



October 16, 2024

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Dated Notice

Re: ANSI Appeals Board Remand of Appeal filed jointly against ASHRAE, challenging ASHRAE's approval, as an ANSI Audited Designator, of Addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* as an American National Standard (ANS) ("Addendum j")

Dear Appeals Participants:

On September 17, 2024, the ANSI Executive Standards Council (ExSC) heard the above appeal. The decision of the ANSI ExSC follows.

Please be advised that **this transmission via e-mail constitutes your official notification of the decision of the ExSC.**

Parties to the Appeal have the right to file an appeal of this decision with the ANSI Appeals Board. The applicable appeals procedures are included in section 11 of the *ANSI Appeals Board Operating*

Procedures. Should a party choose to appeal to the ANSI Appeals Board, written notice of appeal and all appeals statements and documentation must be filed with the Secretary of the ANSI Appeals Board (the office of the undersigned) by **November 6, 2024**, and shall be accompanied by a filing fee in the amount of \$1,200.00. If a party is unable to provide the required appeals materials within the fifteen (15) working day deadline, an extension may be requested, with the grounds for such request noted. Such request shall be directed to me, as Secretary to the ANSI Appeals Board, within the fifteen (15) working day deadline or the party will forfeit the right to appeal. A copy of the *ANSI Appeals Board Operating Procedures* is attached to the E-mail that transmitted this decision.

Thank you for your attention to this matter. If I may be of assistance to you, please contact me at (212) 642-4914 or send an E-mail to acaldas@ansi.org.

Sincerely,
Anne

Anne Caldas
Secretary, ANSI Executive Standards Council

cc: ANSI Executive Standards Council
Patricia Griffin, ANSI Senior VP & General Counsel
Fran Schrotter, ANSI Senior VP & Chief Operating Officer

Attachment A: ANSI ExSC 2023 Decision
Attachment B: ANSI Appeals Board Decision

**ANSI EXECUTIVE STANDARDS COUNCIL (ExSC)
SUMMARY DECISION**

In response to the ANSI Appeals Board’s remand of an appeal filed jointly by Eric Adair, Senior Manager – Codes and Standards, Hearth, Patio & Barbecue Association (HPBA), Shannon Corcoran, Director, Building Codes and Standards, American Gas Association (AGA), David Delaquila, Technical Standards Consultant, National Propane Gas Association (NPGA), Don Denton, Technical Chairman, Vent-Free Products Subsection of HPBA, and Ron Smith, Executive Director, Operations, Global Engineered Solutions Group, LLC (“Appellants”) challenging ASHRAE’s approval, as an ANSI Audited Designator, of Addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* (“Addendum j”) as an American National Standard (ANS), the ExSC finds for the Appellants and upholds the appeal. Addendum j to ASHRAE Standard 62.2-2022 is not approved as an American National Standard (ANS) and may not be published as an ANS until further steps are taken by ASHRAE consistent with this decision.

Joint Appellants:

Represented by:

Dave Delaquila, National Propane Gas Association
Don Denton, Vent-Free Alliance Section of Hearth, Patio & Barbecue Association
Shannon Corcoran, American Gas Association

Respondent: ASHRAE

Represented by:

Stephanie Reiniche, ASHRAE
Paul Francisco, Champaign County Planning Commission and past chair of Standard 62.2

Hearing Date: September 17, 2024

Hearing Location: ANSI’s Washington D.C. Headquarters

ANSI Executive Standards Council Panel (ExSC Panel)

Kerri Haresign, CTA
Megan Hayes, NEMA
Tim Koczanski, Department of Defense
Monica Leslie, NSF International
Paul Olson, AWWA
Alton Sanders, Boeing
Paula Watkins, API, Chair

Observers

Tanisha Meyers-Lisle, ASHRAE
Ron Smith, Joint Appellants
Frank Stanonik, Joint Appellants
Ted Williams, Joint Appellants
Alice Yates, ASHRAE

ANSI

Anne Caldas, ANSI ExSC Secretary
Patricia Griffin, ANSI Sr. Vice President & General Counsel
Gail Matthews, ANSI Associate General Counsel
Jeffrey Smith, ANSI Outside Counsel
Kelly Smith, ANSI Legal Affairs
Jim Thompson, ANSI ExSC Recording Secretary

ANSI EXECUTIVE STANDARDS COUNCIL (ExSC) DECISION

1.0 Introduction

This decision is the result of a remand by the ANSI Appeals Board to the ANSI ExSC. A joint Complaint was first filed against ASHRAE on March 23, 2023; it was considered and dismissed by the ANSI Executive Standards Council (ExSC) on November 1, 2023 (ExSC 2023 Decision, Attachment A hereto). The Appellants filed an appeal with the ANSI Appeals Board which reversed and remanded the ExSC 2023 Decision in a decision dated February 13, 2024 (ANSI Appeals Board Decision, Attachment B hereto). In that decision, the Appeals Board posed a series of questions to the parties and directed the ExSC to hold a hearing. On September 17, 2024, after both parties were afforded the opportunity to address the questions posed in the ANSI Appeals Board Decision, the ExSC held an in-person hearing. Based on the entirety of the written record to date and the oral testimony given at the hearing, the ExSC finds for the Appellants. The basis for this decision is set forth below.¹

2.0 Background

The complaint alleges that ASHRAE, an ANSI Audited Designator², failed to follow its procedures and failed to satisfy ANSI's procedural requirements in connection with the development and approval of Addendum j, which was published in *ANSI Standards Action* for public comment on October 1, 2021. Addendum j includes an informative Foreword (not open for comment) that describes the proposed Addendum as follows, listing the references considered by the consensus body:

This proposed addendum prohibits the installation of unvented combustion space heaters within dwelling units. Unacceptable concentrations of products of combustion can be generated at the ventilation rates allowed in this standard when combustion appliances are unvented. This determination was made by the committee after several years of study and debate on this topic. Technical references that were considered by the committee in the process of arriving at this determination include, but are not limited to... [listing references]

Following this Foreword, just two provisions are identified for public comment:

¹ This decision summarizes the key oral and written arguments presented to the ExSC Panel. While this decision may not reference every argument or point made in connection with the appeal, the ExSC Panel had full access to and considered the complete record.

² See *ANSI Essential Requirements: Due process requirements for American National Standards* (www.ansi.org/essentialrequirements) section 5.0 *Normative policies and procedures for Audited Designators*. An Audited Designator is an ANSI-Accredited Standards Developer to whom the ANSI Executive Standards Council has granted the authority to designate their standards as American National Standards without such standards being reviewed and approved by the ANSI Board of Standards Review but such developer is subjected to additional audits.

Add the following to Section 3, Definitions:

combustion space heater: an appliance that is permanently installed within a space and intended to provide heating or decorative effects to that space through the direct combustion of a fuel.

Add the following new Section 6.4.3.

6.4.3 Unvented combustion space heaters shall not be permitted.

The entire focus of the Appellants' complaint and this appeal is the text associated with 6.4.3 – "unvented combustion space heaters shall not be permitted." While the parties devote considerable attention to whether and to what extent a so-called "white paper" improperly influenced the decision by the consensus body to adopt Addendum j,³ we find those issues irrelevant to the disposition of this appeal.

At its core, this case is instead about the process followed in developing a controversial addendum, including the disposition of an internal appeal on the subject at ASHRAE. Appellants' claim that ASHRAE violated multiple procedural requirements during the development of Addendum j, which, if published, would "prohibit the installation of an entire class of safe, reliable and highly energy-efficient gas-fired unvented appliances in any new or renovated dwelling that is compliant with the ASHRAE 62.2 Standard." *See ANSI Complaint to Appeal the Publication of Addendum "j" to ASHRAE Standard 62.2-2022. March 23, 2023. Page 2. (2023 Appeal to the ExSC).* For its part, ASHRAE maintains that there were no material violations of relevant procedures and that the addendum "does not exclude, prohibit, or ban the use of combustion heaters" but rather "identifies the requirement that must be met for combustion heaters to be installed in a dwelling unit and align with the standard's objective of maintaining acceptable indoor air quality." *See ASHRAE's Response to the Questions on Remand of the Joint Appellants ANSI Appeal of the Publication of Addendum j to ANSI/ASHRAE Standard 62.2-2022, April 10, 2024, page 3. (ASHRAE April 2024 Response).*

The procedural irregularities claimed by Appellants largely fall into three categories: (i) mistakes and oversights in the handling of ASHRAE's own appeals process; (ii) failure by ASHRAE to make *good-faith efforts* to harmonize Addendum j with another ANS in the development of Addendum j; and (iii) the presence of evidence demonstrating that Addendum j is unsuitable for national use, contains unfair provisions, and is contrary to the public interest. Appellants argue that these flaws, among others, resulted in a process in which their technical comments were not afforded due process, as expressly required by the *ANSI Essential Requirements*. Each of these issues is discussed, in turn, below.

³ Appellants alleged that a pivotal "white paper" circulated to the consensus body in 2020 was missing from the above-referenced Foreword and later added to the list after the fact. The Appellants claim that the technical "white paper" was a "game changer" in terms of the prohibition reflected in 6.4.3 and was not available to stakeholders outside of the consensus body, thus limiting the ability of the current Appellants from proposing an acceptable alternative. *See ANSI Appeals Board Complaint and Appeal on the Publication of Addendum "j" to ASHRAE Standard 62.2, December 15, 2023, pages 7-14. (Appeals Board Appeal).* While these issues are obviously disputed, those disputes do not impact the analysis herein.

3.0 Analysis

3.1 ASHRAE's Appeals Process Did Not Comply with ANSI's Requirements

Appellants first maintain that the standards developer-level appeals process implemented by ASHRAE in connection with Appellant Delaquila's⁴ appeal was flawed. Specifically, Appellants argue that ASHRAE implemented its conflict-of-interest (COI) procedures with the Appellant *after* the Appeals Panel was formed and a written decision was issued, rather than *before*. Second, Appellants maintain that the ASHRAE Appeals Panel failed to share with Appellant Delaquila a rebuttal to the appeal requested by the Panel and submitted by the ASHRAE committee chair overseeing the development of Addendum j (instead inviting an *ex parte* communication that excluded Appellant Delaquila) when doing so was not an option available to the Panel under sections B8.3 and B8.5 of ASHRAE's procedures. *See* ANSI Complaint to Appeal the Publication of Addendum "j" to ASHRAE Standard 62.2-2022, March 23, 2023, pages 20-24. (2023 Appeal to the ExSC).

For its part, ASHRAE concedes that it did not implement the COI process with Appellant Delaquila *prior* to the start of the appeals process and as a result has revised its procedures, as required by the 2023 ExSC Decision. ASHRAE argues that the COI concern was remedied by providing Appellant's post-decision COI claim to the Chair of the Panel who found that, since the Panelists (as opposed to the Appellant) were asked to declare if they felt they had a conflict of interest prior to the first meeting of the ASHRAE-level Panel, no conflict of interest exists. The Chair found that "[T]he votes were unanimous for each appeal and the conversation was not dominated or persuaded by any one panelist. Based on this, we would have the same outcome" even if the Panelist with the alleged COI were removed from the Panel. *See* ASHRAE April 2024 Response, pages 9-10. ASHRAE also concedes that rebuttals are typically provided to the Appellant prior to consideration of an appeal by the Appeals Panel and that, through staff oversight, it failed to provide such a rebuttal to Appellant in this case. ASHRAE maintains, however, that the Appellant would not have had the right to respond to the rebuttal at any time, and, therefore, the oversight did not result in any material harm to Appellants or affect the outcome of the appeal at ASHRAE.

The ExSC agrees with the Appellants that the delayed implementation of COI procedures and failure to provide the rebuttal document were material violations of ASHRAE's procedures and the *ANSI Essential Requirements*. As both an ANSI-Accredited Standards Developer (ASD) and an Audited Designator, this is a serious core non-compliance with ANSI's procedural requirements. Although ASHRAE confirms that it took steps to remedy the problems identified by the Appellant, albeit after the appeals decision was issued, the ExSC requires ASHRAE to implement the appeals process correctly to allow the Appellants full due process. Should Appellant Delaquila wish to renew an appeal at ASHRAE, then ASHRAE must implement its recently revised and reaccredited appeals procedures (2024), including the proper implementation of COI procedures *prior to* the formation and finalization of the ASHRAE-level Appeals Panel and share all appropriate documents in a timely manner.

⁴ ASHRAE explains that their procedures do not provide for joint appeals or joint conflict-of-interest claims. Mr. Delaquila, one of the joint Appellants at ANSI, is identified by name in connection with the ASHRAE-level appeal. *See* ASHRAE April 2024 Response, page 9.

3.2 Good-faith Efforts to Coordinate and Harmonize with Existing ANS are Required

Appellants next maintain that ASHRAE failed to engage in good faith efforts to harmonize Addendum j with another ANS. The *ANSI Essential Requirements* addresses expectations applicable to all ANSI-Accredited Standards Developers (ASDs), including those that hold the special status of ANSI Audited Designator, with respect to the need to coordinate and harmonize - in real-time - a proposed ANS with an approved ANS. Section 2.4.2 *Coordination/Harmonization* (Section 2.4.2) reads in part:

2.4.2 Coordination/Harmonization

ANSI-Accredited Standards Developers shall make a good-faith effort to resolve potential conflicts and to coordinate standardization activities intended to result in harmonized American National Standards⁵. A “good faith” effort shall require substantial, thorough and comprehensive efforts to harmonize a candidate ANS and existing ANSs. Such efforts shall include, at minimum, compliance with all relevant sections of these procedures⁶. Developers shall retain evidence of such efforts in order to demonstrate compliance with this requirement to the satisfaction of the appropriate ANSI body. (emphasis added)

Appellants maintain that such good faith efforts to harmonize should have happened with respect to another ANS, CSA Z21.11.2 *Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters* (“Z21 Standard”). They note that requirements for the class of product covered by the Z21 Standard (and prohibited by Addendum j) have existed since 1949 and were ultimately approved in the form of a standard in 1962 by the American Standards Association, ANSI’s predecessor. Appellants report that over the years industry representatives encouraged ASHRAE’s consensus body, SSPC 62.2, to engage with CSA, the sponsor of the Z21 Standard, to work together to understand and resolve issues on both sides, but they refused. See ANSI Appeals Board Appeal, page 5.

For its part, ASHRAE maintains that the standards are not in conflict as a combustion heater *is permitted* in proposed Addendum j *as long as it is vented* to exhaust contaminants to the outdoors. They explain that the committee reviewed the Z21 Standard and found that the difference in scopes and technical information on the product can produce unacceptable levels of contaminants of concern within dwelling units that otherwise comply with ASHRAE Standard 62.2. See ASHRAE April 2024 Response, pages 4-5. ASHRAE further maintains that, in any event, ASHRAE’s policy does not *permit* harmonization until a proposed standard is approved. It states that: “ASHRAE’s policy for submitting formal ASHRAE comments and/or change requests to incorporate in other standards or codes is that comments or change requests are only made to make the referenced standard or code consistent with a published ASHRAE standard, addendum, guideline or other official ASHRAE document.” ASHRAE commits to submitting a formal request to revise the Z21 Standard to align with Addendum j only if Addendum j is first approved and published. See ASHRAE April 2024 Response, page 5.

The ExSC finds that ASHRAE’s response is not in compliance with section 2.4.2 *Coordination and Harmonization*. All ASDs are required to “make a good-faith effort to resolve potential conflicts and to coordinate standardization activities intended to result in harmonized American National Standards”. Efforts to harmonize can take many forms (and may not be successful), but they must be

⁵ Note that clause 4.2.1.3.4 *Withdrawal for Cause* provides a mechanism by which a directly and materially interested party who has been or will be adversely affected by the ANS may at any time request the withdrawal of an existing ANS.

