## INTERPRETATION IC 62-2001-47 OF ASHRAE STANDARD 62-2001 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

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**<u>Request from:</u>** Ed Fickes (fickes@fickes-engineering.com), Fickes Engineering, 1540 Keller Parkway, Suite 108-B306, Keller, TX 76248.

**<u>Reference</u>**: This request for interpretation refers to Sections 6.1.1 and 6.1.2, and Tables 1 and 2 of ANSI/ASHRAE Standard 62-2001 (not including addenda published after November 2001) dealing with Outdoor Air Requirements for Ventilation.

**Background:** A client has several office facilities located in various parts of the country where the ambient air routinely exceeds Table 1 (NAAQS) short-term levels. We feel the client is meeting the standard and does not have to treat the offending outdoor air contaminants before utilizing Table 2 outdoor air requirements for ventilation.

Section 6.1.1 states that outdoor air shall be evaluated so contaminants do not exceed the levels in Table1. However, Section 6.1.2 does not require treating outdoor air as it states, "should be treated". Furthermore, Section 2.3 states that acceptable IAQ may not be achieved in all buildings meeting the requirements of this standard.

**Interpretation No. 1:** Table 2 outdoor air ventilation rates can be used without treatment even though outdoor air contaminant concentrations may exceed Table 1 levels.

Question No. 1: Is Interpretation No. 1 correct?

## Answer No. 1: Yes.

<u>Comments No. 1</u>: Air cleaning requirements in Section 6.1.2 clearly state that if the outdoor air contaminant levels exceed the values given in Table 1, the air SHOULD be treated. In this case, outdoor air cleaning is recommended but is not a requirement.

However, if outdoor air, which is not deemed to be acceptable when evaluated in accordance with Section 6.1.1, is introduced for ventilation without air cleaning treatment, the prescribed rates in Table 2 may or may not result in acceptable indoor air quality.

The sections cited have been revised by Addenda 62r and 62z. Specifically, Section 6.1.2 has been deleted and new sections have been added that require treatment of outdoor air for certain contaminants.

**Interpretation No. 2:** A building owner meets the requirements of this standard by using Table 2 outdoor air ventilation rates (treated or untreated) because Section 2.3 recognized acceptable IAQ may not always be achieved.

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

## Answer No. 2: No.

<u>Comments No. 2</u>: Section 2.3 does not relieve the designer from meeting the requirements of the standard. It merely observes that compliance with all requirements in the Standard may or may not result in acceptable indoor air quality.

**Interpretation No. 3:** The evaluation of outdoor air in Section 6.1.1 is for information only to make the building owner aware of outdoor air conditions because outdoor air is not required to be treated.

Question No. 3: Is Interpretation No. 3 correct?

Answer No. 3: No.

<u>Comments No. 3</u>: While the evaluation required in 6.1.1 serves to inform the owner, designer and others regarding outdoor air conditions, the standard also *recommends* that the design include air cleaning in some situations. The outdoor air evaluation may also help to establish the design approach to use; that is, to use air treatment and the ventilation rate procedure to establish intake airflow, or to use the contaminant analysis approach required by the indoor air quality procedure.

The sections you cite have been revised by ANSI/ASHRAE Addenda 62r and 62z to ANSI/ASHRAE Standard 62-2001. Specifically, Section 6.1.2 has been deleted and new sections have been added that require assessment of outdoor air quality and may require cleaning of outdoor air.