## INTERPRETATION IC 62.1-2007-09 OF ASHRAE STANDARD 62.1-2007 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Transfer Approved: January 20, 2008

Originally issued as interpretation of Standard 62-2001 (IC 62-2001-41) on January 26, 2003, transferred to 62.1-2004 (IC 62.1-2004-09) on June 25, 2006 and subsequently transferred to Standard 62.1-2007. Even though Standard 62.1-2007 changes relevant sections of Standard 62.1-2004, only minor revisions (related to referenced sections, new rates and new calculation procedures) were made in transferring this interpretation to apply to Standard 62.1-2007.

**<u>Request from:</u>** Mike Gallagher (<u>MGallagher@bswintl.com</u>), BSW International, One West Third Street, Suite 100, Tulsa, OK 74103-3505.

**<u>Reference</u>:** This request for interpretation refers to the Ventilation Rate Procedure presented in ANSI/ASHRAE Standard 62.1-2007, particularly Section 6.2.2, Zone Calculations, and Table 6-1, Outdoor Air Requirements for Ventilation.

**Background:** The Occupancy Category column of Table 6-1 lists several categories to which a retail space can be defined.

**Interpretation No.1:** When designing a system to serve a combination of these spaces, the outdoor air requirement should be determined for each space use separately on a per person or per  $ft^2$  basis as appropriate and then added together.

Question No.1: Is this Interpretation correct?

Answer No.1: Yes, with caveats below.

<u>Comments No.1</u>: Table 6-1 provides specific ventilation requirements for each of the different space types noted. The standard requires their use to determine the outdoor air required for each space type, which would then be summed to determine the overall outdoor air requirement for the store, if a dedicated outdoor air system delivers outdoor air directly to each different space, in accordance with the requirements of Section 6.2.4. If a multiple-zone, recirculating system is used, then the total outdoor air required for that system would need to be based on the requirements in section 6.2.5.

**Interpretation No.2:** For the per person space types, the number of occupants can be determined based on actual transaction data.

**Question No.2:** Is this Interpretation correct?

Answer No.2: The standard does not address the method for determining the anticipated occupancy load.

<u>**Comments No.2:**</u> While the standard does not speak to specific methods of determining occupancy values for use in calculating outdoor airflows, it does defines the zone population,  $P_z$  as the "largest number of people expected to occupy the zone during typical usage." The default values of the "occupant density" in Table 6-1 shall be used when the actual design occupancy is not known.