⁶ See, for example, clauses 2.1, 2.4, 2.5, 2.6 and 4.3.

genuine, timely and documented. We see little evidence in the record of any such efforts. And, if ASHRAE's accredited procedures (or ANS-related policies) in fact preclude such conversations, meetings, exchange of ideas/information and other efforts with a goal of harmonization and coordination, then ASHRAE is required to revise its accredited procedures in response to this decision to better align its procedures with the *ANSI Essential Requirements*. For every ANS, compliance with section 2.4 and good-faith efforts to coordinate and harmonize within the ANS process must be demonstrated throughout the standards development process.

3.3 Lack of a Persuasive Record that Addendum j is Suitable for National Use, in the Public Interest and Does Not Include Unfair Provisions

Lastly, Appellants claim that Addendum j is contrary to the public interest because it “would eliminate a viable and energy efficient consumer choice”. Appellants further explain that eliminating unvented heaters:

would make it more expensive for consumers to choose supplemental space heating in their homes, and perhaps not allow space heating at all if venting is not an option. And in this case, it would prevent consumers from having an emergency source of safe heat in the event of a power outage during severe weather in winter. It could potentially increase the cost of new home construction and reduce the ability of consumers to have a fireplace or other space heating options available to them.

See Joint Appellants rebuttal to ASHRAE's response to questions on remand as it relates to the joint appeal opposing the publication of Addendum “j” to ASHRAE Standard 62.2-2022, April 19, 2024, page 6. (Appellants' Rebuttal).

Appellants further assert that industry has argued against the unknown technical basis for banning the product at issue, stating among other things that “during the past 8 years, the 62.2 Committee has never once provided a single piece of empirical data or evidence that a properly installed unvented heater that complies with the current safety standard, ANSI/CSA Z21.11.2, operating in a 62.2 compliant space is exceeding its own criterion for acceptable indoor air quality.” They go on to note that such “criterion doesn't even exist in the standard 62.2” and that the 62.2 Committee:

stacked the most restrictive assumptions on top of each other to achieve its desired result. It used; (1) oversized heaters for the space, (2) emitting at maximum allowable emission rates, (3) operating continuously for many hours, (4) in a very tight space, (5) zero tolerance or failure, and (6) no consideration for temperature rise as an operational factor.

See Appellants' Rebuttal, pages 3-4.

ASHRAE responds that the approach taken in Addendum j is not new or unique and that the standard does not “suggest or implement a ban on the production, sale, or installation of combustion heaters”, rather the “requirement in the subject addendum prohibits unvented combustion heaters installation in any home that wants to meet ASHRAE Standard 62.2-2022. Installation of combustion heaters is still permitted in such homes, provided that they meet the minimum requirement of being vented (similar to how combustion water heaters and combustion forced-air furnaces are required to be vented to support public interests.)” *See* ASHRAE April 2024 Response, page 8.

The ExSC finds for the Appellants as the record presented does not reflect clear, consistent, and documented findings and a justification for Addendum j that was arrived at through a transparent consensus process. Instead, the record reflects a varied and complicated history of multiple proposals,

work groups, three addenda and related appeals (some successful) over some eight years. The Panel is concerned that without evidence of good-faith efforts to discuss, debate, coordinate and harmonize with potentially relevant provisions of a long-standing existing ANS – the Z21 Standard - Addendum j could unnecessarily limit consumer choice, contain unfair provisions and/or be unsuitable for national use.

4. Conclusion and Required Actions

After considering all of the arguments presented in the multi-level appeals record before the ANSI ExSC the Panel upholds the appeal. Addendum j to ASHRAE Standard 62.2-2022 is not approved as an American National Standard (ANS) and may not be published as an ANS at this time.

If ASHRAE wishes to pursue ANS status for Addendum j, ASHRAE must undertake and document several key steps: first, implement and document a new procedural appeals process, including a timely COI process, in accordance with ASHRAE's 2024 reaccredited procedures; second, if ASHRAE's accredited procedures (or ANS-related policies) preclude harmonization and coordination *during* the standards development process, then ASHRAE is required to revise its accredited procedures to better align with the *ANSI Essential Requirements*; third, undertake and document appropriate good-faith efforts to coordinate and harmonize proposed Addendum j with the Z21 Standard in light of the absence of any formal written or other communications in the current record; and fourth, document for consideration during the consensus process, the technical basis upon which Addendum j is based as the record does not clearly and convincingly show that Addendum j is indeed suitable for national use, contains no unfair provisions and is in the public interest.

Finally, the Panel directs the ANSI Audit Program to specifically assess and document compliance-related facts in connection with ASHRAE's upcoming Audit about the following: 1) procedural appeals administered by ASHRAE since ASHRAE's prior audit, to ensure that both the appeals process and COI process were fully, timely and properly implemented; and 2) as warranted, coordination and harmonization efforts were undertaken in connection with the development of the standards that are the subject of ASHRAE's next audit.⁷

⁷ This appeal also raises a number of questions concerning the fairness of the comment consideration process employed by ASHRAE. The *ANSI Essential Requirements*, however, provides broad flexibility with respect to the methods employed to consider and respond to comments submitted with a vote or in response to an ANSI public comment period. In addition, ANSI's rules do not require broad public circulation of the technical basis upon which every standard is developed. Further, an ANS consensus body is not required to vote on proposed responses to comments, rather every member of an ANS consensus body is required to be given an opportunity to vote in response to the recirculation of unresolved negative votes and comments (submitted with timely consensus body votes and public review comments), attempts at resolution and any substantive changes made to the draft since the last vote on or public review of the draft standard. *See* 2.6 Consideration of views and objections of the *ANSI Essential Requirements*, including all identified relevant sections. Accordingly, we do not find that ASHRAE violated its or ANSI's procedures in regards to comment consideration in this case. However, we find that ASHRAE's other procedural violations, as documented above, lead us to find for the Appellants.



Attachment A

November 1, 2023

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Ron Smith
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Dated Notice

Re: Dismissal of March 23, 2023 Complaint filed jointly against ASHRAE, challenging ASHRAE's approval of addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* as an American National Standard (ANS)

Greetings –

The Complaint alleges that ASHRAE, an ANSI Audited Designator¹, failed to follow its procedures and failed to satisfy ANSI's procedural requirements in connection with the development and approval of addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* (addendum j) as an American National Standard (ANS). The

¹ See *ANSI Essential Requirements: Due process requirements for American National Standards* (www.ansi.org/essentialrequirements) section 5.0 *Normative policies and procedures for Audited Designators*. An Audited Designator is an ANSI-Accredited Standards Developer to whom the ANSI Executive Standards Council has granted the authority to designate their standards as American National Standards without such standards being reviewed and approved by the ANSI Board of Standards Review but such developer is subjected to additional audits.

Complaint also asked that ASHRAE not publish addendum j as an ANS while this complaint process was pending and ASHRAE agreed.

A Panel² of the ANSI Executive Standards Council (ExSC) considered the Complaint in accordance with section 20 *ExSC Consideration of Complaints against ANSI Audited Designators* of the *Operating Procedures of the ANSI Executive Standards Council* (Section 20 - Attachment A) and finds that taken together, the Complaint and ASHRAE's responses to the ExSC's questions dated July 14, 2023 (Attachment B) and September 12, 2023 (Attachment C) (Responses), do not support a claim that ASHRAE violated its procedures with respect to ASHRAE's approval of addendum j. Accordingly, the Complaint is dismissed.

In its Responses, ASHRAE nevertheless agreed to clarify both its conflict of interest procedures (including the timing and effect of conflict of interest claims and decisions) and its appeals procedures, changes that the ExSC believes would improve ASHRAE's procedures overall. Accordingly, the Panel expects that ASHRAE will submit such procedural revisions for the ExSC's consideration within forty-five (45) calendar days of the date of this decision.

Notice of the Right to Appeal

Please be advised that this transmission via E-mail constitutes your official notification of the decision of the ANSI ExSC Complaint Panel.

Parties to the Complaint have the right to file an appeal of this decision with the ANSI Appeals Board. The applicable appeals procedures are included in section 11 of the *ANSI Appeals Board Operating Procedures*. Should a party choose to appeal to the ANSI Appeals Board, written notice of appeal and all appeals statements and documentation must be filed with the Secretary of the ANSI Appeals Board (the office of the undersigned) by **November 22, 2023**, and shall be accompanied by a filing fee in the amount of \$1,200.00. If a party is unable to provide the required appeals materials within the fifteen (15) working day deadline, an extension may be requested, with the grounds for such request noted. Such request shall be directed to me, as Secretary to the ANSI Appeals Board, within the fifteen (15) working day deadline or the party will forfeit the right to appeal. A complete copy of the *ANSI Appeals Board Operating Procedures* is attached to the E-mail that transmitted this decision.

Thank you for your attention to this matter. If I may be of assistance to you, please contact me at (212) 642-4914 or send an E-mail to acaldas@ansi.org.

Sincerely,
Anne

Anne Caldas
Secretary, ANSI Executive Standards Council

cc: ANSI Executive Standards Council
Patricia Griffin, ANSI Senior VP & General Counsel
Fran Schrotter, ANSI Senior VP & Chief Operating Officer

² In accordance with the *ANSI ExSC Operating Procedures*, a Panel of not less than five members of the ANSI ExSC may act on behalf of the ANSI ExSC.

Attachment A: Section 20 *ExSC Consideration of Complaints against ANSI Audited Designators of the Operating Procedures of the ANSI Executive Standards Council*

Attachment B: ASHRAE Response, July 14, 2023

Attachment C: ASHRAE Response, September 12, 2023

Attachment A

20 ExSC Consideration of Complaints against ANSI Audited Designators

If a formal complaint³ is lodged against an Audited Designator, and said complaint relates to whether or not the developer should remain ANSI-accredited or retain the status of Audited Designator, the Executive Committee of the ExSC, in their discretion, shall determine whether such a complaint should be processed in accordance with (a) through (f) below or section 19 *ExSC hearing of appeals of the Operating Procedures of the ANSI Executive Standards Council*.

All complaints shall be made in writing. Complaints and the required filing fee shall be directed to the secretary of the ANSI ExSC on or before midnight Eastern time of the due date. The filing fee may be waived or reduced only upon sufficient evidence of hardship.

If a formal complaint is lodged against an Audited Designator and the ExSC Executive Committee has decided not to implement section 19, and if (i) the complaint relates to one or more specific approved American National Standards and (ii) the complainant has completed the appeals process(es) available at the Audited Designator, the ExSC shall handle the complaint in accordance with (a) through (f) below.

- (a) Upon receipt of a formal complaint, the ExSC shall review the complaint.
 - 1) If the complaint has not been submitted to ANSI (i) within 30 days after the complainant completed the appeals process(es) and received the final determination of the complainant's appeal at the Audited Designator or (ii) otherwise within a reasonable time of the challenged action of the Audited Designator, the ExSC shall, unless there are compelling circumstances, dismiss the complaint.
 - 2) If the complaint does not (i) specifically allege that the Audited Designator violated any of its accredited procedures and that any related appeals decision issued by the Audited Designator was clearly erroneous, and (ii) provide sufficient substantiation of facts to support such allegations to establish a *prima facie* case, the ExSC shall dismiss the complaint.
 - 3) If the complaint is technical in nature or relates to the content of a standard, the ExSC shall dismiss the complaint.
- (b) If the complaint is not dismissed pursuant to (a), the ExSC shall send a copy of the complaint to the Audited Designator and request a response to the allegations in the complaint. The ExSC, in its discretion, may ask the Audited Designator either for a general response or, if the ExSC is concerned with only certain of the allegations raised in the complaint, it may request a more limited response only to those areas of concern.
- (c) Upon receipt of the response from the Audited Designator, the ExSC shall do one of the following:
 - 1) If it determines that the complaint and the response taken together do not support a claim that the Audited Designator has violated its procedures, it shall dismiss the complaint.
 - 2) If it determines that the complaint raises issues that merit further review, it shall refer the complaint with any special instructions to the audit team at the next regularly scheduled audit or take other appropriate action such as the scheduling of a hearing.
 - 3) If it determines that substantial and material reasons exist indicating immediate action may be necessary, it shall order an audit for cause or take other appropriate action such as initiating the withdrawal of accreditation or of the developer's Audited Designator status.
- (d) Any audit for cause shall be limited in scope to that which is necessary to reasonably investigate the complaint. Such audits, where appropriate, may be handled remotely, rather than through an on-site visit.

³ See section 19 for filing specifications.

- (e) Following any audit for cause, the Audited Designator shall receive a copy of the audit report and shall have the opportunity to provide a written response to the audit report. The results of any audit for cause and the response of the Audited Designator shall be reviewed by the ExSC, who shall determine what additional action, if any, shall be taken.
- (f) The standards developer shall have full notice and an opportunity to be heard before the ExSC implements any adverse action against the standards developer.
- (g) The ExSC's final action may be appealed to the ANSI Appeals Board.



Shaping Tomorrow's
Built Environment Today

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Stephanie Reiniche
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To: ANSI Executive Standards Council

From: Stephanie Reiniche, ASHRAE
Director of Technology
Connor Barbaree, Senior Manager of
Standards
Tanisha Meyers-Lisle, Assistant Manager
of Standards-Administration

Attachment B

Date: July 14, 2023

ASHRAE REBUTTAL TO JOINT APPEAL FROM MR. ERIC ADAIR, MS. SHANNON CORCORAN, MR. DAVID DELAQUILA, MR. DON DENTON AND MR. RON SMITH REGARDING ADDENDUM J TO ANSI/ASHRAE STANDARD 62.2-2022, VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS

EXECUTIVE SUMMARY

The development of the subject matter of addendum j to ANSI/ASHRAE Standard 62.2-2022 (prior addenda with similar technical subject matter referenced as addendum a and addendum c) began in 2014 and spanned over nine years and three versions of ANSI/ASHRAE Standard 62.2 (2016, 2019 and 2022). This time frame also included two separate appeals of addendum a. (See Attachment A). The consensus process on addendum j was finally concluded by the Standing Standard Project Committee (SSPC) 62.2 in June of 2022 and was submitted to the oversight bodies for process review and publication approval on September 23, 2022. On October 14, 2022, the ASHRAE Board of Directors (BOD) approved the publication of BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*. The Joint Appellants were notified of their right to appeal the BOD decision on October 18, 2022. (See Attachment B). The joint appellants filed their separate appeals¹ by the due date of November 7, 2022. No other unresolved objectors filed appeals at ASHRAE.

¹ ASHRAE's process allows only for individual appeals as rights to appeals are tied to the commenter.

After receipt of the appeal, the Appeals Panel Board was asked if there were any members who had a conflict of interest and therefore should not serve on the ASHRAE Panel². Of the 15-person Appeals Board, two members, Mr. Hoy Bohanon and Mr. William McQuade, recused themselves from serving on the Panel. (See Attachment B). After this process was complete, a random Appeals Panel was selected from the remaining members who indicated they had no conflict of interest. The selected Panel members then reviewed the appeals. After review, the Panel determined it could not make a decision given the initial information provided within the submitted appeals and the Panel requested a rebuttal statement from the Chair of the SSPC. Upon receipt of the rebuttal statement, the Appeals Panel reconvened to determine, after reviewing the written evidence presented by the appellants and the rebuttal statement provided by the Chair of the SSPC, whether the appeal should be dismissed without a hearing, upheld without a hearing, or adjudicated through a hearing. The Appeals Panel subsequently dismissed the appeal without a hearing.

The Appellants claimed during the ASHRAE appeals process that the SSPC for Standard 62.2 violated ASHRAE procedures during the development of addendum j to ANSI/ASHRAE Standard 62.2-2022. The ASHRAE Appeals Panel determined that the appeal should be dismissed on the account of finding no procedural violations during the development of addendum j to ANSI/ASHRAE Standard 62.2-2022.

