

# BSR/IIAR 9-201x

Standard for Minimum System Safety Requirements for Existing Closed-Circuit Ammonia Refrigeration Systems

## IIAR 9

### Public Review #4 Draft

**Note:** This document shows the substantive and informative changes made subsequent to the third (3<sup>rd</sup>) public review. Certain portions of the original text remain to provide the reader with some content along with the changes. Highlighted “**Note Only: statements...**” are included to provide clarification.

You are invited to provide comments on only the struck-through (in **Red**) or the underlined (in **Green**) changes. Understand the content clearly before you submit a comment. Do not submit questions or opinions as comments. If you do not understand the content, contact IIAR at 1-703-312-4200.

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**7.3.6.2 Pipe Penetrations.** Pipes penetrating the machinery room ~~separation envelope~~ shall be sealed to walls, ceilings, or floors through which they pass to prevent leakage of ammonia vapor to adjoining spaces and to maintain the fire rating of the machinery room envelope.

**7.3.11.2 Emergency Ventilation Control Switch.** A clearly identified control switch for emergency ventilation with a tamper-resistant cover shall be located outside the machinery room and adjacent to the designated principal machinery room door unless the continuous ventilation operates at a rate at or above that required for emergency ventilation. The switch shall provide “ON/AUTO” override capability for emergency ventilation. The function of the switch shall be clearly marked by signage near the controls.

**7.3.12.2 Alarm Response.** At a minimum, the machinery room alarm response shall be at an appropriate arrangement for the following to occur:

4) A monitored location shall be notified upon loss of power to or failure of the emergency mechanical ventilation system.

## Appendix A. (Informative) Explanatory Material

A.7.1.2.1 Surge drums associated with evaporators are considered an integral part of the evaporator and thus may be installed indoors outside of machinery rooms in industrial occupancies.

Note Only: An Asterisk was added to Section 7.2.910.4 “\*Quantity of Ammonia in the system.”

A.7.2.10.4 The quantity of ammonia in the system is an estimate of the maximum quantity (in pounds) held in the covered process at any one time during the calendar year.

Note Only: An Asterisk was added to Section 7.3.11 “\*Emergency Control Switches”.

A.7.3.11 The purpose of installing a tamper-resistant style cover is to prevent the inadvertent operation of the Emergency Stop Switch and the Emergency Ventilation Control Switch.