INTERPRETATION IC 62.1-2004-05 OF
ANSI/ASHRAE STANDARD62.1-2004
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

TRANSFER APPROVED: June 25, 2006

Originally issued as interpretation of Standard 62-1989 (IC 62-1989-25) on January 26, 1997, transferred to Standard 62-1999 (62-1999-31) on August 14, 2000, to Standard 62-2001 (IC 62-2001-32) on January 12, 2002 and subsequently to Standard 62.1-2004. Even though Standard 62.1-2004 includes changes to relevant sections of Standard 62-2001, no revisions were deemed necessary in transferring Interpretation No. 1 to apply to Standard 62.1-2004.

Request from: Kevin F. Wade, P.E., Advanced Power Control, Inc., 126 Sandy Drive, P.O. Box 7019, Newark, DE 19714

References. This request refers to Section 6.3 Indoor Air Quality Procedure of ANSI/ASHRAE Standard 62.1-2004.

Background. The last two sentences of ANSI/ASHRAE Standard 62-2001 6.2 read as follows:

> "The Indoor Air Quality Procedure provides a direct solution by restricting the concentration of all known contaminants of concern to some specified levels. It incorporates both quantitative and subjective evaluation."

Section 6.3.1.1 Contaminant Sources of ANSI/ASHRAE Standard 62.1-2004 refers to simply "contaminants of concern" rather than "all known contaminants of concern".

The last paragraph of ANSI/ASHRAE Standard 62-2001 6.2.1 includes the following sentence:

> "Application of generally acceptable technology, and vigilance regarding adverse influences of reduced ventilation, must therefore suffice."

NOTE: ANSI/ASHRAE Standard 62.1-2004 deletes such language, so the second interpretation below no longer applies and does not transfer.

Mr. Wade's Interpretation No. 1. Mr. Wade's letter states,"I interpret the phrase 'all known contaminants of concern' to be contaminants specific to an occupation or task being performed in the space in question (e.g. - monitoring for ammonia in a blue print room) and not to mean all contaminants that may be present (e.g.- individual monitors for all the pollutants listed in applicable tables of informative Appendix C Guidance for the Establishment of Air Quality Criteria for the Indoor Environment)."

~~**Mr. Wade's Interpretation No. 2**. Mr. Wade's letter further states, "I interpret `Application of generally accepted technology ....' to be the use of Volatile Organic Compound (VOC) sensors for the monitoring of contaminants that may be generated by a building and its contents."~~

Question 1. Is Mr. Wade's Interpretation No. 1 correct?

Answer. No.

Comment. Depending upon the rationale for using the Indoor Air Quality Procedure for design, there may be different interpretations of what are the "contaminants of concern" in the given application. While this interpretation rests solely with the user of this Procedure, it may be helpful to consider two distinct categories of use, in keeping with the philosophy of the Standard. The contaminants of concern may be very different for these two categories.

In the first case, the designer knows of unusual sources of a particular contaminant or contaminants that will be present in an otherwise typical space due to its use, construction, etc. As a first step, these particular contaminants may be the only ones considered as contaminants of concern. Provided these contaminants are satisfactorily controlled at outdoor air rates equal to or higher than the rates required by the Ventilation Rate Procedure, the "usual" contaminants in the space need not be considered "contaminants of concern."

In the second case, the designer is attempting to utilize new materials, new technology and/or innovative design, etc. to reduce outdoor air rates below those required by the Ventilation Rate Procedure. In this case, all known contaminants maybe considered contaminants of concern. The designer should evaluate the "usual" contaminants as contaminants of concern in this scenario because anyone may otherwise be present in greater concentration than would be the case when using the Ventilation Rate Systems or Prescriptive Procedure.

~~**Question No. 2**. Is Mr. Wade's interpretation of No. 2 correct?~~

~~**Answer**. No.~~

~~**Comment**: The technology strategy to apply the IAQ Procedure is much broader than ventilation control using VOC sensors. It may include source control, appropriate ventilation and ventilation control strategies, as well as contaminant sensors to control ventilation.~~