ASHRAE’s Response to the Joint Appellants ANSI Appeal of the Publication of Addendum j to ANSI/ASHRAE Standard 62.2-2022

The Joint Appellants specifically highlight four major areas of concern in their appeal to ANSI:

1. ASHRAE did not follow the ANSI Essential Requirements (ER) Section 1.0 on openness and fairness and PASA 7.1 and ER Section 1.6 on consideration of views and objections.
2. ASHRAE lacked a good faith effort to respond to public commenters per PASA 7.4.6 and ANSI/ER 2.6.
3. ASHRAE did not follow its appeals procedures in PASA Annex B and ANSI’s ER 2.8.1.4.
4. Addendum j bans a class of gas-fired unvented appliances in new or renovated dwellings that are built in compliance with Standard 62.2-2022.

ASHRAE will first address the claims from the Joint Appellants and then respond to the specific questions presented by the ANSI Executive Standards Council.

Claim One: The development of this addendum does not comply with PASA 7.1 and ER 1.0, due process, openness, and fairness and ER 1.6 consideration of views and objections.

This technical subject matter (gas-fired unvented appliances) has been in open discussion and deliberation at ASHRAE for over nine (9) years with the effort beginning in 2014. This specific subject matter was also the subject of a previous appeal to ASHRAE under a different proposed change (formerly addendum a) to ANSI/ASHRAE Standard 62.2 that was upheld by the ASHRAE Appeals Panel due to procedural deficiencies at the SSPC level. Following addendum a, the SSPC pursued a

² ASHRAE has an Appeals Board that consists of 15 members but only the chair of the Board plus four additional members and two alternates serve on the Appeals Panel that decides the appeal.

compromise position through addendum *c*³, but ultimately, the SSPC voted to discontinue this addendum in accordance with ASHRAE procedures, in response to information presented by negative voters demonstrating technical deficiencies in the addendum. ASHRAE asserts that these past actions have been resolved. Appeals or complaints on those actions should have been brought forward to ANSI at that time and should not be part of this appeal; consideration of those actions as it relates to the processing of this proposed addendum *j* are a separate issue. However, ASHRAE will provide context on the development of addendum *a* and addendum *c* to demonstrate the amount of time spent on the subject matter of addendum *j*. ASHRAE would further note that the SSPC addressed the procedural deficiencies from the prior addendum *a* as part of the development of addendum *j*. A collaborative effort to determine the next steps on this technology has been back and forth throughout the entire timeframe that began in 2014 and what the appellants highlight in their appeal regarding little to no time or consideration being allotted to their views and objections is factually inaccurate. The claim that this process has not been followed, open, or fair are similarly baseless in nature.

For this specific addendum (proposed addendum *j* to ANSI/ASHRAE Standard 62.2-2022) the SSPC began its open process to consider views and objections by parties participating in the ASHRAE standards development process in August 2020. The SSPC spent the next two years developing what would become addendum *j*. The full SSPC and working groups met 16 times during this process, and at each open meeting process was followed and commenters, SSPC members and interested parties were given time and consideration of their views and objections on the subject addendum. At no point were individuals not granted the opportunity to participate and present to the SSPC on this subject matter. Similarly, all technical resources that were referenced by the SSPC, including the referenced whitepaper, were made available to those participating in the process (objectors or not). ASHRAE will note that there is no policy that requires the SSPC provide commenters with every technical resource that a consensus body relies on to propose changes to a standard. The guidance provided to consensus body is to give a summary of the technical resources utilized. The SSPC provided both a technical summary, the white paper⁴, and also included a listing of the technical resources relied on by the SSPC in the development in the forward of addendum *j*.

Within the SSPC deliberations for proposed addendum *j*, a slightly modified version of previously proposed addendum *c*, was resubmitted to the SSPC with Ms. Corcoran's public comment and was again considered by the SSPC, with ensuing debate. At the time, Ms. Corcoran was employed by AHRI. The revised solution posed by previously proposed addendum *c* was rejected based on continuing Indoor Air Quality (IAQ) concerns (technical issues and not process issues⁵). Two subgroups (working groups, WG#1 and WG#3 both explained with more detail in later claims) were then convened by SSPC 62.2 and led by

³ Addendum *c* was developed by an Ad Hoc group formed by the Standards Committee. Membership consisted of two members from the industry (Mr. Delaquila and Mr. Denton), two SSPC members and four Standards Committee members. The charge of this group was to provide process guidance to the SSPC and determine if a compromise could potentially be met and sent to SSPC 62.2 for consideration. This was a result of the Board of Directors not approving publication of addendum *a* and not providing any reasons.

⁴ The white paper is actually a technical article that was published in the ASHRAE Journal. This was not a journal article as technical articles have different requirements. This will be explained further in the responses to the ANSI ExSC questions.

⁵ Note ASHRAE only allows for appeal submissions based upon process violations.

industry representatives⁶ including a staff member of AHRI⁷ and Mr. Delaquila, one of the joint appellants. These groups were charged with trying to forge a compromise alternative to proposed addendum *j*. Both WG#1 and WG#3 considered multiple iterations of previously proposed addendum *c* (referred to as the compromise addendum) in search for a workable compromise, but no acceptable solutions outside of the proposed addendum *j* were identified, and WG#1 and WG#3 were each disbanded by their industry chair of their own accord. As part of the efforts to provide an inclusive consensus environment, the SSPC solicited the industry for data during their discussions on the technical topic, and the industry representatives (objectors to the proposed addendum) presented data to the SSPC. At each junction in the process, objectors were given due consideration, and efforts were made to resolve their objections. As the ExSC will see in subsequent sections of this response, the procedures were followed, with great efforts to resolve objections to the proposed addendum *j*.

The actions described above meet the requirements of ANSI ER 1.0 and 1.6. The commenters and SSPC members were given the opportunity to present their position and its basis, have their position considered and appeal if adversely affected. The objectors were able to submit comments and replies to responses, address the SSPC, address the Standards Committee, address the Board of Directors and appeal. The objectors were unable to convince the SSPC members to change their minds on the technical content in the addendum.

For the reasons above, ASHRAE respectfully requests that the ANSI ExSC deny this claim.

Claim Two: The project committee did not demonstrate a good faith effort to respond to objections and violated PASA Section 7.4.6 and ANSI ER 2.6.

During the entire development timeline for addendum *j* to ANSI/ASHRAE Standard 62.2-2022, ASHRAE's Procedures for Standards Actions (PASA) and the ANSI Essential Requirements (ANSI ER) were followed. As previously stated, this started with addendum *a* (same subject) in 2015. During the summer of 2020, SSPC 62.2 began to discuss the development of what would later become proposed addendum *j* to ANSI/ASHRAE Standard 62.2-2022. During these SSPC meetings, the joint appellants were invited to present their positions to the SSPC, those who chose to be present were involved in the discussions that took place on proposed addendum *j*. ([See Attachment C](#)).

The SSPC voted to recommend the draft addendum *j* for publication public review at their June 23, 2021, web meeting and subsequently completed the continuation and recirculation ballot process. The SSPC responded to all negative votes with objections on the publication public review vote as shown in the marked-up voting roster in [Attachment D](#). After complying with the voting procedures for standards actions as outlined in PASA, the draft was subsequently approved for publication public review by the Standing Project Liaison Subcommittee (SPLS) per ASHRAE's procedures. The public review of the draft addendum was announced at ANSI and in ASHRAE's Standards Action and was posted for public review on ASHRAE's online comment database. The draft began public review on October 1, 2021, and closed on October 31, 2021.

The SSPC received 53 comments from 37 different commenters and began working to resolve

⁶ Note industry representative means those that represented the interest of the gas-fired unvented appliances.

⁷ This is where Ms. Corcoran was previously employed. At the time the working groups were established Ms. Corcoran changed employers.

commenters and develop responses to the commenters at their December 2, 2021, web meeting. The appeal alleges a lack of good faith effort to hear and resolve comments referencing the requirements for due process under PASA Section 7.4.6. However, the December 2, 2021, web meeting was convened for the sole purpose of seeking input from commenters to Addendum *j*, exploring opportunities for resolution, and soliciting input from the committee regarding what direction the committee should pursue to process the comments. All commenters were invited to attend this web meeting. (See [Attachment E](#)). To process comments efficiently and give all commenters an opportunity to address the SSPC, the comments were carefully reviewed prior to the meeting with the objective of identifying common themes to group together on the agenda for discussion. During the meeting, commenters who present were given time to speak to the various themes in their comments. Organizing the material this way helped to avoid duplicate testimony, and extra time was provided to each commenter requesting it.

At the December 2021 meeting, after listening to and interacting with the unresolved commenters, the SSPC then considered three options with respect to the proposed addendum *j*: discontinue, modify, or continue without modification. The first option, discontinue, was rejected by an SSPC vote of 14-4, which made it clear that the SSPC did not want to pursue this option. The second option, modify, was naturally aligned with accepting one or more comments. The third option, continuing without modification, would ultimately necessitate rejection of all comments that asked for modification or discontinuation. Based on the closely split vote, 10-9 in favor of continuing without modification, two workgroups, WG#1 and WG#2, were formed to develop proposals to either modify the addendum or reject comments and proceed to publication with knowledge of unresolved objectors. One working group (WG#1) would propose a modification to addendum *j* and the second (WG#2) would draft responses to commenters⁸ for the SSPC to consider that would include a recommendation to approve publication without modification and with knowledge of unresolved objectors. An industry representative of AHRI⁹ (not Ms. Corcoran, the joint appellant, but Mary Koban a co-worker of the appellant), the organization that submitted the modified version of previously proposed compromise addendum *c* as an alternative to proposed addendum *j*, was asked to chair the compromise and modification workgroup (WG#1) in order to give it the best chance of success. Ultimately, each group would have the opportunity to present their work to the full SSPC (consensus body) for consideration, thereby encouraging the continuation of debate, supporting due process, and aligning with ASHRAE's PASA requirements specifically Section 7.4.6.

The SSPC met next in January of 2022 and continued the process of consideration of comments and objections to proposed addendum *j*. With no alternative language presented by WG#1 as the WG was unable to develop a proposal, WG#1 was disbanded by the AHRI industry representative, the SSPC decided to reject the comments and recommend publication of addendum *j* with knowledge of unresolved objectors. Negative commenters were given a second opportunity to address the SSPC. (See [Attachment E](#).) The SSPC Chair again organized the agenda so that the related themes of comments were grouped together for discussion. The SSPC explored and discussed several opportunities for resolution and subsequently approved the SSPC responses to comments for posting in the online

⁸ Note for ASHRAE response to commenters means a written response plus a recommendation to accept, accept in principle, reject except as noted, reject, deferred out of scope, more information is needed or deferred late.

⁹ Note ASHRAE procedures state the comment belongs to the commenter and not to the organization for which the commenter works. While AHRI is listed here it is to indicate the same company for which Mr. Cochran is employed

comment database and sending to the commenters. All actions were conducted in accordance with ASHRAE's PASA. The deadline for commenters to indicate if they were resolved or unresolved was a thirty-day period that began on February 2, 2022, and had a reply to deadline of March 2, 2022¹⁰.

In March of 2022, with approval and encouragement from the SSPC 62.2 chair, another workgroup (WG#3) was convened and led by David Delaquila (one of the joint appellants) to again attempt to identify and propose alternatives to proposed addendum j. This workgroup met April 5, April 29, and May 17 of 2022. WG#3 tried to develop an alternative proposal to proposed addendum j that would resolve negative commenters in compliance with PASA Section 7.4.6. Participation included development of a spreadsheet with calculations to help identify multiple solutions that would provide acceptable IAQ. Ultimately, the solutions that were considered to provide acceptable IAQ were not acceptable to industry participants. WG#3 was disbanded on May 23, 2022, by Mr. Delaquila without identifying an alternative solution.

At the SSPC's hybrid summer meeting in Toronto, Ontario in June of 2022, the SSPC continued to make progress on attempting to resolve negative committee voters and unresolved commenters on proposed addendum j. Unresolved commenters and negative committee voters with reason were given time during the meeting to express their concerns to the SSPC, the SSPC asked questions of the objectors, and the objections were given due consideration in accordance with ASHRAE's PASA. After hearing from unresolved objectors, the SSPC voted to recommend addendum j for publication with knowledge of unresolved objectors¹¹ with a final vote after all continuation and recirculation letter balloting of 19-3-2-2-4, (Yes, No, No without comment, Abstain, Not returned).

Throughout this effort, the SSPC made every effort to resolve objections in responding to the objections, including the objectors as collaborators in potential solutions for resolutions, reviewing materials submitted by the objectors as part of their comments or negative votes with reason, and inviting them to the SSPC meetings to address the SSPC. The SSPC complied with ASHRAE and ANSI procedural requirements.

ASHRAE asserts that the actions outlined above meet the requirements of both PASA 7.4.6 and ANSI ER 2.6 that requires prompt consideration of comments, efforts to resolve those comments, and written responses to comments. In addition, all the information was provided to the consensus body (SSPC 62.2) prior to the vote for publication with knowledge of unresolved objectors.

ASHRAE respectfully requests that the ANSI ExSC deny this claim.

Claim 3: ASHRAE did not comply with its Appeals Process

A. PASA Annex B7.4 Conflict of interest.

The appellants state that ASHRAE did not follow the procedures as outlined in PASA annex B, however the application of the relevant section of the annex are taken out of context and out of order in terms of ASHRAE's appeals process. Section B7.4 of PASA Annex B states:

¹⁰ ASHRAE process defaults to a 30-day time period for commenters to reply and indicate their resolution status to consensus body responses to commenters.

¹¹ Note: Objectors include unresolved commenters and negative voters that provided a reason.

“B7.4 Conflict of interest

A member of the ASHRAE Appeals Board shall act at all times in a manner that promotes confidence in the integrity and impartiality of ASHRAE’s processes and procedures and should avoid a conflict of interest or the appearance of a conflict of interest in connection with all ASHRAE Appeals activities. Should the Appeals Board Chair have a conflict of interest with any appeal he/she shall select another member of the Appeals Board to serve in his/her place with respect to consideration of that appeal.

If a materially affected party (either the appellant or the respondent) asserts that it believes a member of the ASHRAE Appeals Board has a conflict of interest, that materially affected party is required to state the reason(s) for its belief. That information shall then be forwarded to the member of the ASHRAE Appeals Board identified as having a possible conflict for that person’s response. If that member disagrees with the assertion, then the Chair of the ASHRAE Appeals Board shall make a final determination as to whether a conflict of interest exists.

Members of the ASHRAE Appeals Board who are disqualified from a particular discussion shall not participate in the arguments, deliberations or decisions.”

As per the procedures, Mr. Delaquila,¹² identified a member of the ASHRAE Appeals Board as potentially having a conflict of interest and provided a reason for this assertion. ASHRAE concedes this was done after the decision was issued. In accordance with ASHRAE’s procedures this identification was provided to the Chair of the ASHRAE Appeals Board for consideration. In the correspondence as shown in [Attachment F](#) the ASHRAE Appeals Board Chair, Julian Keen, asserted, *“I have no reason to believe Roger Hedrick brought bias to the decision-making process. Based on the fact that the panelists were asked to declare if they felt they had a conflict prior to calling the first meeting of the panel, I have to believe that he does not think the conflict exists. The votes were unanimous for each appeal and the conversation was not dominated or persuaded by any one panelist. Based on this, we would have the same outcome even if were to remove Roger from the panel. I feel confident in the work conducted by the Appeals Panel.”*

In ASHRAE’s procedures, it is clear that the Chair of the ASHRAE Appeals Board makes the final determination as to whether a conflict exists and in this instance the Chair determined that there was not a conflict of interest. ASHRAE concedes that it is better to provide an opportunity for claims of conflict to come at the beginning of the process and has created a checklist that will modify its process to include this step in the future. (See [Attachment G](#)). ASHRAE contends that the actions taken in this case did not cause the joint appellants¹³ harm, as no conflict of interest was identified.

ASHRAE respectfully requests that the ANSI ExSC deny this claim.

