**415.8.5.7 Ventilation.** Mechanical exhaust ventilation shall be provided in liquid storage rooms, HPM rooms and gas rooms at the rate of not less than 1 cubic foot per minute per square foot  $[0.0051 \text{ m}^3/(\text{s} \cdot \text{m}^2)]$  of floor area or six air changes per hour, whichever is greater, for categories of material. [F]

Exhaust ventilation for gas rooms shall be designed to operate at a negative pressure in relation to the surrounding areas and direct the exhaust ventilation to an exhaust system.

**415.8.5.8 Emergency alarm system.** An *approved* emergency alarm system shall be provided for HPM rooms, liquid storage rooms and gas rooms. [F]

Emergency alarm-initiating devices shall be installed outside of each interior exit door of such rooms.

Activation of an emergency alarm-initiating device shall sound a local alarm and transmit a signal to the emergency control station.

An *approved* emergency telephone system, local alarm manual pull stations or other *approved* alarm-initiating devices are allowed to be used as emergency alarm-initiating devices.

## 415.8.6 Piping and tubing. [F]

**415.8.6.1 General.** Hazardous production materials piping and tubing shall comply with this section and ASME B31.3. [F]

## 415.8.6.2 Supply piping and tubing. [F]

- **415.8.6.2.1 HPM having a health-hazard ranking of 3 or 4.** Systems supplying HPM liquids or gases having a health-hazard ranking of 3 or 4 shall be welded throughout, except for connections, to the systems that are within a ventilated enclosure if the material is a gas, or an *approved* method of drainage or containment is provided for the connections if the material is a liquid. [F]
- **415.8.6.2.2 Location in service corridors.** Hazardous production materials supply piping or tubing in service corridors shall be exposed to view. [F]
- **415.8.6.2.3 Excess flow control.** Where HPM gases or liquids are carried in pressurized piping above 15 pounds per square inch gauge (psig) (103.4 kPa), excess flow control shall be provided. Where the piping originates from within a liquid storage room, HPM room or gas room, the excess flow control shall be located within the liquid storage room, HPM room or gas room. Where the piping originates from a bulk source, the excess flow control shall be located as close to the bulk source as practical. [F]
- **415.8.6.3 Installations in corridors and above other occupancies.** The installation of HPM piping and tubing within the space defined by the walls of *corridors* and the floor or roof above, or in concealed spaces above other occupancies, shall be in accordance with Section 415.8.6.2 and the following conditions: [F]