



# Training Circular

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Risk Management Issues

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## October Fire Safety



### PREVENTION IS KEY!

Regular and periodic inspections can identify fire hazards and unsafe practices that may pose a threat to the safety of individuals within a specific area. The best form of fire protection is prevention. Eliminating the probability of a fire reduces the chance of loss.

Fire safety and prevention awareness is one of the most crucial components to a fire safety program. Knowing how to identify fire hazards before they result in a fire can save lives and serious property damage or loss. There is little time to respond. In **less than 30 seconds** a small flame can get completely out of control and turn into a major fire. It only takes a minute for thick black smoke to fill a house or office area. In no time an area can be engulfed in flames.

### EVACUATION PROCEDURES AND PLANNING

Be familiar with fire evacuation procedures. Know the primary and secondary evacuation routes in your work area. **Know the unit/department process for obtaining emergency keys if applicable.** Make sure you know where the fire suppression equipment is located, and understand their use in the event it is needed to assist with the evacuation process.

Training should be conducted at least annually in the prevention of fires, fire preparedness procedures, facility fire plans, fire evacuations, fire drill procedures, and fire suppression. Fire drills

shall be practiced in all housing areas at least once per quarter, per shift. (Rm-22) All other areas are required to have a drill ran at least quarterly. The purpose of fire drills in offender living areas is to ensure that assigned staff understand their duties and responsibilities, that the emergency key system is functional, locks and doors are operational, and any concerns or deficiencies are addressed. All other areas, including administrative departments and leased offices, should run drills at least quarterly.

### FIRE EXTINGUISHERS

To understand how fire extinguishers work, you need to understand a little about fire. Fire is a very rapid chemical reaction between oxygen and a combustible material, which results in the release of heat, light, flames, and smoke.

For fire to exist, the following four elements must be present at the same time:

- Enough oxygen to sustain combustion.
- Enough heat to raise the material to its ignition temperature.
- Some sort of fuel or combustible material.
- The chemical reaction that is fire.

All portable fire extinguishers must be approved by a nationally recognized testing laboratory to verify compliance with applicable standards. Equipment that passes the laboratory's tests are

labeled and given an alpha-numeric classification based on the type and size of fire it will extinguish.

### FIRE TYPES

Fires are chemical reactions that occur when fuel, oxygen, and an ignition source combine.

### BE FIRE SMART!

When dealing with fires, it is extremely important to know the different types of fires and the appropriate type of extinguisher required for each fire type.

**Class A:** Involves the burning of paper, cloth, wood or plastics, etc. (solids that are not metal)



**Class B:** Flammable liquids, such as gasoline, oils, or other flammable gases.



**Class C:** Electrical current or electrical devices.



**Class K:** Kitchen (i.e. cooking oils) – to be used only after suppression system discharges. Postings for this type of extinguisher are required in areas where they may be used.



### STANDPIPE HOSE

Wheeled Unit Hoses. Discharge hoses on wheeled extinguishers shall be coiled in a manner to prevent kink and to allow rapid deployment in accordance with the manufacturer's instructions. Hard rubber hose that sprays a fog or straight stream pattern of water. Only to be used on Class A fires. (NFPA-13.6.9.3.1.5)