B. PASA Annex B8.3 to B8.5

The appellants state that ASHRAE did not follow the procedures as outlined in PASA Annex B, however the application of the relevant sections of the annex again are taken out of context and out of order in

¹² Mr. Delaquila referenced a collective we in his email correspondence. However, ASHRAE does not have a process for joint appeals or submitting joint allegations of conflict-of-interest claims. Comments and appeals belong solely to the submitter.

¹³ As previously noted, this was only alleged by Mr. Delaquila.

terms of ASHRAE's appeals process. PASA Sections B8.3 and B8.5 read as follows:

"B8.3 Panel Consideration of Adjudicating the Appeal Without a Hearing

The Appeals Panel shall decide if the appeal shall be dismissed without a hearing. The Appeals Panel Chair or the Chair's designee shall notify the ASHRAE President, the Appellant and the chair of the cognizant PC in writing of the decision. Non-compliance with Section B5 or lack of grounds for an appeal may be reasons for dismissal.

B8.5 Rebuttal

If the Panel determines that the action is not to be dismissed, a rebuttal of the written statement of appeal, shall be submitted to the MOS by the Chair of the Standards Committee or his/her designee, or the Chair of the PC or his/her designee. The MOS shall distribute it to the Appeals Panel and to the Appellant. The rebuttal, from the Respondent(s) shall be due within 15 working days of the date on the letter of notification. The Chair of the Appeals Panel may grant an extension if requested prior to the close of the initial 15 working day period and if sufficient justification is provided. The rebuttal statement shall be sent to the MOS, who shall distribute it to the Appellant and the Appeals Panel. The Appeals Panel has the authority to announce a hearing schedule at the time the rebuttal is requested or wait until after the rebuttal is received."

Upon receipt and review of the appeal, the Appeals Panel determined that it would not grant an outright dismissal per PASA Annex B3 but that a rebuttal from the SSPC Chair would be needed to decide if the Appeals Panel could issue a decision with or without a hearing. Upon review of the appeals and the rebuttal from the SSPC Chair, ASHRAE's Appeals Panel determined that the appeal would be dismissed without a hearing. The joint appellants note that the Manager of Standards is required to distribute the rebuttal from the respondent, however ASHRAE's procedures do not designate when this rebuttal would need to be provided to the appellant. ASHRAE admits it is typically done before a decision is issued or a hearing scheduled. The Appellants also assume that they are given an opportunity to respond to the rebuttal in writing, which is not the case. ASHRAE's process does not allow for response to a rebuttal. The only time that an appellant can reply to a rebuttal is if there is a hearing, at which time, it would be part of the presentation made by the appellants to the Panel. ASHRAE argues that it did not violate its procedures as written in PASA Sections B8.3 and B8.5 as asserted by the appellants.

As a result of the confusion in this process. ASHRAE has proposed changes to its procedures to indicate when rebuttals are distributed. ASHRAE welcomes suggestions to these proposed changes¹⁴ from the ANSI ExSC ([See Attachment H](#)) as part of its decision.

ASHRAE respectfully requests that the ANSI ExSC deny this claim.

Claim 4: Violation of ANSI ER 1.8

The appellants assert that the technical issue was not afforded due process. However, as previously asserted in the appeal, this is factually inaccurate. During the entire development timeline for the subject matter that resulted in addendum *j* to ANSI/ASHRAE Standard 62.2-2022 ([See Attachment A](#))

¹⁴ ASHRAE is prepared to have the revisions approved through its process pending any potential feedback in the ANSI ExSC's decision.

ASHRAE's Procedures for Standards Actions (PASA) and the ANSI Essential Requirements (ANSI ER) were followed. Even if the time that it took to develop addendum *a* and compromise addendum *c* wasn't taken into account, this addendum was in development for two years. As previously stated above, during the summer of 2020, the SSPC began to discuss the development of what would later become proposed addendum *j*¹⁵ to ANSI/ASHRAE Standard 62.2-2022. During all these SSPC meetings, the joint appellants were invited to participate and, if present, were involved in the discussions that took place on proposed addendum *j*.

The SSPC voted to recommend the draft for publication public review at their June 23, 2021, web meeting that also included a continuation and recirculation letter ballot per PASA 7.2.7. The SSPC responded to all negative votes with reasons on the publication public review vote as shown in the marked-up voting roster. (See Attachment D). After complying with the voting procedures for standards actions as outlined in PASA, the draft was subsequently approved for publication public review by the Standing Project Liaison Subcommittee (SPLS) per ASHRAE's procedures. The availability of the draft addendum was posted for public review in ASHRAE Standards Action and ANSI's Standard Action and posted on ASHRAE's online comment database. The draft addendum began public review on October 1, 2021, and closed on October 31, 2021. (See also prior claims.)

Upon the close of the public review, the SSPC received 53 comments from 37 different commenters and immediately began working to resolve commenters and develop responses to the commenters at their December 2, 2021, web meeting. The joint appellants allege a lack of good faith effort by the SSPC to hear and resolve comments referencing the requirements for due process under PASA Section 7.4.6. However, the December 2, 2021, web meeting was convened for the sole purpose of seeking input from commenters to Addendum *j*, exploring opportunities for resolution, and soliciting input from the SSPC regarding what direction the SSPC should pursue to process the comments. (See Attachment E). To process comments efficiently and give all commenters an opportunity to address the committee, the comments were carefully reviewed prior to the meeting with the objective of identifying similar comment issues. The comments were grouped on the agenda into several common issues. During the meeting, commenters were given time to speak to the various issues in their comments. Organizing the material this way helped to avoid duplicate testimony and extra time was provided to each commenter requesting it, including Mr. Delaquila, an appellant.

As previously indicated above in claim two, SSPC considered three options for handling the proposed addendum *j*: discontinue, modify, or continue without modification. The proposal to discontinue was rejected by an SSPC straw poll with a vote of 14-4, which made it clear that the SSPC did not want to pursue this option. The second option, to modify, aligned with what was requested by the joint appellants and the third option, continuing without modification, aligned with rejecting most comments and ended in a split straw poll vote of 10-9 in favor of continuing without modification. The joint appellants are correct these motions weren't sent out for continuation ballots because the intent was for these to be straw polls to determine what the SSPC members were thinking the path should be. As a result of these straw polls, two workgroups were formed to pursue proposals for the two remaining options (modification or rejection). As indicated earlier, Working Group One (WG#1) was assigned the task of proposing a modification of the addendum and the second working group (WG#2) was to propose responses to commenters for the SSPC to consider along with a motion for publication with

¹⁵ Note ASHRAE does not put letter designations on draft changes to Standard 62.2 until the committee votes it for publication public review.

knowledge of unresolved objectors. An industry representative of AHRI¹⁶ was tapped to chair the compromise and modification workgroup, WG#1, in order to give it the best chance of success. Ultimately each group would have the opportunity to present their work to the full SSPC aligning with ASHRAE's procedures for standards action requirements specifically PASA Section 7.4.6.

At the SSPC meeting in January of 2022, the process of consideration of comments and objections to proposed addendum j continued. With no alternative language (the group was unable to reach consensus) presented by WG#1, and with WG#1 disbanded by the AHRI industry representative, the SSPC considered the alternative option to modifying proposed addendum j which was to proceed with the recommendation for publication and the rejection of comments. Unresolved commenters were given a second opportunity to address the SSPC. This included allowing members of the SSPC to ask questions of the commenters. The SSPC reviewed the common comment themes, explored several opportunities for resolution, and approved SSPC responses to be posted in the online comment database. All actions were conducted in accordance with ASHRAE's Procedures for Standards Action. As stated previously, the commenters were given from February 2, 2022, to March 2, 2022, to indicate whether or not the SSPC response resolved their comments.

In March of 2022, with approval and encouragement from the SSPC 62.2 chair, another workgroup, WG#3, was convened and led by Dave Delaquila (one of the joint appellants) to identify alternatives to proposed addendum j. WG#3 consisted of industry representatives and committee members. WG#3 met April 5, April 29, and May 17 of 2022. WG#3 tried to develop an alternative proposal to proposed addendum j that would resolve negative commenters in compliance with PASA Section 7.4.6. During those meetings, WG#3 developed a spreadsheet with calculations to help identify multiple solutions that would provide acceptable IAQ. Ultimately, the solutions that were proposed and considered by WG# 3 to provide acceptable IAQ were not acceptable to industry participants. WG#3 was disbanded on May 23, 2022, by Mr. Delaquila without identifying an alternative solution.

At the SSPC meeting in Toronto, Ontario in June of 2022, the SSPC continued to make progress on attempting to resolve negative committee voters and unresolved commenters on proposed addendum j. Unresolved commenters and negative SSPC voters with reason were given time to express their concerns to the SSPC and were given due consideration in accordance with ASHRAE's procedures for standards action. The SSPC voted to recommend addendum j for publication with knowledge of unresolved objectors with a final vote after all continuation and recirculation letter balloting of 19-3-2-2-4, (Yes, No, No without comment, Abstain, Not returned). (See Attachment I).

Throughout this process, the SSPC made every effort to resolve objections in responding to the objections, including the unresolved objectors (including the joint appellants) as collaborators in potential solutions for resolution, and complied with ASHRAE and ANSI procedural requirements.

ASHRAE respectfully requests that the ANSI ExSC deny this claim.

ASHRAE Counter Claim 1: Submittal of the Letters of support from non-parties to the appeal.

While ASHRAE is appreciative of the supportive letters from non-parties to the appeal, ASHRAE requests that these letters be excluded from consideration by the ANSI ExSC. John Phillips, Kerry Leason, Brian

¹⁶ The previous employer of Ms. Corcoran. While the comments are tied to Ms. Corcoran, they did represent the opinions of AHRI.

Vandrak, Charlie Olds, and Peter Baker were all unresolved objectors that were offered the right to appeal at ASHRAE. None of those individuals chose to submit an appeal at ASHRAE, and so their letters of support should not be allowed as part of this appeal. Aside from the individuals listed above, none of the other individuals that submitted letters of support submitted comments on the draft addendum. Allowing these letters to be part of the current appeal would be inappropriate because none of those individuals have completed the process at ASHRAE as is required before submitting an appeal to ANSI. In addition, none of these letters were submitted as part of any of the Joint Appellants appeals at ASHRAE and, therefore, is new information, which should not be allowed here.

ASHRAE respectfully requests that the information contained in these letters not be considered as part of its deliberations for the reasons stated above.

Specific Questions from ANSI ExSC

ASHRAE would like to thank the ANSI Executive Standards Council for asking additional clarifying questions so that ASHRAE can provide additional information to assist in rendering a decision. Please see the answers to the questions in more detail below.

(1) Please address the issues raised by the joint Complainants concerning alleged irregularities in ASHRAE’s appeals process. Please also address whether (and if so what) related changes in ASHRAE’s implementation of its appeals procedures or revisions to its written appeals procedures are planned.

As provided in the Executive Summary, separate appeals were received from the joint appellants and were due by November 7, 2022. An Appeals Panel was formed after ensuring compliance with PASA B8.4, Conflict of Interest, and B8.2, Ineligible Panel Members. After all Appeals Board members indicated whether they were able to serve (including indicating if there was any potential conflict), a Panel of five voting members (including the Appeals Panel Board Chair) and two alternates were randomly assigned to the Panel. The Appeals Panel subsequently met via conference call to review the documentation submitted by the appellants. After reviewing the documents, the Appeals Panel requested that the SSPC Chair provide a rebuttal to determine if a hearing on the matter would be called per PASA B8.3.

Upon receipt of the rebuttal, the Appeals Panel reconvened to review all the appeals and the rebuttal. The Appellants are correct that the ASHRAE Appeals Panel dismissed all the appeals without a hearing. Per PASA Section B8.3, Panel Consideration of Adjudicating the Appeal Without a Hearing, “the Appeals Panel shall decide if the appeal shall be dismissed.” The section indicates that non-compliance with Section B5 or lack of grounds for an appeal may be reasons for dismissal. Nothing in section B8.3 limits the reasons for a dismissal of an appeal; it only includes sections that may also be considered as a reason for the dismissal. After reviewing all the separate appeals from the Joint Appellants, the Appeals Panel determined that a hearing was not necessary as is allowed by PASA section B8.3. It was after the issuance of the decision that the appellants were provided a copy of the SSPC Chair’s rebuttal. However, since the Appeals Panel did not conduct a hearing there was no harm to the joint appellants. ASHRAE’s appeals process does not include an opportunity for the appellants to submit additional information in response to the rebuttal unless the Appeals Panel has questions. After reviewing the material from the joint appellants and the SSPC Chair, the Appeals Panel had no additional questions and ruled under

PASA B8.3 to dismiss the appeal without a hearing.

The joint appellants are correct that ASHRAE did not ask the appellants if any of the members of the Appeals Panel should be removed due to a perceived conflict of interest. Only one appellant, Mr. Delaquila, submitted an alleged conflict of interest against one of the Appeals Panel members after receiving the final decision. ASHRAE staff immediately sent that information to the Chair of the Appeals Panel asking for review and asking if a new Panel should be formed. Per PASA B7.4, the Appeals Panel Chair determined that Mr. Delaquila's request did not cause a conflict of interest.

ASHRAE will be proposing revisions to our appeals process in PASA Annex B in order to greater clarify ASHRAE's current practice of distributing the rebuttal from a given respondent in future appeals and how that correlates with the dismissal of an appeal. The planned revisions will clarify ASHRAE's current practice of conflict-of-interest identification in order to reflect the current best practices in place for our process. In addition, there will be revisions made to clarify the requirements for asking the appellants if there are any Appeals Panel members that pose a conflict of interest. ASHRAE asserts that it did not violate its procedures outlined in PASA Annex B. As noted previously, ASHRAE, will be revising its procedures (See attachment H) to provide clarification to the timing and chronology of sharing the rebuttals and requesting appellants to indicate if there is a conflict of interest of any of the Appeals Panel members. However, ASHRAE would argue that these irregularities did not cause harm to any of the appellants and ASHRAE should be directed to revise its procedures to protect against this in the future.

(2) Please explain why information, e.g., the “technical white paper” identified by the Complainants as the basis upon which decisions of the consensus body were made, was not made available to stakeholders during the consensus process so that they could meaningfully respond/provide counter information. Is there an ASHRAE policy or procedure that addresses the availability of such information/documentation? If so, please provide a copy or point to the provision in ASHRAE's accredited procedures that applies.

To avoid confusion ASHRAE will continue to reference the document from the joint appellants as the white paper but what was ultimately produced was a technical feature in the ASHRAE journal. This is significant as the rules for a technical feature are different. This will be explained further below.

It is important to note that the white paper was just one of many sources that the SSPC referenced in their deliberation of this technical subject. All deliberations of this subject were in compliance with ASHRAE's procedures for standards action and the ANSI essential requirements. The white paper was referenced in the committee responses to the negative commenters through the ASHRAE Online Comment Database as one of 20 references that were considered in the development of proposed addendum j. Each commenter was provided with a response that addressed their comment and referenced a supplemental document (See Attachment J) summarizing the committee's technical approach in arriving at proposed addendum j. This document provided the following reason supporting the SSPC's determination that acceptable Indoor Air Quality could not generally be readily achieved when unvented combustion heating appliances are operated in 62.2-compliant dwelling units. There is

no requirement in ASHRAE's procedures that all technical material relied on by a consensus body must be provided to commenters. That would be cost prohibitive for ASHRAE to develop standards. The best practice that is followed is for the consensus body to provide a summary of the technical basis, which was provided in response to commenters on addendum *j*, as shown in Attachment J. Following publication of the white paper, the SSPC provided additional supplementary information to each commenter citing the published article.

The only rules related to dissemination of white papers that have been submitted to ASHRAE for publication fall under the purview of ASHRAE's publications department and not the standards section. Specifically, for a white paper to be published at ASHRAE it cannot have been published in another venue, but it also requires a blind peer review. If the draft is shared prior to the peer review being complete it could potentially get published or discussed by others and reduce the pool of potential reviewers.

