and the ability to promptly notify the fire department are important items to consider. During the patrol of the area, the person should not only be looking for fire, but making sure that the other fire protection features of the building such as egress routes and alarm systems are available and functioning properly.
3. A fire watch should at least involve some special action beyond normal staffing, such as assigning an additional security guard(s) to walk the areas affected. These individuals should be specially trained in fire prevention, in the use of fire extinguishers and occupant hose lines, in notifying the fire department, in sounding the building fire alarm, and in understanding the particular fire safety situation for public education purposes. Some authorities having jurisdiction require fire fighters to be assigned to the area, with direct radio communication to the local fire department. Also see NFPA 601, Standard for Security Services in Fire Loss Prevention.

Emergency Lighting and Exit Lights

Inspection, Testing, and Maintenance

Policies and Procedures

Section 5-9.3 “ A functional test shall be conducted on every required battery-powered emergency lighting system at 30 day intervals for a minimum of 30 seconds. An annual test shall be conducted for a 1 ½ hr duration. Equipment shall be fully operational for the duration of the test. Written records of visual inspections and tests shall be kept by the owner for inspection by the authority having jurisdiction.”

YEAR:														
LIGHT # :														
LOCATION DESCRIPTION														
		DATE	BY:											
MONTHLY 30 SECOND TEST :	JAN													
	FEB													
	MAR													
	APR													
	MAY													
	JUN													
	JUL													
	AUG													
	SEP													
	OCT													
	NOV													
	DEC													
ANNUAL 90 MIN TEST														



Oxygen Cylinder / Container Storage

Policies and Procedures

THE FOLLOWING ARE PROVIDED AS SUGGESTIONS ONLY, CONSULT WITH YOU'RE A.H.J. FOR SPECIFIC REQUIREMENTS

A determination shall be made if the facility is going to have compressed gas in cylinders or liquefied gas in containers.

Compressed Gas Cylinders

1. The storage of oxygen less than 3000 ft³ shall be in a one (1) hour rated room with natural ventilation direct to the outside.
2. The storage of oxygen more than 3000 ft³ shall be in a one (1) hour rated room with dedicated mechanical ventilation direct to the outside.
3. Compressed gas cylinders: E-Tank = 22 ft³, H-Tank = 222 ft³.
4. Compressed gas cylinders with values are constituted as ready use and can be stored at an accessible location to be used in an emergency situation.
5. Compressed gas cylinders without values are constituted as storage and shall be stored in a one hour rated room with natural ventilation.

Any storage of cylinders or containers shall be without any combustibles with in the room or louvers in the doors.

Liquefied Gas in Containers

The storage of oxygen shall be the same as number 2 above.

Liquefied gas containers: small container = 742 ft³, large container = 1120 ft³.

Transferring of liquid oxygen from one container to another shall be accomplished at a location specifically designated for the transferring that is as follows:

- a) Separated from any portion of a facility wherein patients are housed, examined, or treated by a separation of a fire barrier of 1-hour fire-resistive construction; and
- b) The area is mechanically ventilated, is sprinkled, and has ceramic or concrete flooring; and
- c) The area is posted with signs indicating that transferring is occurring, and that smoking in the immediate area is not permitted.
- d) Transferring shall be accomplished utilizing equipment designed to comply with the performance requirements and producers of CGA Pamphlet P-2.6, Transfilling of Low-Pressure Liquid Oxygen to be Used for Respiration, and adhering to those procedures.
- e) The use and operation of small portable liquid oxygen systems shall comply with the requirements of CGA Pamphlet P-2.7, Guide for the Safe Storage, Handling and Use of Portable Liquid Oxygen Systems in Health Care Facilities.