




City of Pittsburgh

Fire Prevention Plan

Safety Policy
Issued by: 
Issued on: 11/28/05

PURPOSE

The purpose of this Fire Prevention Plan is to prevent fires involving flammable or combustible materials handled onsite. This plan is also documented to comply with Title 8 CCR §3221, "Fire Prevention Plan." This Plan applies to all City activities that involve the handling or storage of flammable or combustible materials, or that involve potential ignition sources.

The Fire Prevention Plan addresses:

- Identification of potential fire hazards (flammable or combustible materials) and procedures for proper storage and handling.
- Identification of potential ignition sources and procedures for controlling them.
- Identification of fire protection systems or equipment for controlling fires.
- Identification of the individuals responsible for maintaining fire control and prevention equipment or systems.
- Housekeeping to control the accumulation of flammable and combustible materials.
- Identification of the individuals responsible for controlling the accumulation of flammable or combustible waste materials.
- Equipment and systems maintenance to prevent accidental ignition of combustible materials.
- Employee training.

POLICY

Fire is the most common of all the hazards. Every year fires cause thousands of deaths and injuries and billions of dollars in property damage. It is the City's intent to implement this Plan in order to minimize the risk of fire occurring. In the event of a fire employees are to follow the evacuation procedures outlined in their facilities Emergency Action Procedures flipchart.

DEFINITIONS

Class I liquids: Flammable liquids, which have a flash point below 100°F and a vapor pressure not exceeding 40 psia at 100°F.

Designated smoking areas: Outside areas that are a minimum of 20 feet from any building or structure.

Flammable or combustible materials: Solid, liquid, or gaseous substances that can be readily ignited, and which once ignited sustain combustion. Examples include methane, gasoline, some solvents, and paper and wood products.

Potential ignition sources: Activities or pieces of equipment that could supply the energy necessary to ignite flammable or combustible materials. Examples of potential ignition sources include welding, grinding, smoking, static and electric motors.

IDENTIFICATION OF POTENTIAL FIRE HAZARDS, AND PROCEDURES FOR PROPER STORAGE AND HANDLING

Materials handled by the City that pose potential fire hazards include paper and wood products, and all hazardous materials for which potential for fire is listed on the Material Safety Data Sheet (MSDS) as a physical hazard. In addition to being identified as fire hazards on the MSDS's, flammable liquids shall also be identified by container and storage area labels. All storage cabinets and rooms shall be clearly labeled *FLAMMABLE - KEEP FIRE AWAY*, and all flammable liquid containers shall be marked with a warning legend.

Flammable liquids shall not be used to wash floors, walls, ceilings, structural members, furniture equipment, machines or machine parts, unless adequate ventilation is provided and maintained.

Spraying of flammable liquids for cleaning purposes shall not be allowed, except when performed in a booth equipped with adequate ventilation or outdoors (or in an open shed) with no source of ignition within 25 feet.

Flammable liquids shall be kept in covered containers when not actually in use. Such liquids shall not be transported from storage areas to areas of use in open containers. Containers used to transport flammable liquids or as dispensing devices shall be covered containers or original closed containers. Closures of such containers shall be kept in place at all times except when liquid is being drawn from the container.

IDENTIFICATION OF POTENTIAL IGNITION SOURCES AND PROCEDURES FOR CONTROLLING THEM

Potential ignition sources include electrical equipment (e.g., motors, wiring), smoking, hot work (e.g., electric or gas welding, cutting, brazing, grinding), friction (e.g., improperly lubricated bearings), and static electricity.

In order to control electrical equipment as a potential ignition source, the City shall inspect and maintain electrical equipment in such a way that excessive sparking, heating, or arcing is prevented. Only qualified individuals shall work on electrical equipment. Electrical equipment and wiring shall be protected from mechanical damage and environmental deterioration. The City shall ensure that hazardous locations are classified for electrical installations and that all electrical equipment in such locations is suitable for the classification, per the National Electrical Code.

In order to control smoking as a potential ignition source, smoking shall be allowed in designated smoking areas only. The City shall designate such areas with consideration of proximity to areas where flammable or combustible materials are stored or handled. The City shall not allow smoking in any location where flammable vapors in concentrations greater than 25% of the lower explosive limit may reasonably be expected.