The reference to the white paper is a little bit misleading because what was actually produced was a technical feature and not a technical article. The joint appellants site the email from the ASHRAE editor:

"Mr. Delaquila, "The only requirement for submission of a technical article in ASHRAE Journal is that the article not be published in another publication prior our publication. We do not restrict the transfer of technology content prior to publication. In other words, after a manuscript is submitted to us, we expect the author to not distribute the same article to another publication. We want to be the first to publish, but we don't (and can't) restrict content dissemination on any given topic."

Again, this response is for generic articles and not technical features (aka white papers). The delay in sharing the technical feature was a result in delays by the reviewers, which may or may not have included any of the joint appellants. Standards staff lacks the means to determine the individuals who conduct the reviews, as this would undermine the value of the white paper process.

The published white paper provided a peer reviewed analysis and estimate of concentrations of contaminants of concern associated with operation of unvented combustion heating appliances in 62.2-compliant dwelling units. Prior to the white paper, the SSPC had been leaning toward modifying the standard to limit the capacity of unvented combustion equipment, but the white paper demonstrated that the capacities that the committee was considering were still likely to generate contaminants of concern at concentrations that were too high to maintain minimum acceptable indoor air quality. Lower capacities were previously considered by the committee but were rejected by industry representatives as unrealistic. Following the release of the white paper to the SSPC, the SSPC tried again to reach a compromise that could maintain acceptable IAQ.

The committee considered all options for resolution presented by commenters and convened two working groups of diverse opinions both led by industry representatives (including one of the joint appellants). The workgroups, WG#1 and WG#3 were charged with identifying compromise solutions that

could maintain acceptable IAQ. WG#1 and WG#3 were disbanded by their industry representative leaders after failing to reach a compromise.

Following publication of the white paper in the ASHRAE Journal, commenters were provided with approximately six weeks to analyze the article (white paper) and prepare responses/objections for the committee at their June 2022 meeting. This amount of time was approximately one and a half (1.5) times as long as a typical public review period for ASHRAE addenda and provided a generous window for negative commenters to develop and present information that could change the trajectory of proposed addendum j. PASA Section 7.4 stipulates requirements for openness in achieving due process. PASA's definition for due process requires that "any person with a direct and material interest in a Standard or Guideline has a right to participate by (a) expressing a position and its basis, (b) having that position considered, and (c) appealing if adversely affected." Each of these requirements were met in handling the white paper. This resulted in the committee pursuing publication of addendum j with knowledge of unresolved objectors.

Furthermore, it is important to mention that if the joint appellants possess additional technical justification that warrants further modifications to Standard 62.2 concerning unvented space heaters, they may submit it as a continuous maintenance proposal.

(3) Please explain why certain annexes that the joint Complainants argue lacked support or consensus were advanced while another that allegedly was supported, was abandoned?

In compliance with ASHRAE's Procedures for Standards Actions and the ANSI Essential Requirements consensus, SSPC 62.2 considered several alternative solutions to addressing the IAQ concerns associated with operation of unvented combustion space heaters in 62.2-compliant dwelling units. One of these potential solutions was proposed addendum c during the 2019 continuous maintenance cycle of ANSI/ASHRAE Standard 62.2. This proposed compromise came out of the development of addendum *a* and an Ad Hoc formed by the Standards Committee. While this is indicated as a compromise it should be noted that this wasn't developed by all in the industry nor by a large number of members from the SSPC. Collaborators on the proposal included Mr. Delaquila, Mr. Don Denton, four members of Standards Committee (oversight body), the Chair of the SSPC and one other member of the SSPC. This group agreed that addendum c was a compromise and agreed to present it to the full SSPC for consideration. Feedback wasn't sought from the full industry or the SSPC until the compromise was presented.

Addendum c was viewed as a compromise addendum and was originally approved by a supermajority of the SSPC with the vote to approve for publication public review tallying 20-6-3-0; yes, no, abstain, not returned. Prior to the publication public review, however, the SSPC became aware of new information demonstrating that unacceptable concentrations of pollutants could result from operation of unvented combustion space heaters complying with proposed addendum c. After considering this new information, the SSPC voted to discontinue proposed addendum c. This motion was also approved per PASA by a vote of 20-3-3-4; yes, no, abstain, not returned.

Within the SSPC deliberations for proposed addendum j, a slightly modified version of previously proposed compromise addendum c, was resubmitted to the SSPC within AHRI staff's public comment

and was again considered by the SSPC with ensuing debate. The modified solution based on previously proposed addendum c was again rejected based on IAQ concerns. Two subgroups (working groups, WG#1 and WG#3) were then convened by SSPC 62.2 and led by industry representatives. These groups (WG#1 and WG#3) were charged with working to forge a compromise alternative to proposed addendum j. Both WG#1 and WG#3, considered multiple iterations of previously proposed addendum c in search for a workable compromise, but no acceptable solutions outside of the proposed addendum j were identified, and WG#1 and WG#3 were each disbanded by their industry chair.

The process of considering and looking for alternative solutions to proposed addendum j was exhaustive, sincere, and inclusive. The effort to deliberate this subject matter began in 2014 and has been an exhaustive effort. After all consideration and deliberation for alternatives, the committee followed ASHRAE's procedures and the ANSI essential requirements in their approval of the publication of addendum j with knowledge of unresolved objectors.

(4) Please briefly explain why ASHRAE believes that the final approved Addendum j contains no unfair provisions, is suitable for national use and is not contrary to the public interest, meeting all of ANSI's procedural requirements.

The appellants have asserted that addendum j to ANSI/ASHRAE Standard 62.2-2022 is in effect a ban on a specific type of heating equipment. While California and New York have effectively banned this technology for new construction, ASHRAE has no regulatory authority to ban a product. From a regulatory perspective, ASHRAE follows a voluntary consensus process, and the adoption and use of all or part of ASHRAE standards is completely voluntary. In fact, an authority having jurisdiction can choose to adopt all of a standard, parts of a standard, or adapt the standard to meet its local needs. ASHRAE regularly supports efforts for code and jurisdictional adoption for all or part of ASHRAE standards to help meet the required end use goals.

The requirements found in addendum j to ANSI/ASHRAE Standard 62.2-2022 does not suggest or implement a ban on the production, sales or installation of combustion appliances. The requirement in the subject addendum prohibits unvented combustion heaters installation in any home that wants to meet ASHRAE Standard 62.2-2022. Installation of combustion heaters is still permitted in such homes, provided that they meet the minimum performance requirement of being vented (similar to how combustion water heaters and combustion forced-air furnaces are fairly required to be vented to support public interests). This approach in the standards industry is not new and can be viewed in the same way that the standard prohibits other technical solutions such as high decibel rating fans. Similarly, there are no restraint-of-trade issues for placing performance requirements on products or systems that have a direct bearing on the purpose of the standard. Based on the information provided above, this addendum meets ANSI's procedural requirements.

ASHRAE humbly asserts that this new requirement still allows for combustion to be utilized as a heating source in a vented capacity, does not impact the applicability of the standard for national use and is not contrary to the public interest.

CONCLUSION

ASHRAE asserts that it has met the rules as outlined in PASA and the Essential Requirements. The SSPC

has exercised great diligence in the development of the addendum as demonstrated above and in the attachments. ASHRAE further agrees that it will revise its appeals procedures to provide additional clarity to the requirements for appeals. For those reasons, ASHRAE respectfully requests that this appeal be denied.

ATTACHMENT LIST

Attachment A: Timeline of Development

Attachment B: Addendum j right to appeal letter and recusal of members for COI

Attachment C: SSPC 62.2. Minutes

Attachment D: Publication public review voting record addendum j

Attachment E: Email invites to objectors on addendum j

Attachment F: Correspondence with Appeal Panel Chair regarding COI submitted by Mr. Delaquila

Attachment G: Revise Appeals Process Checklist

Attachment H: ASHRAE's Proposed Appeals Process revisions.

Attachment I: Publication voting record addendum j.

Attachment J: Supplement document provided to commenters.

Development of Addendum j (including addenda a and c) to SSPC 62.2

2015

The SSPC begins development of the addenda on unvented space heaters that will officially become addendum a to Standard 62.2.-2013.

2017

1/27/17-SSPC approves publication public review on addendum a at face-to-face meeting and a continuation letter ballot is issued closing on 2/6/17 and recirculation ballot is issued and closed on 2/13/17.

4/7/17 – 5/7/17 First full public review of addendum a and receives 13 comments from 10 commenters

8/31/17 - Second full public review draft of addendum a approved by SSPC via letter ballot (includes recirculation letter ballot) closes 8/31/17.

9/24/17 - Staff sends notice to 1st Full public review commenters notifying them of the availability of the second full public review draft.

10/13/17 – 11/12/17 - 2nd full public review of addendum a. 19 comments from 14 commenters.

2018

1/19- 1/20/18: SSPC reviews, edits, and approves responses to commenters. This was at a face-to-face open meeting.

1/20/18 – SSPC Chair sends responses to commenters. Replies from commenters due 2/19/18.¹

2/21/18: Staff notifies SSPC of comments. 17 unresolved comments

3/12/18 – Letter ballot to approve responses to comment.

6/28/18 – Board of Directors approves addendum a for publication.

7/2/18- Unresolved objectors sent notice of right to appeal.

7/22/18 – Appeal received from Don Denton

7/23/18 – Appeal received from Frank Stanonik

7/23/18 – Appeal received from David Delaquila

7/23/18 – Appeal received from Greg Achman

9/20/18 – Rebuttal statement received from SSPC Chair

11/1/18 – Appeals Panel hearing.

¹ ASHRAE process says no response by deadline commenters are automatically resolved.

11/20/18 – Appeals Panel decision issued. Upheld one process claim due to lack of documentation by the SSPC and direction to make better documentation of efforts to resolve commenters.

2019

4/26/19 – Unresolved commenters invited to attend 5/13/19 SSPC meeting to attempt comment resolution. Those unable to attend were advised they could provide a summary in advance. Mr. Delaquila attended, and Mr. Denton provided a summary. Summary of the discussions were included in the minutes.

5/13/19 – SSPC meeting to hear from unresolved commenters and motion made for publication approval with knowledge of unresolved objectors was made after discussion stopped.

5/16/19 – Continuation letter ballot issued for absent members.

5/23/19 – Recirculation ballot issued to circulate negative votes with reason and provide opportunity for members to change their vote (including vote)

5/30/19 – ballot is final with a vote of 19-7-0-4-0 (Yes-no-no-no without comment-abstain-not returned)

5/22/19 – SSPC approves addendum a for publication with knowledge of unresolved objectors.

6/7/19 – Staff emails all unresolved objectors notifying the unresolved objectors that the addendum a to Standard 62.2-2016 will be on the agenda for consideration and invites them to submit a request to address the Standards Committee.

6/22/19 – Standards Committee meeting to review the publication approval request.

6/23/19 – Several unresolved objectors address the Board of Directors during the open microphone portion of the meeting regarding concerns.

6/26/19- The Board of Directors disapprove the publication addendum with no reasons provided.

Late 2019 – Standards requests clarification on the Board of Directors reasoning. None were provided and Standards later provided training on the need to provide the process reasons for disapproving a standards action.

2020

2/1/20 – Standards Committee considers SSPC 62.2's request to resubmit publication of addendum a. Motion to approve for publication is postponed so an Ad Hoc can be formed to look at process and determine if a compromise could be met.

3/17/20 - Standards Committee and Board Representative (as a 62.2a AD HOC) meet to discuss possible next steps and direction for SSPC 62.2 based on ASHRAE's procedures.

4/3/20 – Standards Committee and Board Representative (as a 62.2a AD HOC) meet again to continue discussions with 62.2 Leadership and Industry representatives to recommend next steps and help to find a compromise for all parties.

6/19/20 – Motion to approve addendum c (at meeting followed up with continuation ballot and recirculation ballot).

7/2020- Motion to discontinue addendum c and resubmit addendum a for publication approval.

8/8/2020 – Executive summary of white paper presented to SSPC.

8/24/202 – Addendum c discontinued by SSPC in SSPC meeting.

11/18/20 – Board of Directors approves addendum a for publication.

11/19/20 – Right to appeal letters sent out to unresolved objectors.

12/21/20 – Mr. Delaquila, Mr. Denton and Mr. Ron Smith filed appeals.

2021

1/21/21 – Unvented combustion discussion in SSPC meeting.

2/15/21 – SSPC submits rebuttal per request of Appeals Panel.

3/24/21 – Virtual Appeals Panel hearing

3/25/21 – Appeals Panel Upholds the appeal based on two process claims: 1.Lack of documentation by the SSPC on comment resolution in minutes and failure to do Standards Action vote for reaffirming the prior publication vote for addendum a.

4/22/21 – Discussed proposed research for unvented combustion in SSPC meeting.

6/9/21 – Unvented combustion discussion in SSPC meeting.

6/23/21 – SSPC meeting with a motion to approve addendum j for publication public review.

6/25/1 – SSPC Chair issues a continuation letter ballot including the negative votes with reason allowing all members to vote or change their vote.

7/2/21 – Letter ballot closes with no additional negative votes received. Final vote is 19-3-1-4-5 (Yes, No, No without comment, Abstain, not returned).

7/13/21 – SSPC submits addendum j for publication public review.

8/24/21 – Complaint for action/inaction filed by Mr. Delaquila on addendum a to 62.2.

8/25/21 – Response from SSPC Chair to complaint

9/2/21- Mr. Delaquila indicates the SSPC Chair response did not resolve his complaint and moves to Standards Committee

9/23/21 – Response from Standards Committee indicating that process was followed.

10/1/21 – 30-day public review of addendum j to 62.2 begins.

10/13/21- Mr. Delaquila indicates that the Standards Committee response does not resolve his concerns.

10/31/21 – Public review of addendum j closes. 53 comments from 36 commenters were received.

11/2/21 – Workgroup #1 (modification) convened by SSPC Chair and led by Mary Koban (AHRI) to identify alternatives to Addendum j.

11/22/21 – All negative commenters invited to attend and participate in SSPC discussion in addendum j.

12/2/21 – Commenters given first opportunity to address SSPC at virtual meeting. SSPC reviewed themes of comments, explored several opportunities for resolution, and held several straw polls to identify the SSPC's preferences regarding disposition of the themes. Appellants that addressed the committee were Don Denton, Dave Delaquila, Shannon Corcoran's replacement from AHRI, and Eric Adair.

12/14/21 – WG#1 meets

12/21/21 – WG#1 mts

2022

1/4/2022 – Workgroup #1 meeting.

1/6/2022 – Workgroup #1 meeting.

1/10/2022 – All negative commenters invited to attend 1/28/2022 SSPC discussion on addendum j where they were given a second opportunity to address SSPC.

1/19/2022 – Workgroup #1 meeting.

1/28/2022 – Commenters given a second opportunity to address SSPC at hybrid meeting. SSPC reviewed themes of comments, explored several opportunities for resolution, and approved responses to be posted in the online comment database. Appellants that addressed the committee were Don Denton, Dave Delaquila, Eric Adair, and Ron Smith. Appellant Shannon Corcoran did not address the committee, but her replacement at AHRI did.

2/2/2022 – SSPC responses to commenters posted in OCD. Commenters given until 3/2/2022 to reply.

3/24/2022 – With approval of 62.2 chair, Workgroup #3 was convened and led by Dave Delaquila to identify alternatives to Addendum J. This workgroup met April 5, April 29, and May 17. Appellant participants were Dave Delaquila and Shannon Corcoran. This workgroup was disbanded on May 23 by Mr. Delaquila without identifying an alternative solution.

4/5/2022 – Workgroup #3 meeting.

4/29/2022 – Workgroup #3 meeting.

