## INTERPRETATION IC 62.1-2004-1 OF ANSI/ASHRAE STANDARD 62.1-2004 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

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**<u>Request from:</u>** Dick Bourne (dbourne@davisenergy.com), Davis Energy Group, 123 C Street, Davis, CA 95616.

**<u>Reference</u>**: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2004, Section 6.2.6.2 Short-Term Conditions, specifically the interruption of ventilation air.

**Background:** Equation 6-9 in Section 6.2.6.2 of 62.1-2004 is used to calculate the period T over which ventilation air supply must average to the minimum outdoor air intake as determined by Equation 6-3, 6-4 or 6-8 as appropriate.

**Interpretation No. 1:** The value of *T* in Equation 6-9 and the period of interruption of ventilation can be very large (6 hours or more and 5 hours or more, respectively) depending on occupancy and building type. For example, by my calculations, in a 10,000 ft<sup>2</sup> building with 10 ft ceilings specified as office space (5 people/1000 ft<sup>2</sup>), T = 353 minutes, and the supplied ventilation air must average to 850 cfm. If the HVAC equipment provides 6000 total cfm, I interpret this to mean that the equipment could run for (850/6000) x 353 = 50 minutes out of every 353 minutes in 100% outside air mode at 6000 cfm, and the remainder of the time (nearly 5 hours) in 100% recirculation mode.

Question No. 1: Is this interpretation correct?

Answer No. 1: No

<u>Comments No. 1</u>: Five out of six hours is not a short term condition

**Interpretation No. 2:** This interpretation holds true for both ANSI/ASHRAE Standard 62.1-2004 and Addendum "n" to ANSI/ASHRAE Standard 62-2001 (Section 6.2.5.2).

Answer No. 2: No.

<u>Comments No. 2</u>: Five out of six hours is not a short term condition