## INTERPRETATION IC 62-1999-16 OF ASHRAE STANDARD 62-1999 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

TRANSFER TO 62-1999 APPROVED: August 14, 2000

Originally issued as interpretation of Standard 62-1989 (IC 62-1989-8) on September 22, 1993, but transferred to Standard 62-1999. Since no changes were made to the relevant sections of Standard 62-1999, no revisions were made to the interpretation as part of this transfer.

Request from: Eileen P. Senn, Shop Steward, CWA Local 1034, 321 West State Street, Trenton, NJ 08618

**References.** This request refers to the requirements given in ASHRAE Standard 62-1989, paragraphs 5.1 and 5.11.

## **Background**

1. Paragraph 5.1 of the standard states in part:

"When natural ventilation and infiltration are relied upon, sufficient ventilation shall be demonstrable."

Ms. Senn's letter interprets "sufficient ventilation" to mean ventilation rates specified in Table 2, or alternatively, ventilation sufficient to meet the indoor air quality guidelines in Table 3.

2. Paragraph 5.11 of the standard states in part:

"Relative humidity in habitable spaces preferably should be maintained between 30% and 60% relative humidity ...."

Ms. Senn's letter interprets that this range should be maintained by using mechanical humidification and/or dehumidification equipment, if necessary.

**Question 1**. Is Ms. Senn's interpretation of 5.1 correct as given in Item No. 1 above?

<u>Answer 1</u>. No with respect to ventilation rates. Yes with respect to IAQ Guidelines in Table 3 "Guidelines for Selected Air Contaminants of Indoor Origin."

Comment. Demonstration of ventilation rates specified in Table 2 is only one of the acceptable methods. Acceptable means of demonstrating natural ventilation include the infiltration methods described in Chapter 23 "Infiltration and Ventilation" of the 1993 ASHRAE Handbook - Fundamentals. Acceptable means of demonstrating openable areas to the outdoors for natural ventilation are given in the model building codes. Documentation of a background of successful natural ventilation experience in similar buildings and building uses could also be considered suitable demonstration.

**Question 2**. Is Ms. Senn's interpretation of 5.11 correct as given in Item No. 2 above?

Answer 2. Yes

## Comments.

- a) It is important to note that the word "should" in 5.11 is a recommendation and not a mandatory requirement.
- b) Since ASHRAE 62-1989 does not define "habitable space," the provisions of 5.11 would not apply to bathrooms, toilet compartments, halls, or storage or utility spaces, as currently defined in model building codes. ASHRAE SSPC 62 will consider adding a definition for "habitable space" in the next revision of the standard.