5/12/2022 – Notice provided to unresolved commenters that ASHRAE Journal had published a key technical reference used by the SSPC in approving Addendum J: Sherman, M., P. Fairey, and R. Crawford. 2022 – *Impacts of Unvented Space Heaters*. ASHRAE Journal 64(5): 32-49.

5/17/2022 – Workgroup #3 meeting.

6/10/2022 – All unresolved commenters invited to address SSPC at 6/24/2022 meeting.

6/24/22 – Commenters given a third opportunity to address SSPC at hybrid meeting, including provision of new information as related to ASHRAE Journal article. Review of commenter replies to SSPC's OCD responses, including attempts to resolve. Appellants that addressed the committee were Don Denton, Dave Delaquila, and Ron Smith.

6/24/22 – SSPC motion to approve with knowledge of unresolved objectors.

7/26/22 – SSPC Chair issues continuation letter ballot.

8/3/22 – SSPC Chair issues a recirculation ballot.

8/10/22 – Ballot closes with a final vote count of 19-3-2-2-4 (Yes, No, No without comment, abstain, not returned).

9/23/22 – Standards Committee approves publication of addendum j.

10/14/22 – Board of Directors approves addendum j.

10/18/22 – Right to appeal letters sent to joint appellants and others.

11/4/22 – Shannon Corcoran , David Delaquila, files appeal.

11/5/22 – Mr. Don Denton files appeal

11/7/22 – Ron Smith files appeal

11/14/22 – Eric Adair files appeal.

2023

1/24/23 – The Appeals Panel meets, reviews all the appeals and determines the appeals will be dismissed without a hearing.

2/6/23 – Appellants notified of the decision of the Appeals Panel.

ANSI Appeals begin.

From: [Meyers-Lisle, Tanisha](#)
To: [Meyers-Lisle, Tanisha](#)
Bcc: "[Eli Howard](#)"; "[ggress@iccsafe.org](#)"; "[Larry Fletcher](#)"; "[David Delaquila](#)"; "[arudd@absystems.us](#)"; "[scorcoran@aga.org](#)"; "[psuphy1988@gmail.com](#)"; "[Rosenstock, Steven](#)"; "[adam.m.mcmillen@imeqcorp.com](#)"; "[susan.mclaughlin@alumni.stanford.edu](#)"; "[Mr Lawrence J Schoen](#)"; "[joe.winters@hok.com](#)"; "[darryld@ebtron.com](#)"; "[jbradley@awc.org](#)"; "[csubasicpe@aol.com](#)"; "[mikec@cmservices.com](#)"; "[lchinchilla@opiacr.com](#)"; [Barbaree, Connor](#); [Reiniche, Stephanie](#); [Littleton, Jeff](#); "[farooq.mehboob@smehboob.com](#)"; [Weber, Mark](#); "[brianstreisel@ghpgroupinc.com](#)"; "[co1@austin.rr.com](#)"; "[kleason@usaprocom.com](#)"; "[wricha2796@aol.com](#)"; "[ventfree@comcast.net](#)"; "[bmassey@eastern.com](#)"; "[ronsmith@smithtot.net](#)"; "[bdresner@empirecomfort.com](#)"; "[adair@hpba.com](#)"; "[rcooper@aham.org](#)"; "[brian.vandrak@us-egi.com](#)"; "[mccormickcj@hearthnhome.com](#)"; "[bswiecicki@npga.org](#)"; "[jranfone@aga.org](#)"; "[ngdllc@outlook.com](#)"; "[riani@apga.com](#)"; "[pbaker@maxitrol.com](#)"; "[dnoyes@ahri.net](#)"
Subject: Right to Appeal Notification - Fall Meeting 2022
Date: Tuesday, October 18, 2022 7:26:00 AM
Attachments: [Appeals Submittal Form for Publications Approved on October 14, 2022.doc](#)
[PASA Annex B.pdf](#)
[10-18-2022 Right to Appeal Letter for Publications Approved on October 14, 2022.doc](#)
Importance: High

MEMORANDUM

DATE: October 18, 2022

TO: Unresolved Commenters and PC Members Voting Against Publication Approval

BSR/ASHRAE Addendum <i>x</i> to ANSI/ASHRAE Standard 62.1-2022	Gregg Gress Eli Howard
BSR/ASHRAE Addendum <i>i</i> to ANSI/ASHRAE Standard 62.2-2022	David Delaquila Larry Fletcher Armin Rudd
BSR/ASHRAE Addendum <i>j</i> to ANSI/ASHRAE Standard 62.2-2022	Eric Adair Peter Baker Randall Cooper David Delaquila Don Denton Bruce Dresner Gregg Gress Mary Koban Renee Lani Kerry Leason William Massey Colin McCormick David Noyes Charlie Olds James Ranfone William Richardson Ron Smith Brian Streisel Bruce Swiecicki Brian Vandrak Ted Williams
BSR/ASHRAE Addendum <i>m</i> to ANSI/ASHRAE Standard 62.2-2022	Shannon Corcoran David Delaquila Mary Korban Armin Rudd
BSR/ASHRAE Addendum <i>h</i> to ANSI/ASHRAE Standard 90.4-2019	Steven Rosenstock

BSR/ASHRAE/ICC/USGBC/IES Addendum k to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020	Darryl DeAngelis Susan McLaughlin Adam McMillen Lawrence Schoen Joe Winters
BSR/ASHRAE/ICC/USGBC/IES Addendum m to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020	Jeff Bradley Christine Subasic
BSR/ASHRAE/ICC/USGBC/IES Addendum y to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020	Michael Cudahy
BSR/ASHRAE Standard 230P	Luis Chinchilla

FROM: Connor Barbaree, *Senior Manager of Standards*

SUBJECT: Right to Appeal Notification

This is notification to you that the ASHRAE Board of Directors (BOD) voted on **June 30, 2022**, to approve publication of the following documents:

- [BSR/ASHRAE Addendum x to ANSI/ASHRAE Standard 62.1-2022, *Ventilation and Acceptable Indoor Air Quality*](#)
- [BSR/ASHRAE Addendum i to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*](#)
- [BSR/ASHRAE Addendum j to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*](#)
- [BSR/ASHRAE Addendum m to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*](#)
- [BSR/ASHRAE Addendum h to ANSI/ASHRAE Standard 90.4-2019, *Energy Standard for Data Centers*](#)
- [BSR/ASHRAE/ICC/USGBC/IES Addendum k to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*](#)
- [BSR/ASHRAE/ICC/USGBC/IES Addendum m to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*](#)
- [BSR/ASHRAE/ICC/USGBC/IES Addendum y to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020, *Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings*](#)
- [BSR/ASHRAE Standard 230P, *Commissioning Process for Existing Buildings and Systems*](#)

You are receiving this letter because you are either an unresolved commenter or you are a member of the consensus body (project committee) responsible for the document and you voted against publication of that item. This letter is notification of your right to appeal. **The deadline to file your appeal is by close of business November 7, 2022.**

The procedure for appealing to the BOD is enclosed for your information. An appeal of the BOD's publication approval may be initiated by filing papers consistent with the requirements of the Procedures for ASHRAE Standards Action (PASA) Annex B. Note that as of April 29, 2015, ASHRAE no longer accepts technical appeals and only appeals that are based on process violations (PASA) will be heard. Please return any appeal to me by the deadline noted in the procedures. Attached for your convenience is a form for filing such an appeal.

Thank you for your interest in ASHRAE standards.

Enclosures: (1) Excerpt from Procedures for ASHRAE Standards Actions (PASA) Annex B
(2) Appeals Filing Forms

Best Regards,
Tanisha



ashrae.org

Tanisha Meyers-Lisle
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180 Technology Parkway
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ashrae.org/newhq



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From: bohanoneng@gmail.com
To: Mevers-Lisle, Tanisha
Subject: Re: Appeals Received (62.2j)- Fall 2022
Date: Monday, November 14, 2022 2:32:06 PM
Importance: High

Hi Tanisha,

I was a voting member of 62.2 when these actions were taken; therefore cannot serve.

Thanks,
Hoy

Hoy Bohanon, PE, LEED-AP
Hoy Bohanon Engineering, PLLC
200 Indian Wells Circle
Lexington, NC 27295

336-972-1626
bohanoneng@gmail.com

On Nov 14, 2022, at 2:29 PM, Meyers-Lisle, Tanisha <TMeyers-Lisle@ashrae.org> wrote:

Dear Appeals Board,

We have received a total of five appeals to BSR/ASHRAE Addendum *j* to ANSI/ASHRAE Standard 62.2-2022, *Ventilation and Acceptable Indoor Air Quality in Residential Buildings*. Below are the names and employers of the appellants. We will need to form an Appeals Panel; **please let me know by COB December 17th** if you **CANNOT** serve on the Panel due to ineligibility, if you have a conflict of interest or any other reason.

-

PASA Annex B (attached)

B8.2 Ineligible Panel Members

Any Member of the Appeals Board that served as a PCVM or PSVM on the project committee that is the subject of the appeal during the three years prior to the standards action under appeal shall be ineligible to serve on the Panel. Any Member of the Appeals Board that voted on the draft that is the subject of the appeal as a member of the Standards Committee or Board of Directors shall be ineligible to serve on the Panel.

Please let me know if you have any additional questions or concerns.

62.2j Appellants

Eric Adair, *Hearth, Patio & Barbecue Association (HPBA)*
Shannon Corcoran, *American Gas Association (AGA)*
David Delaquila, *Aquila Consulting LLC*
Don Denton, *Self-employed*
Ron Smith, *Self-employed*

Please let me know if you have any questions.

Best Regards,
Tanisha

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<PASA Annex B.pdf>

cc: Farooq Mehboob, *President*
Jeff Littleton, *Executive Vice-President*
Stephanie Reiniche, *Director of Technology*
Connor Barbaree, *Senior Manager of Standards*
Tanisha Meyers-Lisle, *Procedures Administrator*

From: [Bill McQuade](#)
To: [Meyers-Lisle, Tanisha](#); [jkeen@ksu.edu](#); [dccashrae@gmail.com](#); [busybee@tds.net](#); [Drake Erbe](#); [bohanoneng@gmail.com](#); [Walter Grondzik](#); [deanborges@aol.com](#); [ritamh@optonline.net](#); [Hedrick, Roger](#); [ross montgomery](#); [ben@leppardjohnson.com](#); [Wilkins, Christopher](#); [Lee Millies](#)
Cc: [Barbaree, Connor](#); [Reiniche, Stephanie](#); [Littleton, Jeff](#); [farooq.mehboob@smehboob.com](#)
Subject: RE: Appeals Panel Appointment - 62.2j
Date: Friday, November 18, 2022 12:33:35 PM
Attachments: [image001.jpg](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.jpg](#)
[image008.png](#)
[image009.png](#)

Dear Tanisha and all,

Although my company, Air Conditioning, Heating, and Refrigeration Institute (AHRI) no longer represents Vent Free Appliance manufacturers or has those companies as members, two of the appellants, Shannon Corcoran and David Delaquila, are former employees of AHRI and/or have served in a consulting capacity for AHRI in the past.

While I do not feel I would personally have any bias in the 62.2j appeals, I believe it is in ASHRAE's best interest that I am removed as an alternate in this case to avoid any appearance of biasing the process.

Please let me know if you have any questions,

Regards,

Bill McQuade

Bill McQuade, P.E., LEED® AP, FASHRAE
Vice President Sector Services
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AHRI Certified® Over 50 Years of Leadership in environmental stewardship, energy efficiency, performance, and customer satisfaction.

From: Meyers-Lisle, Tanisha <TMeyers-Lisle@ashrae.org>

Sent: Thursday, November 17, 2022 3:32 PM

To: jkeen@ksu.edu; dccashrae@gmail.com; busybee@tds.net; Drake Erbe <DrakeErbe@airxchange.com>; bohanoneng@gmail.com; Walter Grondzik <gzik@gzik.org>; deanborges@aol.com; ritamh@optonline.net; rhedrick@noresco.com; ross montgomery <rossmont@aol.com>; ben@leppardjohnson.com; Wilkins, Christopher <christopher.wilkins@pmgroup-global.com>; Bill McQuade <BMcQuade@ahrinet.org>; Lee Millies <lee@milliesengineeringgroup.com>

Cc: Barbaree, Connor <CBarbaree@ashrae.org>; Reiniche, Stephanie <sreiniche@ashrae.org>; Littleton, Jeff <JLittleton@ashrae.org>; farooq.mehboob@smehboob.com

Subject: Appeals Panel Appointment - 62.2j

Dear Appeals Board,

Pursuant to PASA Annex B8.1, six members of Appeals Board shall be randomly selected from a pool of all Appeals Board members that do not have a conflict to hear the appeal. At least four of those selected shall be appointed as the Appeals Panel and the other 2 shall be appointed as alternates. The Appeals Panel alternates will participate in the hearing activities in the event that one of the four other members are unable to serve. The Appeals Board chair will chair the Appeals Panel.

Below are the names of those randomly selected to serve on the Appeals Panel:

Julia Keen, Appeals Panel Chair

Dean Borges
Roger Hedrick
Ben Leppard
Christopher Wilkins

Alternates:

Walter Grondzik
William McQuade

I will forward the Panel a link to all five appeals for their review. Due to the upcoming holidays, we probably won't be able to meet until the second or third week of December. I will work with the Chair to poll available dates and times. Please let me know if you have any questions.

Have a safe and wonderful Thanksgiving!

**ASHRAE SSPC 62.2 Main Committee Meeting
MINUTES
Kansas City- 2019**

Friday June 21st 9:05 am

Attendees- see attendance sheet attached to these minutes.

18 voting members present at start of meeting.

Introductions and Agenda Review

Motion to Accept the Agenda:

Added May Web Mtg Minutes to item 3 at request of Dave Delaquila

Agenda accepted unanimously

Atlanta Minutes

Armin Rudd has a comment on Atlanta Minutes

Motion 7: "Add Gas cooking appliances can be on at a much higher Btu output than the smallest unvented heaters"

David Delaquila- requests for attendance to be included in minutes.

Stanonik says there is a Bunsen burner handout and Dave would like to know if handouts are added as attachments to minutes. He would like to have that handout circulated.

Add "Chair Denied request to discuss appeal panels"

Pg 5 Roy Crawford added as second to motion

Pg 7 Motion 7: Dave Delaquila would like to provide data to dispute the WHO NO2 limit (will send to chair for distribution)

Motion to accept Atlanta minutes: First Paul Raymer, Second Armin Rudd

Motion passes: 16-0-1-1 CNV

Motion to Approve Houston minutes

1st Paul Raymer, 2nd Ray Crawford

Motion passes: 16-0-1-1 CNV

Web Meeting Minutes

Dave Delaquila- Add clarifying text "...in Orlando in January 2016".

Add "only" in front of "objection by the committee was that didn't use the same emission rates". KL, DL and Dave Baylon state that this would be incorrect. Change not made.

DD will submit further editorial edits to the chair.

Further Review of Agenda

- User manual: Waiting on budget maybe delayed FY20/21
- Version 2019- Includes Addenda a-e, g, h, j, k, l, m, p, q, s, t & u.. Chair thanks committee for their efforts to complete so many addenda
- Add. R withdrawn
- Operational Intent Interpretation Request from M Sherman Approved
- 62.2 Proposal to have ASHRAE comment on ANSI Z21 Approved

- New Interpretation Request on transfer air and outdoor air from GV
- Guideline 24
- Chair suggests group IAQ and MF together. Marion G requests that we review Max's comments but don't allow that to prevent fully addressing GV's proposal.
- New change proposal from M Sherman Operation
- New Change Proposal from Rick Karg Readily Accessible

Chair asked Dave Delaquila for an update on work statement 1798. No progress. Chair asks if DD would like input from the committee and if so to let him know. Chair would like to have a new version answering RAC committee comments.

