## INTERPRETATION IC 62.2-2013-1 OF ANSI/ASHRAE STANDARD 62.2-2013 Ventilation and Acceptable Indoor Air Quality in Low-Rise Residential Buildings

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**<u>Request from:</u>** Armin Rudd (<u>arudd@buildingscience.com</u>), Building Science Corporation, 30 Forest Street, Somerville, MA 02143.

**<u>Reference</u>**: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.2-2013, Sections 2.1 and 3, regarding air contaminants and odor dissatisfaction.

**Background:** Section 2.1 states, "This standard considers chemical, physical, and biological contaminants that can affect air quality."

In Section 3 Definitions, the definition of the term *acceptable indoor air quality* is: air toward which a substantial majority of occupants express no dissatisfaction with respect to odor and sensory irritation and in which there are not likely to be contaminants at concentrations that are known to pose a health risk.

In Section 3 Definitions, the definition of the term *toilet* is: space containing a toilet, water closet, urinal, or similar sanitary service.

A recent public meeting discussion among some SSPC 62.2 members and others, relative to a change proposal before the committee, made it clear that the committee would need to decide:

a) whether a *toilet* generates odor such that a substantial majority of occupants will express dissatisfaction with that odor or whether a *toilet* generates air contaminants at concentrations that are likely to pose a known a health risk.

b) whether odors generated in a *toilet* are covered by the Scope of Standard 62.2 either because of the reference to "biological contaminants affecting air quality" in Section 2.1, or because of the reference to "occupants expressing no dissatisfaction with respect to odor" in the Section 3 definition of *acceptable indoor air quality*.

c) whether any indoor odor that is not likely to pose a known health risk is intended to be covered by Standard 62.2 whether the majority of occupants express odor dissatisfaction or not.

d) whether odor in a *toilet* was covered by Standard 62.2 since a *toilet* may cause only temporary odor dissatisfaction rather than persistent or constant odor dissatisfaction.

**Interpretation No.1:** In a *toilet* without local mechanical exhaust a substantial majority of occupants will not express dissatisfaction with respect to odor.

**Question No.1:** Is this interpretation correct?

Answer No.1: No.

**Interpretation No.2:** In a *toilet* without local mechanical exhaust where someone just defecated, urinated, or threw up there are not likely to be air contaminants (such as either bacterial, viral, or bioeffluent VOCs) at concentrations that are known to pose a health risk.

Question No.2: Is this interpretation correct?

Answer No.2: No.

**Interpretation No.3:** Odors that are not likely to pose a known health risk are addressed by Standard 62.2 if the majority of occupants are likely to express odor dissatisfaction.

**Question No.3:** Is this interpretation correct?

Answer No.3: Yes, subject to Sections 2.2 and 6.6.

**Interpretation No.4:** Standard 62.2 addresses only persistent or constant odor rather than temporary odor such as may occur in a *toilet*.

**Question No.4:** Is this interpretation correct?

Answer No.4: No.