



CITY OF MANTECA - FIRE DEPARTMENT

FIRE PREVENTION BUREAU

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HPM FACILITIES OPERATIONAL PERMIT REQUIREMENTS

105.6.22 HPM facilities. An operational permit is required to store, handle or use hazardous production materials.

DEFINITION

HAZARDOUS PRODUCTION MATERIAL (HPM). A solid, liquid or gas associated with semiconductor manufacturing that has a degree of hazard rating in health, flammability or instability of Class 3 or 4 as ranked by NFPA 704 and which is used directly in research, laboratory or production processes which have, as their end product, materials that are not hazardous.

REQUIREMENTS

2703.1. Emergency control station. Emergency control station is provided, staffed, equipped and maintained.

2703.2.3.2 System, equipment and processes. Supply piping for health hazard 3 or 4 HPM gases and liquids is welded.

2703.3.3. Liquid storage rooms. Liquid storage room spill control, secondary containment, ventilation, storage arrangement, fire extinguishing system and fire extinguisher(s) is provided and maintained.

2703.3.4. HPM rooms. Rated construction, opening protectives, exits, ventilation, explosion control and emergency alarm at HPM room is provided and maintained.

2703.10.2. Combustible tools. Gas cabinets are ventilated, constructed of 12 gauge steel, equipped with self-closing door and sprinklered.

2703.3.6. Exhausted enclosures. Exhausted enclosure is of noncombustible construction, ventilated and provided fire extinguishing system.

2703.3.7 Electrical wiring and equipment. Rated construction, fire extinguishing system and ventilation at gas room is provided and maintained.

2703.4. Emergency plan. Emergency plan and emergency drill records are maintained and available.

2703.3.8. Corridors and enclosures for stairway and ramps. Rated construction and opening protectives are provided and maintained at service corridor.

2703.5. Maintenance of equipment, machinery and processes. Equipment, machinery, processes and associated systems are tested and maintained.

2703.7.2. Workstations. Class I, Division 2 electrical and electrical equipment is provided within 5 feet of workstations where flammable or pyrophoric gas or flammable liquids are used.

2703.7.3 Hazardous production material (HPM) rooms, gas rooms and liquid storage rooms. Class I, Division 1 electrical and electrical equipment is provided at fabrication areas, HPM rooms, gas rooms and liquid storage rooms as applicable.

2703.8. Corridors and enclosures for stairways and ramps. Hazardous materials are not used or stored in exit access corridors or enclosures.

2703.10. Automatic sprinkler system. Fire extinguishing, fire detection and fire alarm systems are installed, tested and maintained.

2703.12. Emergency alarm system. Emergency alarm, gas detection, ventilation and emergency power systems are installed, tested and maintained.

2704.2. Fabrication areas. Hazardous materials stored and used at fabrication areas do not exceed maximum allowable quantities (MAQ), maximum aggregate quantities or maximum number of control area(s).

2704.3. Indoor storage outside of fabrication areas. Storage of HPM outside fabrication area in excess of MAQ's is located in liquid storage room, HPM room or gas room.

2704.3.3 Separation of incompatible hazardous materials. Incompatible materials in containers exceeding 5 pounds or 0.5 gallons are separated by minimum 20 feet, non-combustible barrier, storage cabinet or gas cabinet.

2705.2.1 Location of HPM in use in fabrication areas. HPM in use at fabrication area are located in gas cabinet, exhausted enclosure or workstation.

2705.2.3.1. Construction. Fabrication workstations are constructed of materials that are compatible with the materials used and stored.

2705.2.3.2. Protection of vessels. Vessels containing HPM are protected.

Additional requirements may apply.