



City Manager_____

THE CITY OF POMONA

SAFETY POLICIES AND PROCEDURES

FIRE PROTECTION POLICY

I. PURPOSE

This Policy describes the general requirements of the City of Pomona's Fire Protection program.

II. APPLICABILITY

This Policy applies to all City employees and operations.

III. POLICY

It is the policy of the City of Pomona that all aspects of Cal/OSHA's requirements for a Fire Prevention Plan, *California General Industry Safety Orders, Title 8, Subchapter 7, Group 1, Article 2, Section 3221*, shall be met or exceeded.

IV. DEFINITION OF TERMS

"Fires – Class A" – fires in ordinary combustible materials, such as wood, cloth, paper, rubber, and many plastics.

"Fires – Class B" – fires in flammable or combustible liquids, gases, greases, and similar materials and some rubber and plastic materials.

"Fires – Class C" – fires involving energized electrical equipment where the electrical non-conductivity of the extinguishing media is of importance.

"Fires – Class D" – fires involving combustible metals, such as magnesium, titanium, zirconium, sodium, and potassium.

"Flammable Liquid Class IA" – a liquid having a flash point below 73⁰ F and having a boiling point below 100⁰ F.

"Flammable Liquid Class IB" – a liquid having a flash point below 73⁰ F and having a boiling point at or above 100⁰ F.

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“Flammable Liquid Class IC” – a liquid having a flash point at or above 73⁰ F and below 100⁰ F.

“Flammable Liquid Class II” – a liquid having a flash point at or above 100⁰ F and below 140⁰ F.

“Flammable Liquid Class III” – a liquid having a flash point at or above 140⁰ F and below 200⁰ F.

“Flash Point” – the minimum temperature at which a liquid gives off vapor in sufficient concentration to form an ignitable mixture with air.

“Ignition Temperature” – The minimum temperature to which a flammable vapor or gas mixture in air must be heated in order to initiate or cause self sustained combustion.

“Safety Can” – A listed container of not more than five (5) gallons capacity, having a spring closing lid, spout cover, and a flame arrester and so designed that it will relieve internal pressure when subjected to fire exposure.

V. RESPONSIBILITY

A. Department Directors shall:

1. Ensure that the Fire Protection Policy is implemented. The department director has the authority to delegate any or all portions of this Policy to subordinates, but the department director will be held responsible for compliance.

B. Division Managers shall:

1. Implement the Fire Protection Policy.
2. Annually budget for items related to fire protection.

C. Employees shall:

1. Adhere to all aspects of this Policy and immediately report all incidents of fire to their supervisor.

D. Safety Officer shall:

1. Update and maintain the Fire Protection Policy on an annual basis.
2. Advise all levels of management on fire protection issues, compliance, and training.
3. Review and approve all Hot Work Permits.

VI. PROCEDURE

A. Storage

Flammable and combustible liquids require careful handling at all time. The proper storage of flammable liquids within a work area is very important in order to protect personnel from

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fire and other safety and health hazards.

1. Cabinets:

Not more than 120 gallons of Class I, Class II, and Class IIIA liquids may be stored in a flammable storage cabinet. Flammable storage cabinets shall be vented to the outside and be grounded and bonded to prevent ignition of accumulated vapors when Class I liquids are stored within. Of this total, not more than 60 gallons may be Class I and II liquids.

2. Containers:

The capacity of flammable and combustible liquid containers will be in accordance with Table 1.

Table 1

Container	Flammable Liquids		Combustible Liquids		
	IA	IB	IC	II	III
Glass or approved plastic	1 pt	1 qt	1 gal	1 gal	1 gal
Metal (other than DOT drums)	1 gal	5 gal	5 gal	5 gal	5 gal
Safety Cans	2 gal	5 gal	5 gal	5 gal	5 gal
Metal Drums	60 gal	60 gal	60 gal	60 gal	60 gal
Approved portable tanks	660 gal	660 gal	660 gal	660 gal	660 gal

3. Storage Inside Buildings:

- a. Containers of flammable or combustible liquids will remain tightly sealed except when transferred, poured or applied. Remove only that portion of liquid in the storage container required to accomplish a particular job.
- b. Flammable paints, oils, and varnishes in one (1) or five (5) gallon containers, used for building maintenance purposes, may be stored temporarily in closed containers outside approved storage cabinets if kept at the job site for less than 10 calendar days.
- c. Materials that can contribute to a flammable liquid fire shall not be stored with flammable liquids. Examples are oxidizers and organic peroxides, which, on decomposition, can generate large amounts of oxygen. This information can be obtained by reviewing the material safety data sheet (MSDS) for the respective materials.

B. Elimination of Ignition Sources

All non-essential ignition sources must be eliminated where flammable liquids are used or stored. **Smoking is strictly prohibited in areas that contain flammable materials.** The following is a list of some of the more common potential ignition sources:

1. Open flames, such as cutting and welding torches, furnaces, matches, and heaters – these sources shall be kept away from flammable liquids operations. Cutting or welding on flammable liquids equipment should not be performed unless the equipment has been
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properly emptied and purged with a neutral gas such as nitrogen.

