## INTERPRETATION IC 62-2001-49 OF ANSI/ASHRAE STANDARD 62-2001 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Date Approved: February 6, 2005

Request from: Ed Fickes (fickes@ix.netcom.com), Fickes Engineering, 1540 Keller Parkway, Suite 108-B306, Keller, TX 76248.

<u>Reference:</u> This request for interpretation refers to Table 2, Outdoor Air Requirements for Ventilation, application of rates for dormitories, patient rooms, and pet shops, Section 6.1.3.1 Multiple Spaces, and Section 8.1.3 Building Alterations or Change-of-Use, of ANSI/ASHRAE Standard 62-2001 dealing with pets.

**<u>Background:</u>** Some nursing care facilities allow pets, primarily dogs, into nursing homes for therapeutic reasons. Also, there have been several colleges that allow students to keep dogs and cats in their dorm rooms, and people bring pets into restaurants and grocery stores.

Prescribed OA rates in Table 2 for acceptable IAQ were established considering activities normal to the occupancy. However, Table 2 footnotes state there is adequate margin of safety that accounts for health variations among people. The footnotes are vague as to what safety margins considered.

<u>Fickes Interpretation No. 1:</u> When pets are kept in occupancies other than 'pet shops', the occupancies are considered to have changed. Therefore, the system design, operation and maintenance must be reevaluated. (Section 8.1.3)

Question No. 1: Is Fickes' interpretation correct?

Answer No. 1: No

<u>Comments No. 1</u>: When changes are made (such as described in Section 8.1.3) that are inconsistent with system design assumptions, then the ventilation system design, operation and maintenance shall be reevaluated. Standard 62-2001 does not specify whether the changes you describe would be inconsistent with system design assumptions.

Fickes Interpretation No. 2: Pet odors and droppings are considered harmful contaminants and other relevant standards (e.g., OSHA, EPA) supersede Standard 62. (Section 6.1.3.1)

Question No. 2: Is Fickes' interpretation correct?

Answer No. 2: No

<u>Comments No. 2</u>: The Standard does not define harmful contaminants. If the designer suspects that pet odors and droppings may be harmful, then other relevant standards for minimum ventilation requirements must supersede the ventilation rate procedure, but not Standard 62-2001 in its entirety.

<u>Fickes Interpretation No. 3:</u> When pets are kept in dorms or brought into nursing homes or other occupancies, Table 2 pet shop rate of 1 cfm per sf should be added to the rates of the respective occupancies.

**Question No. 3:** Is Fickes' interpretation correct?

Answer No. 3: No

<u>Comments No. 3</u>: Each ventilation system design should be evaluated based on the space use. The prescribed rates in Table 2 for dorm rooms, for instance, assume that pets are not present. If the design goal is to ventilate a dorm room with pets present, the designer must use his/her judgment when determining the minimum ventilation rates, provided the minimum rates are no less than those prescribed for a dorm room without pets.

<u>Fickes Interpretation No. 4:</u> Margins of safety built in to Table 2 rates account for health variations and other contaminants and would allow pets in all occupancies listed in Table 2 without an increase in ventilation.

**Question No. 4:** Is Fickes' interpretation correct?

Answer No. 4: No

<u>Comments No. 4</u>: The introduction of pets was not considered when establishing the prescribed minimum rates.