Hot work shall be controlled by the City's Public Works Department Hot Work Permit procedure. The City's Hot Work Permit procedure covers management authorization of

areas where hot work may be conducted and precautions that must be taken to prevent ignition of flammable or combustible materials.

Frictional heat shall be controlled as a potential ignition source by performing appropriate inspections and maintenance on rotating equipment and all equipment where friction could potentially generate enough heat to ignite flammable or combustible materials.

In order to control static electricity as a potential ignition source, Class I liquids shall not be dispensed into metal containers unless the nozzle or fill pipe is in electrical contact with the container.

IDENTIFICATION OF FIRE PROTECTION SYSTEMS AND EQUIPMENT FOR CONTROLLING FIRES

The systems and equipment provided by the City for controlling fires include portable fire extinguishers, fire hydrants, fixed sprinkler systems, smoke detectors, and fusible links (heat detection and sprinkler system activation).

HOUSEKEEPING TO CONTROL THE ACCUMULATION OF FLAMMABLE AND COMBUSTIBLE MATERIALS

City maintenance and operations shall be conducted in such a manner that the leakage or release of flammable or combustible liquids is controlled or prevented. Any spills that do occur shall be cleaned up promptly. Combustible waste materials or residues in work areas shall be kept to a minimum. Such materials shall be stored in metal waste receptacles that are to be set away from other combustible sources and vehicles, and shall be disposed of daily.

Aisles and other passageways through work areas shall be maintained free of clutter and obstructions. The purpose is to permit unobstructed personnel egress in the event of a fire, and to permit unobstructed access for fire protection personnel and equipment.

EQUIPMENT AND SYSTEMS MAINTENANCE TO PREVENT ACCIDENTAL IGNITION OF COMBUSTIBLE MATERIALS

Electrical and mechanical equipment and systems shall be maintained in order to prevent ignition of flammable or combustible materials. Maintenance shall be conducted by qualified personnel. The maintenance procedures and intervals shall be based upon: 1) applicable codes, standards, and regulations; 2) manufacturers' recommendations; and 3) City-specific equipment history.

RESPONSIBILITIES

The Public Works Superintendent (Buildings) is responsible for ensuring that the fire control and prevention equipment and systems are properly inspected and maintained in City operated facilities. The Public Works Superintendent is also responsible for inspection and housekeeping related to the control of the flammable and combustible materials in shared spaces (lobbies, rest rooms, etc.) under the control of the City. The Department Directors are responsible for overseeing the control of the accumulation of flammable or combustible waste materials in their Departmental office areas and corridors.

TRAINING

All City employees shall be trained in this plan when they are initially hired. All City employees shall be retrained any time this plan is modified (e.g., in response to addition of new flammable or combustible materials or new potential ignition sources). Training shall also be administered to any employee at the time his/her responsibilities change in such a manner that his/her exposure to fire hazards changes.

DOCUMENTS

Related Documents

Documents related to this Fire Prevention Plan include the City's Hot Work Permit procedure and Emergency Action Plan.

Document Control

The Safety Committee shall maintain this plan. The Safety Committee is responsible for distributing the plan, and for ensuring that all outdated copies are replaced with the most current revision. The plan shall be reviewed annually. The plan shall also be revised at the time any change, which would materially alter the plan is made (e.g., handling new material which is flammable, introduction of new activity or new equipment which presents potential ignition source, modification to fire control or prevention systems).

RECORDS

Required Records

The City shall maintain records that certify that: 1) each employee has had initial training in this plan; 2) each employee is trained any time the plan changes; and 3) each employee is trained at any time the employee's responsibilities change such that the fire hazards he/she may be exposed to change.

Records Control

Training records connected with the Fire Prevention Plan will be kept in accordance with the City's Injury and Illness Prevention Plan records policy.

REFERENCES

Title 8, Code of California Regulations, §3221, *Fire Prevention Plan*.

Title 8, Code of California Regulations, §5416, *Flammable Vapors*.

Title 8, Code of California Regulations, §5417, *Flammable Liquids*.

Title 8, Code of California Regulations, §5533, *Design, Construction, and Capacity of Storage Cabinets*.

Title 8, Code of California Regulations, §5560, *Sources of Ignition*.

Title 8, Code of California Regulations, §5562, *Housekeeping*.