2. Chemical sources of ignition such as d.c. motors, switches, and circuit breakers – these sources shall be eliminated wherever flammable liquids are handled or stored. Only approved explosion-proof devices shall be used in these areas.
3. Mechanical sparks – these sparks can be generated as a result of friction. Only non-sparking tools shall be used in areas where flammable liquids are stored or handled.
4. Static sparks – these sparks can be generated as a result of electron transfer between two contacting surfaces. The electrons can discharge in a small volume, raising the temperature to above the ignition temperature. Every effort shall be made to eliminate the possibility of static sparks. Also proper bonding and grounding procedures must be followed when flammable liquids are transferred or transported. When attaching bonding and grounding clamps or clips, a secure and positive metal to metal contact shall be made. Such attachments shall be made before closures are opened and substance movements are started and shall not be broken until after substance movements are stopped and closures are made.

C. Fire Extinguishers

A portable fire extinguisher is very effective when used while a fire is small. The use of a fire extinguisher that matches the class of fire, by a person who is well trained, can save both lives and property. Portable fire extinguishers must be installed in workplaces regardless of other fire-fighting measures. The successful performance of a fire extinguisher in a fire situation largely depends upon its proper selection, inspection, maintenance, and distribution.

1. Classification of Fires and Selection of Extinguishers:
Fires are classified into four general categories depending on the type of material or fuel involved. The type of fire determines the type of extinguisher that should be used to extinguish it.
 - a. Class A fires involve materials such as wood, paper, and cloth which produce glowing embers or char.
 - b. Class B fires involve flammable gases, liquids, and greases, including gasoline and most hydrocarbon liquids which must be vaporized for combustion to occur.
 - c. Class C fires involve fires in live electrical equipment or in materials near electrically powered equipment including computer equipment.
 - d. Class D fires involve combustible metals, such as magnesium, zirconium, potassium, and sodium.

Extinguishers will be selected according to the potential fire hazard, the construction and occupancy of facilities, hazard to be protected, and other factors pertinent to the situation.

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2. Location and Marking of Extinguishers:

Extinguishers shall be conspicuously located and readily accessible for immediate use in the event of fire. They will be located along normal paths of travel and egress. Wall recesses and/or flush-mounted cabinets will be used as extinguisher locations whenever possible.

Extinguishers shall be clearly visible. In locations where visual obstruction cannot be completely avoided, directional arrows will be provided to indicate the location of extinguishers and the arrows will be marked with the extinguisher classification.

3. Condition:

Portable extinguishers shall be maintained in a fully charged and operable condition. They will be kept in their designated locations at all times when not being used. When extinguishers are removed for maintenance or testing, a fully charged and operable replacement unit shall be provided.

4. Mounting and Distribution of Extinguishers:

Extinguishers shall be installed on hangers, brackets, in cabinets, or on shelves. Extinguishers having a gross weight not exceeding 40 pounds shall be installed so that the top of the extinguisher is not more than 3-1/2 feet above the floor.

Extinguishers mounted in cabinets or wall recesses or set on shelves shall be placed so that the extinguisher operating instructions face outward. The location of such extinguishers shall be made conspicuous by marking the cabinet or wall recess in a contrasting color which will distinguish it from the normal décor.

Extinguishers shall be distributed in such a way that the amount of time needed to travel to their location and back to the fire does not allow the fire to get out of control. Cal/OSHA requires that the travel distance for Class A extinguishers not exceed 75 feet. The maximum travel distance for Class B extinguishers is 50 feet. There is no maximum travel distance specified for Class C extinguishers, but they must be distributed on the basis of appropriate patterns for Class A and B hazards.

All City field vehicles shall have a type ABC fire extinguisher stored within the vehicle.

5. Inspection and Maintenance:

Once an extinguisher is selected, purchased, and installed, it is the responsibility of the Public Works Facilities Division to oversee the inspection, maintenance, and testing of fire extinguishers to ensure that they are in proper working condition and have not been tampered with or physically damaged. Any employee who uses a fire extinguisher shall not put the extinguisher back in place after its use. The employee shall contact their supervisor,

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the Facilities Division, or the Safety Officer to ensure the extinguisher is recharged before it is placed back in its location.

6. Training:

Only City employees who have been trained in the proper use of a fire extinguisher shall use an extinguisher to put out a fire if it is safe to do so. Employees who have not been trained in fire extinguisher use shall immediately evacuate the area or building where the fire has occurred. The City shall offer fire extinguisher training on an annual basis to those individuals that are selected to use a fire extinguisher.

D. Emergency Egress

Every exit will be clearly visible, or the route to it conspicuously identified in such a manner that every occupant of the building will readily know the direction of escape from any point. At no time will exits be blocked.

Any doorway or passageway which is not an exit or access to an exit but which could be mistaken for an exit shall be identified by a sign reading "Not an Exit" or a sign indicating its actual use (e.g., "Storeroom"). Exits and accesses to exits shall be marked by a readily visible sign. Each exit sign (other than internally illuminated signs) will be illuminated by a reliable light source providing not less than 5 foot-candles on the illuminated surface.

