

**INTERPRETATION IC 15-1989-4 OF
ANSI/ASHRAE STANDARD 15-1989
SAFETY CODE FOR MECHANICAL REFRIGERATION**

June 9, 1992

Request from: Mark E. Rood, P.E., Johnson, Spellman & Associates, Inc., 270 Scientific Drive, Suite 5, Norcross, GA 30092

Reference: This request refers to paragraph 10.13.2.1 of ANSI/ASHRAE Standard 15-1989.

Background: Paragraph 10.13.2.1 of the standard states:

"10.13.2.1 For Group 1 refrigerants, machinery rooms shall be equipped with vapor alarms to warn of oxygen levels below 20 volume percent since there is insufficient odor warning."

1. Mr. Rood's letter interprets that it is the intent of 10.13.2.1 to require refrigerant vapor alarms for Group 1 refrigerants so as to provide warning of depressed oxygen levels in the event of refrigerant leaks.
2. In cases where a refrigerant vapor alarm is required and installed under the provisions 10.13.2.1, Mr. Rood's letter interprets that the additional installation of an oxygen level sensor and alarm is not required by the standard.

Question 1: Is Mr. Rood's interpretation of 10.13.2.1 correct as given in Item No. 1 above?

Answer 1: Yes

Comment: Oxygen deficiency detectors are reported to be less expensive than refrigerant detectors.

Question 2: Is Mr. Rood's interpretation of 10.13.2.1 correct as given in Item No. 2 above?

Answer 2: Yes

Comment: Refrigerant detectors that provide warning of refrigerant leaks also serve also serve to warn personnel long before oxygen deprivation could occur.