- 1. Automatic sprinklers shall be installed within the space unless the space is less than 6 inches (152 mm) in the least dimension.
- 2. Ventilation not less than six air changes per hour shall be provided. The space shall not be used to convey air from any other area.
- 3. Where the piping or tubing is used to transport HPM liquids, a receptor shall be installed below such piping or tubing. The receptor shall be designed to collect any discharge or leakage and drain it to an *approved* location. The 1-hour enclosure shall not be used as part of the receptor.
- 4. HPM supply piping and tubing and nonmetallic waste lines shall be separated from the *corridor* and from occupancies other than Group H-5 by *fire barriers* that have a *fire-resistance rating* of not less than 1 hour. Where gypsum wallboard is used, joints on the piping side of the enclosure are not required to be taped, provided the joints occur over framing members. Access openings into the enclosure shall be protected by *approved* fire protection-rated assemblies.
- 5. Readily accessible manual or automatic remotely activated fail-safe emergency shutoff valves shall be installed on piping and tubing other than waste lines at the following locations:
- 5.1. At branch connections into the fabrication area.
- 5.2. At entries into *corridors*.

Exception: Transverse crossings of the *corridors* by supply piping that is enclosed within a ferrous pipe or tube for the width of the *corridor* need not comply with Items 1 through 5.

- **415.8.6.4 Identification.** Piping, tubing and HPM waste lines shall be identified in accordance with ANSI A13.1 to indicate the material being transported. [F]
- **415.8.7 Continuous gas detection systems.** A continuous gas detection system shall be provided for HPM gases when the physiological warning threshold level of the gas is at a higher level than the accepted PEL for the gas and for flammable gases in accordance with Sections 415.8.7.1 and 415.8.7.2. [F]
- **415.8.7.1 Where required.** A continuous gas detection system shall be provided in the areas identified in Sections 415.8.7.1.1 through 415.8.7.1.4. [F]
- **415.8.7.1.1 Fabrication areas.** A continuous gas detection system shall be provided in fabrication areas when gas is used in the fabrication area. [F]
- **415.8.7.1.2 HPM rooms.** A continuous gas detection system shall be provided in HPM rooms when gas is used in the room. [F]
- **415.8.7.1.3 Gas cabinets, exhausted enclosures and gas rooms.** A continuous gas detection system shall be provided in gas cabinets and exhausted enclosures. A continuous gas detection system shall be provided in gas rooms when gases are not located in gas cabinets or exhausted enclosures. [F]
- **415.8.7.1.4 Corridors.** When gases are transported in piping placed within the space defined by the walls of a *corridor* and the floor or roof above the *corridor*, a continuous gas detection system shall be provided where piping is located and in the *corridor*. [F]