1. Evacuation of Persons with Disabilities:

The first line supervisor is assigned the responsibility to assist persons with disabilities under their supervision during an emergency. The supervisor may choose an alternate person. The role of the two assistants is to report to their assigned person, and to either assist in evacuation or assure that the person with the disability is removed from danger.

Visitors who have disabilities shall be assisted in a manner similar to that of City of Pomona employees. The host of the person with a disability will assist in their evacuation.

2. Employee Emergency Action Plan & Evacuation Procedures:

The City of Pomona has developed an Employee Emergency Action Plan and Evacuation Procedures. Every City facility shall have facility specific evacuation routes, maps, and a point of contact for reporting emergencies. The City's Emergency Preparedness Coordinator will assist each facility in completing this plan and establishing a site Emergency Response Team.

Each Facility shall assign a Point of Contact and an Alternate Point of Contact and two people from each division to serve on an Emergency Response Team. The Emergency Response Team members will be responsible for verifying personnel have evacuated from their assigned areas, perform first aid/CPR as necessary, and assist in performing triage during a disaster. Each

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Each member shall receive training through the Risk Management Division or Police Department. Emergency Response Team members must serve a minimum of two-years on the team. Assignments will be on a voluntary basis. Departments with large amounts of staff should assign multiple members based on the department's size.

3. Evacuations:

In the event the fire alarm should sound or an evacuation is announced, all employees and visitors shall immediately evacuate the building, even if the alarm is a false alarm. Employees who do not evacuate the building when an alarm sounds may be disciplined for remaining within the building. Employees should learn at least two escape routes and emergency exits from their area. Employees shall not use the elevator during a fire or as part of an escape route. Employees shall close all doors as they evacuate the building.

Once employees have evacuated they shall meet in the department's designated assembly area. The respective department managers and supervisors, in conjunction with the Emergency Preparedness Coordinator, shall determine this designated meeting area. Employees shall report to their supervisor so a head count may be conducted. Employees shall remain outside the building until competent authority (Police, Fire, Safety Officer, or your supervisor) states that it is safe to re-enter.

4. Training:

All employees shall receive initial and annual training on the Employee Emergency Action Plan and Evacuation Procedures. In addition, all employees will participate in an annual evacuation drill in order to test the effectiveness of existing evacuation procedures.

E. Hot Work

Hot work, as referred to in this Policy, is defined as any work involving cutting, brazing, welding, or soldering. Division Managers who perform or oversee hot work in their operational area shall approve areas for hot work and establish procedures for approving hot work in other areas. The Safety Officer shall be responsible for approving hot work in areas not specifically designed or approved for such processes. All Hot work shall be approved by completed the Hot Work Permit. Employees who perform hot work and their supervisors shall be suitably trained in the safe operation of their equipment and the safe use of the hot work process.

In areas that are not designated for hot work, the following procedures shall be adhered to ensure that a fire does not develop:

1. The area shall be inspected by the designated person prior to the hot work beginning. Cutting and welding shall only be allowed in areas that have been made firesafe.
2. All combustible material shall be removed from the area of hot work

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3. Fire protection and extinguishing equipment shall be located at the site.
4. Where objects to be cut or welded are not movable and where fire hazards cannot be removed, then guards shall be used to confine the heat, sparks, and slag, and to protect the immovable fire hazards and nearby personnel.
5. A “fire-watch” shall be imposed whenever welding or cutting is performed in locations where other than a minor fire might develop for at least 30 minutes after the hot work has been completed. A “fire-watch” shall also be imposed when building materials are within 35 feet of the hot work, combustibles can be easily ignited, wall or floor openings are within a 35 foot radius of the hot work, and where materials can be ignited by conduction or radiation through a metal wall.
6. “Fire-watchers” must be trained in the use of a fire extinguisher and shall be familiar with facilities for sounding an alarm in the event of a fire.

F. Fuel Cylinders:

Oil and grease shall not be permitted to come in contact with oxygen cylinders, valves, regulators or other fittings. Oxygen cylinders shall not be handled with oily hands or gloves, or greasy materials. Oxygen shall not be used from a cylinder or cylinder manifold unless a pressure-reducing device intended for use with oxygen, and so marked, is provided. Backflow protection shall be provided by an approved device that will prevent oxygen from flowing into the fuel-gas system or from fuel flowing into the oxygen system.

Torches shall be inspected each working shift for leaking shutoff valves, hose couplings, and tip connections. Defective torches shall be removed from service. Clogged torch tip openings shall be cleaned with suitable cleaning wires, drills, or other devices designed for such purpose.

Fire resistant shields shall be provided as a barrier between cylinders and the hot work when the cylinders cannot be kept far enough away from sparks, hot slag, or flame.

G. Battery Charging

Battery charging installations shall be located in areas designated for that purpose. The area shall be adequately ventilated to prevent concentrations of flammable gases exceeding 20 percent of the lower explosive limit. Smoking shall be prohibited in the charging area.

VII. ACTION

This Policy is effective 10/27/06.

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