Chair asks for Code Updates- Darren Meyers "Success on GV for Multifamily for energy eff but IECC is reticent to accept 62.2" Dave Baylon "State of Washington all references to 62.2 have been removed. Moving toward balanced ventilation and in fact 2 fans"

Jeff Miller- would like to withdraw his IR on ventilation range hoods
Randy Cooper will talk after lunch.

Patricia Fritz has a question if Max Sherman's comments will go to IAQ or Envelopes. It's going to envelopes.

Marian Goebes: Gave summary of timeline for Addendum o
Slides are attached to these minutes.

1/2017- Mike Moore submitted add o which would have required balanced ventilation for all multifamily. Many comments- especially to allow for supply only and some exhaust only.
2017-2018: In adapting add. O in order to answer comments moved to include supply only and treat it like Balanced Ventilation.

Comment by A Rudd that he made note of concern about impacts of negative pressure.
For Garden Style more OA so the WG in this addendum took garden style out and only applies to MF with common corridor.

Patricia is asking for clarification of "common corridor". Marian has clarified that the intent is for the addendum to address common enclosed corridors.

Darren Meyers- is asking if common corridors and vertical stairwells are covered by 62.1. 62.1 ventilated corridors at 0.06 cfm/sqft of floor area. Comes out to be ~10cfm for a 30'x5' hallway.
Marian Goebes read through section 4 "Dwelling Unit.."

Points out 4.6 change.

Max Sherman- says that 4.6 would require developing a baseline of annual exposure that would be very difficult.

Amy Musser- suggesting adding "single zone per dwelling unit".

Marian review data from national study of 8 buildings showing ~29% of cfm50 is to outdoors.

Max asked how did the research team equalize pressure to the corridors?

Iain comments that this is measuring leakage not airflow.

Dave Baylon and Max Sherman debated where air would come from and what that would mean in terms of IAQ.

Gary Nelson- points out that supply only is still in conflict with Fire Code because the corridor becomes a relief duct for units.

Marian Goebes concludes review and chair opens floor to discussion.

Roy asks whether or not 4.6 changes the baseline.

Darren:

- Use of word “directly”. Nuance which could result in making so that only OA through wall would be acceptable.
- Fire Code- Say commercial designer should supply “neutrality” to common corridor or wall.
- If most or all national model codes say that neutrality must be maintained wouldn't we say that we can't beg, borrow, steal from adjacent spaces

Discussion of neutrality across the boundary.

Max says that 4.1 doesn't say direct OA.

Darren Meyers suggests striking “directly”.

Gregg Gress is concerned that corridor air is “used”

Dave Baylon is suggesting that we prohibit exhaust only

Break for 10 minutes

New change proposed by Gregg Gress.

4 “A dwelling unit ventilation system shall be installed in compliance with Sections 4.1 through 4.4, Section, or Section 4.6 except that an exhaust-only shall not be used to provide dwelling-unit ventilation for an attached dwelling unit of new construction that opens directly to an enclosed corridor.”

Paul Raymer asks what is the problem we are trying to solve with this addendum.

Max Sherman asks Marian to show the data illustrating where there is a problem with exhaust only.

No data are presented.

Armin Rudd- Recaps single family acceptance of exhaust only systems. This was a compromise that ignored the true source of ventilation air and its quality.

Straw Poll Question Proposed by Kimberly Llewellyn: Do voting committee members think that enclosed multifamily corridor air is an equivalent of Outdoor Air. All voting members present raised hands for no except Max Sherman.

Straw Poll Question Proposed by Max Sherman: To ask the same question but about garage air being the equivalent to OA. No vote.

Discussion about equivalence to 4.1

Chair has called for a Motion to address Addendum O from multifamily working group.

Motion- Max moves to withdraw Addendum O. 2nd Amy Musser.

13-2-3-0 - will go to CLB after meeting.

Discussion of change proposal on section 6.1 from Gayathri Vijayakumar to change tightness limits for multifamily dwellings.

Gayathri Vijayakumar gives outline: Substantial change is air leakage requirement reduced to 0.2 cfm50/ft² from 0.3 cfm cfm50/ft².

CP edited to strike “common hallways” replace with “enclosed corridors”

Gary Nelson asks if building envelope area is defined.

Discussion about the use of the term common corridor vs enclosed corridor.

Marian Goebes presents data related to compartmentalization. In 62.2-2010, Terry Brennan made a recommendation that 0.2 cfm50/ft² be achieved. This was increased to 0.3 cfm 50/t² in 62.2-2016 addendum g. Change proposal is to lower this to 0.2 cfm50/ft².

Discussion on whether or not committee thinks we should lower the compartmentalization requirement to 0.2 cfm50/ft². Roy- “Should we require 0.2 cfm50/ft² unless it’s for a balanced system?” Max- No. Armin proposes 0.25 cfm50/ft² as used in Environments for Living program.

Amy Musser and Steve Saunders are concerned that this requirement is too difficult to achieve.

Gary Nelson- 0.2 in a 1,000 sqft dwelling is the equivalent of 4.5ACH50 = much higher than single family code and is for this reason is already too high.

Pierre Lopez made a comment that he would support this lower rate.

Armin Rudd- makes the point that there are some issues with achieving compartmentalization because UL requirements may not allow for using foam for air sealing.

Marian asked if Amy Musser would support 0.25 cfm50/ft². Amy said no to anything lower than 0.3 cfm50/ft² because she does not see lower levels being achievable in the housing market she is familiar with.

Collin Olson and Gregg Gress made the point that if the requirement is changed 0.2 then builders will find a way to achieve it.

Marian makes motion to accept Gayathri Vijayakumar’s change proposal. Gregg Gress 2nd.

7-9-1-1 CNV – Change proposal is not accepted. Chair states this is a rejection of the change proposal. Committee agrees.

Gregg Gress makes motion to accept language change in 6.1. Dave Baylon 2nd. Clarifying that we are proposing to change language for publication.

Collin Olson asks if Gregg would be willing to withdraw so that we could make sure that we are addressing all of the places this shows up.

Gregg agrees and withdraws his motion.

Multifamily working group will address this and resubmit.

Lunch break for 1 hour.

Randy Cooper- Association of Home Appliance Manufacturers- Presentation on AHAM and Ratings for Ranges – *appended to these minutes*

- CEC CA Blg Std has requirement for rangehood ventilation
- A group of manufacturers asked AHAM if they could create a directory since they weren’t members of HVI. CEC said yes if airflow and sound requirement methodology in accordance 62.2, 7.1 & 7.2

- Directory will be live 10/19 and available: www.ahamverifide.org
- Capture Efficiency ratings/testing are in development.
- 62.2's role in this will be to pick a "number or numbers" for the standard.

Don Stevens explains that AHAM like HVI will certify products.

Max Sherman: motion to accept his Change Proposal on section 4.1 & 5.1. Don Stevens 2nd.

Max: This is a follow-up to his Interpretation request approved at the Atlanta meeting.

Armin Rudd and Gregg Gress discussion about who makes the determination of what is "safe/healthy"?

Gregg Gress thinks 5.1 changes are not necessary as we don't need to say "why" something is done in the standard – it would be better in a guideline.

Armin makes a motion to table Max's motion until we have a chance to examine Armin's proposal from his working group that addresses this same issue.

Motion to table passes.

Friday Meeting ends at 2:30 pm

Saturday June 22nd, 8:30 am meeting called to order.

Attendance list is attached to these minutes.

Chair Introductions

Rick Karg- Addresses the Committee and Reads part of the ASHRAE Code of Ethics. Makes the point is that respect and civility is critically important. He reminded the male members of the committee that marginalization of women is unacceptable and complemented the 5 fantastic women who are on the committee and/or in working groups and make critical contribution to 62.2.

Systems Sub-committee report (Roy Crawford)

Subcommittee Attendance 9 out of 14.

Has four motions for committee on responses to commenters on Addendum v (References update)

Systems subcommittee motion #1: to accept comment 1 as editorial from Stephen Gatz.

Subcommittee voted 9-0-0 to accept comment as editorial.

18-0-1-1 CNV – motion passes

Systems subcommittee motion #2: Motion to reject comment 3 from Darren Meyers.

Subcommittee voted to dismiss on the basis that the comment is out of scope of the Addendum 9-0-

18-0-1-1 CNV – motion passes

Systems subcommittee motion #3: Motion to accept subcommittee's recommendations on Darren Meyers comment #2

This motion separated out responses to individual reference items. Some accepted as editorial, some were rejected and one accepted in principle that would also require a change in the main body of the standard (to be dealt with as an ISC to addendum v). Subcommittee voted 9-0-0.

18-0-1-1 CNV – motion passes

Systems subcommittee motion #4: Motion to make ISC to Addendum v to update reference to NFPA in the references and change to Section 6.9.

Systems Subcommittee Motion #4 will be sent out by letter ballot.

IAQ Subcommittee report (Patricia Fritz)

Question about revising Guideline 24 Title, purpose, and scope for 62.2. The most substantive change is to remove “low-rise” in order to make it consistent with the change in scope of the standard. There is question as to whether or not we should continue to update and support Guideline 24 and withdraw the motion to reaffirm the document. Some of this in light of publication of ASHRAE’s residential IAQ guide and there is significant overlap.

Discussion about whether or not to withdraw reaffirmation of Guideline 24. Question about whether or not the publication is being used/bought. Subcommittee Chair requests time to review.

Envelope Subcommittee report (Amy Musser)

Action Item- Requesting for participation on working group to working on definitions for transfer air, outdoor air etc. Max Sherman to lead working group. There is a request for the working group to be well balanced.

Based on conversations in the committee on Fri. morning and in Envelopes subcommittee on Sat. morning, it was clear committee members didn’t want to explicitly point MF exhaust only to 4.6. The proposal was revised to remove that reference to 4.6 for exhaust only.

Interpretation request by Gayathri Vijaykumar on transfer air. Subject is related to conflict between 4.1 which says “outdoor air” while 4.3 says that measured exhaust air can meet air flow requirements of 4.1. She has indicated that she may withdraw the interpretation request.

Armin makes the point that once we add multifamily to 62.2, we need to address transfer air.

Amy makes the point that this interpretation request is extremely consequential.

There are 5 committee members who do not want to withdraw the interpretation request.

No action on this interpretation request at this time in the meeting.

Kimberly Llewellyn readdressed the subject of respect and communication.

End of subcommittee reports

Motion by Rick Karg to send his change proposal removing the word “readily” for publication and public review. Roy Crawford 2nd

This change proposal was an action item for Rick Karg and Paul Francisco from the Atlanta 2019 meeting. Discussion about implications of readily accessible vs accessible as defined in the Uniform Mechanical Code. Max Sherman makes point that controls are increasingly electronic and this definition is mechanical. Friendly amendment to add “or opening”.

Armin Rudd spoke against the change proposal on the basis that it would be a violation of the National Electric Code to state in the Exceptions of 62.2 Sections 4.4 and 5.3.1 that an electrical control “shall not be required to be accessible” since substituting the new definition for “accessible” would be the same as saying that an electrical control “shall not be required to have access to.”

Roll Call Vote: 16-1-2 Chair Abstaining – will go to CLB.

Control/Operation working group (Armin Rudd) Change Proposal to Section 4

Motion by Gregg Gress (Rudd 2nd) to accept with modification Armin Rudd’s Change Proposal on section 4.

Motion Passes 18-0-1 Chair Abstaining.

Motion by Gregg Gress to approve Armin Rudd’s Change Proposal on Section 4 for publication and public review. Armin Rudd 2nd.

Friendly amendment to “4.4.2 Operation. The system shall be ~~is intended to~~ operated as designed.”

There is a suggestion by Max Sherman that we take the changes to 4.6 out and Armin says he is ok with that if it prevents a hold up of the change proposal. CP amended to remove 4.6 changes.

Motion Max Sherman to bring back tabled motion and to consider Max’s change proposal rather than Armin’s. Roy Crawford 2nd. 15-2-2 – motion passes.

Motion by Jeff Miller to add “Continuous” to the title of 4.1 “Continuous Ventilation Rate”. Max 2nd.

Darren Meyers makes the point that titles are not enforceable. Gregg Gress backs this.

8-10-0-1 CNV – motion fails

*Action Item: Both Armin Rudd’s and Rick Karg’s change proposals should reference each other in their forwards.

Back to main Motion by Gregg Gress to send amended change proposal for Section 4 publication and public review.

Vote on motion to approve Armin Rudd’s amended change proposal on section 4 for publication and public review.

Roll Call Vote: 18-0-1 Chair Abstaining – will go to CLB

BREAK 10:50-11:00am

Control/Operation working group (Armin Rudd) change proposal to Section 5.

Darren Meyers raises question as to whether or not Armin would be open to changing 5.3.3 “occupiable hours”? “5.3.3 Operation. The continuous local mechanical exhaust shall be operated as designed.”

Gregg Gress- makes point that should say “continuously operating” instead of “continuous local exhaust.” There’s no such thing as a continuous local mechanical.

Max comments that this version is more complicated and asks for explanation of why this change was needed.

Friendly amendments to

- 5.1 Exception: *Alternate Ventilation*. “...shall be permitted where approved by a licensed design professional.”
- 5.2.3 Operation. “Demand-controlled local mechanical exhaust systems shall be operated by the occupant as needed.”
- 5.5.5 Operation. “The local mechanical exhaust system be operated continuously.”

- 5.1 Local Mechanical Exhaust.

Motion made by Armin Rudd to Approve his change proposal to Section 5 out for publication and public review. 2nd Darren Meyers

Armin withdraws his motion.

Armin makes motion that we accept his change proposal on Section 5 in principle and will send it back to work group to change language. 2nd Gregg Gress. 16-0-1-1 CNV – motion passes.

Max Sherman's change proposal (previously tabled but brought back to the committee during discussion of Armin Rudd's change proposals)

Motion from Max Sherman to approve his amended change proposal out for publication and public review. (The amended proposal strikes the suggested change to 4.1 and is only for the change to 5.1.)

Rick Karg 2nd.

Gregg Gress states that explanation is not necessary. Others have expressed concern about listing intent because it could be exclusionary. Eric Werling and Rick Karg are interested in the committee addressing local exhaust fans which are dual purpose fans.

Discussion about whether or not "odors" are considered a contaminant.

Eric Werling suggests fixing the ambiguity around dual purpose fans.

Section 5.1 of the change proposal edited for clarity.

Roll Call Vote: 5-11-2 chair abstaining. Will go to CLB.

Motion to accept Max Sherman's change proposal on sections 4 and 5 with amendments.

Note this vote to accept the change proposal happened after the vote on publication and public review. In future the vote to accept should be made first. It was also important to several committee members that minutes reflect this motion was to accept the change proposal for discussion not to approve it.

10-5-1-1 CNV – motion passes.

Break for lunch 12:00pm- 1:00PM

Multi Family Working Group discussion

Multifamily working group change proposal (Mike Moore) to change section 4.2 to restrict exhaust systems in buildings with common corridors.

Discussion: concern that if the committee agrees that transfer air is not acceptable as a replacement for OA, then why would we specify that exhaust only is an acceptable solution for existing buildings.

Paul Raymer is concerned about banning the use of exhaust only in new construction. Marian responds that a product type isn't being banned but that we may see less dual duty fans.

Gregg Gress- Makes point that it could become a hardship to existing buildings to have this apply retroactively.

Dave Baylon would like to see this apply to all attached dwellings.

Multifamily working group as a strategy would like to submit a change proposal with a smaller scope which has a better chance of being passed than a broader change which is more controversial which is why they are limiting the scope to multifamily buildings with attached enclosed corridors.

Eric asks if the Steven Winters & Assoc field data used to substantiate the reason for specifying dwellings with enclosed, common corridors will be available for the public review period.

Jeff Miller asks if Appendix a is meant to provide relief from hardship for existing buildings? And if so, we should not be concerned about whether specifications in 4.2 to restrict exhaust systems would be interpreted as being applicable to existing buildings.

