## INTERPRETATION IC 62-2001-45 OF ANSI/ASHRAE STANDARD 62-2001 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Approved January 24, 2004

**<u>Request from:</u>** Joel Winstead (jdwinstead@trane.com), Trane Company, 1775 Pyramid Place, Suite 100, Memphis, TN 38132.

**Reference:** This request for interpretation refers to ANSI/ASHRAE Addendum o to ANSI/ASHRAE Standard 62-2001 that removes the reference to smoking spaces in Table 2 of outdoor air requirements and adds a requirement for additional ventilation and/or air cleaning in spaces where smoking is permitted and prohibits the recirculation or transfer of air from smoking to no-smoking areas.

**Background:** Addendum 620 changes the table of outdoor air ventilation requirements in the standard to apply to no-smoking areas only. Addendum 620 also addresses ventilation in smoking areas by requiring (620, Section 6.1.3.5), as part of the ventilation rate procedure, that these areas have more ventilation and/or more air cleaning than comparable no-smoking areas. However, it does not say specifically how much more ventilation or specifically which contaminants must be removed or the efficiency of air cleaning that must be provided to comply with the standard. To comply with Standard 62, the building design must meet the general requirements in Sections 4 and 5, the ventilation requirements in Section 6, determined using either the Ventilation Rate Procedure or the IAQ Procedure, the installation/start-up requirements in Section 7 and the operation/maintenance requirements in Section 8.

When applying the Ventilation Rate Procedure, no-smoking areas must be ventilated at the rates prescribed in Table 2, while smoking areas must be ventilated (per Addendum 62o, Section 6.1.3.5) at rates that exceed those prescribed in Table 2 by an unspecified amount. Since it's non-specific, any degree of increase in ventilation airflow would seem to meet the mandatory minimum requirement in compliance with the standard.

**Interpretation:** A smoking-area design that increases the Table 2 ventilation rate, by even a very small amount, complies with the mandatory minimum requirements of the Ventilation Rate Procedure.

**Question:** Is this Interpretation correct?

Answer: Yes.

## **Comments**:

ETS is a known carcinogen with no established minimum concentration; therefore, Std 62 can neither determine nor prescribe a minimum ventilation rate. While a ventilation rate only slightly higher than the rate prescribed in Table 2 for no-smoking spaces would technically result in compliance, the preponderance of scientific and medical evidence indicates that acceptable indoor air quality may not be achieved.