## INTERPRETATION IC 15-1994-6 OF ASHRAE STANDARD 15-1994 SAFETY CODE FOR MECHANICAL REFRIGERATION

## August 1999

**Request from**: George Stavrou, Chief Mechanical Inspector, City of Fort Lauderdale, 300 N. W. First Avenue, Ft Lauderdale, FL 33301.

**References**. This request refers to Standard 15-1994, Table 1 and Subsection 8.13.7.

**<u>Background</u>**. Mr. Stavrou's letter asks two questions.

Question 1: What is the rational for the change in the quantity allowed for R-123 in Table 1 from the  $0.004 \text{ lb}/1000 \text{ Ft}^3$  in 15-1992 and  $0.40 \text{ lb}/1000 \text{ Ft}^3$  in 15-1994?

Question 2: 8.13.7 requires gaskets to prevent leaked refrigerant from entering occupied spaces. The standard does not address an acceptable leakage rate through the gasketed panels. Should a refrigerant leak detector be installed in the duct and wired to stop the handler and initiate an exhaust system in the event refrigerant is detected leaking into the duct system?

Question 1. Table 1 in ASHRAE 15-1994 lists the allowable quantity for R-123 as 0.40 lb/1000 Ft<sup>3</sup>. Is this quantity correct?

Answer 1. Yes

**Comment**. A typographical error for the allowed quantity of R-123 appeared in 15-1992. This error was corrected when 15-1994 was published.

<u>Question 2</u>. Is a refrigerant detector with associated shutdown controls for the air handler and start up controls for an exhaust system required to comply with subclause 8.13.7 of ASHRAE 15-1994.

## Answer 2. No

<u>Comment</u>. 8.13.7 requires the gasketed panels to be tight fitting. The requirements for gasketed panels 8.13.7 coupled with refrigerant detectors in 8.13.2 and mechanical ventilation in 8.13.4 will preclude leaked refrigerant from entering the duct system to/from the occupied spaces.