Appendix Y: CSA B52 Code Rules Relating to Emergency Discharge

6.10 Emergency discharge

In the design of a refrigeration system, consideration shall be given to the provision of an emergency discharge system (see Annex B).

7.3.6.1.2

The discharge to the atmosphere shall be not less than 4.6 m (15 ft) above the adjoining ground level or accessible roof level and not less than 7.6 m (25 ft) from any window, ventilation opening, or exit in any building unless venting is in accordance with Clause 7.3.6.1.3(b). Discharge piping connected to the discharge side of a fusible plug or rupture member shall be equipped to prevent plugging of the piping in the event that the fusible plug or rupture member functions.

Annex B (informative)
Guidelines for emergency discharge of refrigerants

Note: *This informative Annex has been written in normative (mandatory) language to facilitate adoption where users of the Standard or regulatory authorities wish to adopt it formally as additional requirements to this Standard.*

B.1

This Annex is included as a guide for designers of refrigeration systems that will include facilities for rapidly discharging refrigerants into the atmosphere during a fire or other emergency.

B.2

B.2.1

Systems designed for operation over 103 kPa (15 psig) and containing 182 kg (400 lb) or more of Group A1 or 91 kg (200 lb) or more of all other refrigerants shall be constructed so that, in an emergency, the refrigerant can be safely and rapidly discharged into the atmosphere.

B.2.9

The emergency valve shall be installed in a glass-fronted box that is painted bright red and placed outside the building in a location where it cannot be operated by anyone other than the plant operator, a firefighter, or a person who could be called on to open the valve in an emergency. The valve shall be located at least 2.3 m (7 ft) above finished grade, except as permitted by the regulatory authority.