### Proper Fire Extinguisher Usage

#### **(P.A.S.S)**

**Pull pin** – this allows you to activate the extinguisher.

**Aim** – hold hose and point at base of fire.

**Squeeze** – the trigger mechanism to release the agent.

**Sweep** – back and forth at the base of the fire.



### FIRE EXTINGUISHER

#### INSPECTION

- Fire extinguishers shall be inspected either manually or by means of an electronic monitoring device/system at a minimum of 30-day intervals. (NFPA-13.6.9.2.1.2)
- Personnel making manual inspections shall keep records of all fire extinguishers inspected, including those found to require corrective action. (NFPA-13.6.9.2.4.1)
- Where manual inspections are conducted, records for manual inspections shall be kept on a tag or label attached to the fire extinguisher, on an inspection checklist maintained on file, or by an electronic method. (NFPA-13.6.9.2.4.4)
- Records shall be kept to demonstrate that at least the last 12 monthly inspections have been performed. (NFPA-13.6.9.2.4.5)
- Six-year Internal Examination. Every 6 years, stored-pressure fire extinguishers that require a 12-year hydrostatic test shall be emptied and subject to the applicable internal examination procedures as detailed in the manufacturer's service manual and NFPA 10. (NFPA-13.6.9.1.2.1)
- Six-Year Service Label. Fire extinguishers that pass the applicable 6-year requirement of 13.6.9.3.1.2.1 shall have the maintenance information recorded on a weather-proof, durable label that is a minimum size of 2 in x 3 1/2. (NFPA-13.6.9.3.3.1)
- The label shall include the following information. (13.6.9.3.3.1.3)  
Month and year the maintenance was performed, indicated by a perforation such as hand punch.

Name or initials of the person performing the maintenance, and name of the agency performing the maintenance.

- Is each extinguisher in its designated place, clearly visible, and not blocked by equipment, coats, or other objects that could interfere with access during an emergency?
- Is the nameplate with operating instructions legible and facing outward?
- Is the pressure gauge showing that the extinguisher is fully charged (the needle is in the green zone)?
- Is the pin and tamper seal intact?
- Is the extinguisher in good condition and showing no signs of physical damage, corrosion, or leakage?
- Have all dry powder extinguishers been gently rocked top to bottom to make sure the powder is not packing?

### EVACUATION PROCEDURES

Each shift/department should have a means for accounting for all persons in their respective areas.

Have someone designated to notify local emergency response.

Never assume an activated alarm or fire evacuation is a drill.

#### Don't be a hero.



**HOT WORK**

Any time welding, grinding, or other types of work that produce a flame or spark is performed outside an approved hot work area, a Hot Work Permit is required.

Ensure there is an appropriate fire extinguisher available for the work being performed.

After any hot work is completed, a fire watch must be implemented for a time of no less than 30 minutes to ensure a fire does not start due to the hot work.

**INSPECT YOUR SURROUNDINGS**

When properly utilized, inspections are an effective method of eliminating hazards and an educational opportunity for employees and offenders. (RM- 13)

- Regular and periodic inspections can identify fire hazards and unsafe practices that may pose a threat to the safety of individuals within a specific area.
- Housekeeping is one of the easiest forms of fire prevention.
- Flammable liquids that are unsafe should only be stored in approved containers.
- Chemicals with a flash point less than 100 degrees must be stored in an approved flammable storage cabinet.
- Never store combustibles inside or on top of flammable storage cabinets.
- No open flames should be produced near flammable materials. The use of candles is prohibited.
- Electrical circuits should not be overloaded. Use only appropriate 3-wire extension cords and plug them directly into an outlet. Never "piggy-back" or "daisy chain" extension cords and power strips.

- If electrical equipment or cords feel hot, unplug them and discontinue their use until cleared by an electrician.
- Appliances should be in the OFF position when unattended.
- Report hazards in the workplace to a supervisor.
- Store excess materials and equipment out of the range of fire exits to prevent blocking or tripping.
- Do not store materials in such a manner that would block sprinkler heads, fire suppression equipment, or emergency lights.

**Frequent Findings****State Office of Risk Management Frequent Findings:**

- Electrical
- Ansul Systems
- Noise Surveys
- Slips, Trips, and Falls
- Marking of Cooking Equipment
- Eyewash/Emergency Showers
- Confined Spaces

**State Fire Marshal's Office Frequent Findings:**

- Electrical
- Storage
- Standpipe Systems
- Exit Signs
- Emergency Lights

Any Questions: Contact Kaury McConahay for additional information.

**References:**

- Risk Management Fire Plans and Emergency Drills (TDCJ RM-22)
- Risk Management Inspections, Audits, and Reviews ( TDCJ Rm-13)
- Extreme Temperature Conditions in the TDCJ (TDCJ AD-10.64)
- Risk Management Hot Work Permit (TDCJ RM-49)

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