Fire Prevention and Fire Emergency Planning

1. **Identification of Workplace Hazard**

A Fire Prevention Plan is required to address fire hazards by recognizing materials that can cause or contribute to a fire and how to properly handle and store such materials. In most cases, flammable and combustible liquids and solid materials are included but other sources of fire hazard must be considered. In addition, this plan includes procedures and equipment for fire control and provides for employee training. All employees must be trained on the Fire Prevention Plan as part of their injury and illness prevention training or as a special fire prevention program. The following provides fire prevention information for the typical office or commercial workplace.

2. **Management and Trainer Information**

**Written Program**

A written program is required by Cal/OSHA that addresses all of the elements of the Standard. Completion of the form Fire Prevention Plan using the following information as a reference will meet this requirement.

**Typical Workplace Fire Hazards**

(1) The most important potential fire hazards include combustible materials. These materials include flammable and combustible liquids and combustible solids including paper, packaging materials and other materials which will burn once ignited.

(2) Any electrical appliance, including office equipment and portable heaters, and their power cords also may pose a fire hazard if any of the following occurs: equipment improperly operated or maintained, electrical cords exposed to damage or in poor condition, receptacles over-loaded, or circuit breakers or fuses bypassed or mis-sized.

(3) Other common fire hazards include gas appliances, welding and cutting operations and other maintenance or light manufacturing materials and equipment introduced into the workplace by contractors or service personnel.

These fire hazards must be identified and fire prevention measures as described below, implemented.

**Fire Prevention**

(1) Fire hazards are minimized by limiting the volume of flammable and combustible material in used and storage and making sure that sprinklers are not blocked by such storage.

(2) Flammable liquids should be used in small volume containers. Refilling should be done in a location and manner which precludes exposure to ignition sources and spills. Grounding of metal containers is necessary to avert static ignition.

(3) Fire hazards are posed by electrical appliances including office equipment, portable heaters, electrical equipment and instruments. These devices should be in good condition, properly maintained, and grounded according to the device’s design. Power cords should be free of defects and protected from damage. Minimize use of extension cords and avoid overloading receptacles. Individual device fuses and power supply circuit breakers should be properly sized and never circumvented.
Inspections & Maintenance

(1) Periodic inspections of electrical equipment, including safety inspections, should include looking for the types of electrical problems that cause fires. Any defects detected should be immediately repaired or the appliance taken out of service.

(2) Electrical equipment should receive regular maintenance as recommended by the manufacturer.

(3) Periodic safety inspections should cover flammable and combustible material use, transfer and storage, and electrical appliance installation and use.

Fire Control

(1) Many offices and commercial establishments are equipped with automatic fire suppression systems, commonly sprinklers. These systems should be professionally maintained on the recommended frequency, usually annually. Employees should not place any object in a position which would obstruct operation of the sprinkler heads or their ability to detect fire.

(2) Portable fire extinguishers should be available. ABC rated 5-pound extinguishers in appropriate locations near areas where flammable and combustible materials are present are appropriate for office and commercial establishments. Some situations may require more protection. Employees should not obstruct these devices with any object that would interfere with access to or visibility of the extinguishers. These devices must be visually inspected monthly and professionally serviced after use or periodically, usually on an annual basis.

(3) Employees should not attempt to use an extinguisher unless they have received at least basic training on how to use it. Employees also should be aware of the limitations of portable fire extinguishers. They should be used solely for small non-structural fires such as waste paper in a trash basket or a shorted-out appliance. Employees should never attempt to control a fire that has spread to furnishings or structures.

Alarm Systems

(1) Many offices and commercial establishments are equipped with either automatic or manual fire alarm systems. Employees should be aware of how these alarms sound and what the response should be; usually evacuation according to the Emergency Action Plan.

(2) Employees should know when it is appropriate to sound manual fire alarms and how this is done. Alarms should be triggered whenever it is apparent that the fire is not a small, non-structural fire controllable with a portable fire extinguisher.

3. Employee Safe Work Practices and Personal Protective Equipment

Fire Prevention Safe Work Practices

Employees must comply with the following safe work practices to minimize fire hazards and to assure a safe response in the event of a fire.

(1) Handle flammable and combustible liquids very carefully. They should be used in small labeled safety-can containers (except for very small volume personal use containers) and away from any source of ignition. Refilling should be performed in a manner that minimizes spills and away from sources of ignition.
(2) Avoid storing any materials where they may block fire extinguishers or sprinklers. Combustibles should never be stored near a source of ignition, such as an electrical appliance.

(3) Refrain from performing repairs or operating defective electrical equipment. Contact professional service personnel.

(4) Minimize use of extension cords.

(5) Avoid overloading electrical receptacles.

(6) Determine the problem if a fuse or circuit breaker trips. Do not merely reset or replace the device. Do not attempt to circumvent these safety devices.

(7) Know how to use portable fire extinguishers and their limitations if you are in a position to observe a small fire. Do not exceed these limitations, like trying to fight a large fire or using an extinguisher you have not been trained to use.

(8) Refrain from blocking fire extinguishers or fire alarms with stored materials or clothing.

(9) Know where fire alarms are located and when and how to activate them.

(10) Know what the fire alarm sounds like and what to do when this sound is heard (see Emergency Action Plan).