**Section 604.1115 Chlorine Gas**

a) Chlorinators that are housed separately from the chlorine storage must be in an adjacent room.

b) Chlorinator rooms must be heated to 60oF, and be protected from excessive heat. Cylinders and gas lines must be protected from excessive temperatures.

c) Chlorine gas feed and storage must be enclosed and separated from other operating areas. Both the feed and storage rooms must be constructed so as to meet the following requirements:

1) a shatter resistant inspection window must be installed in an interior wall;

2) all openings between the rooms and the remainder of the plant must be sealed;

3) doors must be equipped with panic hardware, assuring ready means of exit and opening outward only to the building exterior;

4) a ventilating fan with a capacity to complete one air change per minute when the room is occupied, unless otherwise approved by the Agency under Section 604.145(b);

5) the ventilating fan must take suction near the floor and at as great a distance as is practical from the door and air inlet, with the point of discharge located so as not to contaminate air inlets to any rooms or structures;

6) air inlets with corrosion resistant louvers must be installed near the ceiling;

7) air intake and exhaust louvers must facilitate airtight closure;

8) separate switches for the ventilating fan and for the lights must be located outside and at the inspection window.

A) Outside switches must be protected from vandalism.

B) A signal light indicating ventilating fan operation must be provided at each entrance when the fan can be controlled from more than one point;

9) vents from chlorinator and storage areas must be screened and must discharge to the outside atmosphere, above grade;

10) where floor drains are provided, the floor drains must discharge to the outside of the building and not be connected to other internal or external drainage systems; and

11) provisions must be made to chemically neutralize chlorine gas in the event of any measured chlorine release. The equipment must be sized to treat the entire contents of the largest storage container on site.

d) Chlorine gas feed systems must be of the vacuum type and include the following:

1) vacuum regulators on all individual cylinders in service;

2) service water to eductors must be of adequate supply and pressure to operate feed equipment within the needed chlorine dosage range for the proposed system.

e) All chlorine gas feed lines located outside the chlorinator or storage rooms must be installed in air tight conduit pipe.

f) Full and empty cylinders of chlorine gas must meet the following requirements:

1) housed only in the chlorine storage room;

2) isolated from operating areas; and

3) restrained in position;

g) Continuous chlorine leak detection equipment equipped with both an audible alarm and a warning light is required.