Steve Saunders makes suggestion that we need to characterize air that comes from sources other than OA rather than assuming the quality or content of the air.

Iain Walker says that this data isn't useful to the discussion about contaminant transport because it's about leakage area not air flows.

Dave Baylon makes the point that in Seattle field studies all apartments were negative in pressure relative to the enclosed corridor.

Collin Olsen makes point that there is a necessary linkage between 62.2 and 62.1.

Craig Wray- Comment on field studies on high rise buildings where they found how connected floors are and therefore it is very difficult to rely upon corridor pressure differential.

Gayathri Vijayakumar makes point that exhaust only cannot deliver the required 62.2 exhaust rate.

Max Sherman makes point that there is no data to show that exhaust only doesn't work. There is an appendix in 62.1 to allow for transfer air. Suggests that building needs to be viewed as a system. Unit to unit air has some dilution capabilities.

Gregg Gress makes motion to call to question. Don Stevens 2nd 13-1-3-1, CNV.

Chairs note: I think this is out of order as we had no motion on the floor.

Gregg Gress makes motion to accept change proposal from the multifamily working group with amended language for publication and public review. Dave Delaquila 2nd

Roll Call Vote 18-1-2 Chair abstaining – will go to CLB

Discussion about Gayathri's interpretation request on transfer air (deferred from earlier in meeting).

Motion by Marian to answer Interpretation Request "Yes". 2nd Gregg Gress

Friendly amendment to Gayathri's interpretation request. "For attached dwelling units complying with Section 4.1, air from adjacent spaces cannot be credited toward the outdoor air required by Section 4.1."

16-2-1-1 CNV – motion passes.

Meeting Adjourned 2:50pm

Attendance sheets: *Mark Jackson, Daikin North America, was in attendance 6/21 and 6/22.

SSPC 62.2 - Sign In Sheet- Kansas City 2019

Date _____

SSPC VOTING MEMBERS	6/21/19	6/22/19	Signature	Email
Walker, Iain (Chair)	✓			iwalkw@bl.gov
Moore, Mike (Vice Chair)				
Llewellyn, Kimberly (Secretary)	✓	✓	<i>[Signature]</i>	k.llewellyn@hvac.nec.com
Meyers, Darren	✓	✓	<i>[Signature]</i>	d.meyers@ieccode.com
Agopian, Nick	✓	✓	<i>[Signature]</i>	Nick.Agopian@outlook.com
Baylon, David	✓	✓	<i>[Signature]</i>	DBAND@ECOTOPS.COM
Crawford, Roy	✓	✓	<i>[Signature]</i>	roy.crawford@jci.com
Delaquila, David (OM-NPGA)	✓	✓		
Drumheller, Craig (OM-NAHB)	✓	✓	<i>[Signature]</i>	arudd@absystems.us
Alternate <u>Armin Rudd</u>				
Fairey, Philip				
Francisco, Paul				
Fritz, Patricia	✓	✓		patricia.fritz@health.ny.gov
Goebes, Marian	✓	✓	<i>[Signature]</i>	Marian.Goebes@TRCCOMPANIES.COM
Gress, Gregg	✓	✓	GG	GGRESS@ICCSAFE.ORG
Jackson, Mark				
Jacobs, David				
Jenkins, DeWayne	✓	✓	<i>[Signature]</i>	bdjenkin@southernco.com
Karg, Richard	1/3	✓	<i>[Signature]</i>	rkarg@residents.org
LeRoy, Jason				
Lubliner, Michael				
Miller, Jeff	✓	✓	<i>[Signature]</i>	jeff.miller@energy.ca.gov
Musser, Amy	✓	✓	<i>[Signature]</i>	amy.evandemusser.com
Raymer, Paul	✓	✓	<i>[Signature]</i>	paul.raymer@icf.com
Saunders, John	✓	✓	<i>[Signature]</i>	Steve@TempPartners.com
Sherman, Max	✓	✓	<i>[Signature]</i>	MSherman@SPH.com
Stevens, Don	✓	✓	<i>[Signature]</i>	Don.T.Stevens@wauve.com
Stroud, Thomas (OM-HPBA)				
Werling, Eric	✓	✓	<i>[Signature]</i>	eric.werling@ee.doe.gov
Williams, Ted (OM-AGA)				
MARK JACKSON	1/3	✓	mark jackson	MARK.JACKSON@DAIKIN.COM
Print Name				
John Rose	✓	✓	<i>[Signature]</i>	eng1ewi.org
Ronby Cooper	✓	✓	<i>[Signature]</i>	rcooper@aham.org
Brandon Svitak	✓	✓	<i>[Signature]</i>	Brandon.Svitak@Systeme.net
Gary Nelson	✓	✓	<i>[Signature]</i>	gnelson@energyconservatory.com
Colin Olson	✓	✓	<i>[Signature]</i>	colson@energyconservatory.com

			Version 2/1/2019	
Loic ARES				
Patrick Nielsen	✓	✓	Eric Ares	aresl@venmar.ca
James Aycock	✓	✓	James Aycock	patrick.nielsen@braun.ca
Shannon Corcoran	✓	✓	Field Controls	jay.coak@fieldcontrols.com
Andrea Papageorge	✓	✓	AHEI	scorcoran@shrinet.org
Eric ADAIR	✓	✓	Southern Co Cos	apapageo@southernco.com
Stephen Gate	✓	✓	Health, BATO & DBC Assn	ADAIR@HPEA.ORG
JAMES SUFFENY	✓	✓	Whirlpool	stephen-e-gate@whirlpool.com
Pierre LOPEZ	✓	✓	TEXAS ADMIN	JSWITHNEY@TAMU.EDU
Henry Greist	✓	✓	Aeroco	pierre.lopez@aeroco.com
Nick Hurst	✓	✓	Inj. Ins	henry.greist@lennoxind.com
Scott GREFSHEIM	✓	✓	Highly Ex. Hunt	HURST.NICHOLS@EPA.GOV
Russell Pope	✓	✓	Scott Greifheim	scott.grefsheim@apribair.com
SANJEEV HIRIGORAMI	✓	✓		russell.pope@us.panasonic.com
Gary Crow	✓	✓	King	SKH@LENNOXIND.COM
Joel Davis			Gaylan	gary.crow@aldes.com
Gayathri Vijayakumar		✓	AAF/Elanders	joel.davis@aafintl.com
Dave Delagarda			Dastm	gay-thr.@suintec.com
Delayne Jenkins	✓	✓		
Mark Baines		✓		mark.baines@ul.com
Yang-seon Kim		✓		yang-seon.kim@wichita.edu
JIM LEVERETTE		✓		jalever@southernco.com
DAVID TRELEVEN	✓	✓		DRELEVEN@THERMATSOR.COM
Scott Morte		✓	Winfield Morte	winfield.morte@venmar.ca
Eric ADAIR				
James Aycock				
Mike Blanford		✓		Michael, D. Blanford @HUD.gov

also
can

Summary of Multifamily (MF) Ventilation Proposal through Jan. 2019

- Jan. 2017: Moore submits Addendum o - would require balanced ventilation in all new construction MF dwelling units. 62.2 committee votes to publish for public review
- Spring 2017: Addendum o receives numerous public comments, including allow supply-only and allow some path for exhaust-only
- 2017-2018: Moore, with Multifamily working group (MFWG) input, revises proposal: Treat supply-only same as balanced, and require passive vents (with sizing calculation) for exhaust-only. Several iterations of passive vent proposals discussed
- Jan. 2019: 62.2 committee and Envelopes comments on revised proposal with passive vent sizing requirements. Several members object, citing PM2.5 and comfort concerns with passive vents

Updates on MF ventilation Proposal since Jan. 2019

- Mar. 2019: 62.2 teleconference discusses high level options for proposal. No consensus, but majority of participants support idea of exhaust-only using Section 4.6 (Equiv. Ventilation)
- Apr. 2019: CEE/Ecotope study of MF units in buildings with common corridor (8 bldgs.) shows source of air leakage varies tremendously but **on average**: 29% from outdoors, ~50% from corridor, ~21% from adjacent units
- Apr. 2019: Moore sends e-survey to 62.2 for feedback with proposal scope limited to units on common corridors. 11 responses:
 - Most not happy with status quo and want some action
 - Most believe corridor air shouldn't be treated as outdoor air
 - Split on solution. Most popular responses were either a. require balanced or supply only, or b. allow exhaust-only to use 4.6
- May 2019: Moore (with MFWG input) revises proposal: For MF units on enclosed corridors, exhaust-only ventilation follows 4.6

AHAM Range Hood Directory
June 2019

AHAM VERIFIDE Independently Tested, Consumer Trusted.

AHAM
ASSOCIATION OF HOME APPLIANCE MANUFACTURERS
Leadership • Knowledge • Innovation

California Building Code

- > New for the 2019 Building Energy Efficiency Standards are mandatory measures that require kitchen range hoods to meet airflow and sound ratings specified in ASHRAE 62.2.
- > Kitchen range hood fans are now required to be verified by a HERS Rater. The new verification protocol requires comparing the installed model to ratings in the Home Ventilating Institute (HVI) directory of certified ventilation products to confirm the installed range hood is rated to meet the required airflow and sound requirements specified in ASHRAE 62.2.
- > Kitchen exhaust fans must be rated at a maximum of 3.0 sone at one or more airflow settings greater than or equal to 100 CFM.
- > A minimum exhaust airflow of 100 CFM is required for vented kitchen range hoods.
- > Compliance required January 2020

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AHAM

AHAM Directory

- > AHAM was asked by its members, that are not HVI members, to build a directory and manage the required testing for range hoods and over-the-range microwaves like the HVI system for California.
- > AHAM asked CEC if this would be allowed:
 - > Yes, as long as we :
 - > Air flow and sound measurement methodology in accordance with ASHRAE 62.2 Clause 7.1.
 - > Have a directory that has "no less" information than what is currently available (or available in the future).
 - > Directory must be publicly available to anyone.
 - > Rated per ASHRAE 62.2 Clause 7.2

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AHAM

Background

- > AHAM Verifide™ has over 30 years of experience of certification and verification in air cleaners, room air conditioners, and dehumidifiers. The Air cleaner program is recognized globally. AHAM has over 7 years of experience in verification of refrigerators, washers, dryers, and dishwashers to DOE or ENERGY STAR requirements.
- > AHAM is recognized as an Administration Body by the EPA for ENERGY STAR products. AHAM has a Letter of Reliance with DOE.
- > AHAM is reviewing Intertek-Cortland for additional certification testing and verification testing. This lab is accepted by both CEC and EPA in the US and SCC in Canada for ventilation fan testing.

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AHAM

Program Definition

- > AHAM is not creating anything new but following the requirements of clause 7.1/7.2 and using a lab that is already approved to do this testing for CEC and EPA.
- > Correlation/verification testing is in process.
- > Directory will be live by October 2019. Once live, the directory will be publicly available on www.ahamverifide.org.
- > AHAM is an ASHRAE member and applied to be official member of 62.2. AHAM is an ASTM member in D22.06.
- > AHAM is also the TAG administrator for the US deviations of IEC 61591 - Range Hood Performance

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AHAM

Run Date: 6/28/2021 7:27:21 AM

ASHRAE Roster

As of 06/23/2021

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

Final Vote: 19-3-1-4-5

CHAIR, PCVM-GENERAL; INDOOR AIR QUALITY
SUBCOMMITTEE

5128655 082 Voting

Term in Position: 07/02/2020 to 06/30/2023

Dr Iain S Walker

Lawrence Berkeley Laboratory

1 Cyclotron Rd Bldg 90-3074

Berkeley, CA 94720-8099

Phone: (510)486-4692

Fax: (510)486-6658

Email: iswalker@lbl.gov

Interest Category: General

ABSTAIN

PCVM-DESIGNER/BUILDER; ENVELOPE SUBCOMMITTEE

4007464 079 Voting

Term in Position: 10/17/2019 to 06/30/2022

Mr David A Baylon

922 34th Ave

Seattle, WA 98122-5135

Phone: (206)322-3753
(206)

Fax: (206)325-7270

Email: davidbaylon45@outlook.com

Interest Category: Designer/Builder

YES

VICE CHAIR; PCVM-MANUFACTURER; INDOOR AIR QUALITY
SUBCOMMITTEE

8009091 073 Voting

Term in Position: 07/01/2018 to 06/30/2021

Mr James (Mike) C Moore III

5313 Fox Hollow Ct

Loveland, CO 80537-7977

Stator LLC

Phone: (303)408-7015

Fax: (301)889-0019

Email: mmoore@statorllc.com

Interest Category: Manufacturer

ABSTAIN

PCVM-OWNER/OPERATOR/OCCUPANT; SYSTEMS
SUBCOMMITTEE

72198 029 Voting

Term in Position: 07/01/2019 to 06/30/2022

Mr Hoy R Bohanon, Jr

8236 Arbor Ridge Ln

Clemmons, NC 27012-9637

Hoy Bohanon Engineering, PLLC

Phone: (336)972-1626

Fax:

Email: bohanoneng@gmail.com

Interest Category: Owner/Operator/Occupant

YES

SECRETARY; PCVM-GENERAL; INDOOR AIR QUALITY
SUBCOMMITTEE

8347433 073 Voting

Term in Position: 02/06/2021 to 06/30/2024

Dr Jordan D. Clark

544 S Front St Apt 109

Columbus, OH 43215-7611

The Ohio State University

Phone: (512)585-4096

Fax:

Email: clark.1217@osu.edu

Interest Category: General

YES

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE;
CHAIR, ENVELOPE SUBCOMMITTEE

8356996 064 Voting

Term in Position: 07/02/2020 to 06/30/2022

Mr Randy Brannen

Quality Filters, Inc.

23351 Grissom Dr

Robertsdale, AL 36567-3180

Phone: 346 8319128

Fax:

Email: randyb@qualityfilters.com

Interest Category: Manufacturer

Not returned

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

2008563 999 Voting

Term in Position: 02/06/2021 to 06/30/2022

Mr Nick H Agopian

Madison

722 McLean Dr

Madison, WI 53718-3060

Renewa LLC, A Soler & Palau Company

Phone: (608)512-3807

Fax: (608) 850-2222

Email: nick.agopian@outlook.com

Interest Category: Manufacturer

YES

PCVM-MANUFACTURER; CHAIR, SYSTEMS SUBCOMMITTEE

1016897 068 Voting

Term in Position: 07/02/2020 to 06/30/2023

Roy R Crawford, PhD

Johnson Controls

5005 York Dr

Norman, OK 73069-9504

Phone: (405) 419-6598

Fax:

Email: roy.crawford@jci.com

Interest Category: Manufacturer

YES

*SSPC 62.2 Webinar 6/23/2021

Continuation Ballot opened 6/25/2021, closed 7/2/2021

Total Voting: 32

Page 1 of 7

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VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

5057464 025 Voting
Term in Position: 07/02/2020 to 06/30/2023

Mr Steven J Emmerich

NIST YES
100 Bureau DR # MS 8633
Gaithersburg, MD 20899-8633
Phone:(301) 524-1022 Fax: (301)975-4409
Email:steven.emmerich@nist.gov
Interest Category: General

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

2033347 508 Voting
Term in Position: 07/01/2019 to 06/30/2022

Mr Philip W Fairey

Florida Solar Energy Ctr YES
1679 Clearlake Rd
Cocoa, FL 32922-5703
Phone:(321)638-1005 Fax: (321)638-1010
Email:pfairey@fsec.ucf.edu
Interest Category: General

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8374594 055 Voting
Term in Position: 07/02/2020 to 06/30/2023

Sama Fakhimi, PhD

AAF Not returned
200 Patrol RD Ste 100
Jeffersonville, IN 47130-7748
Phone:(812)697-5489 Fax:
Email:sfakhimi@aafintl.com
Interest Category: Manufacturer

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

5184990 050 Voting
Term in Position: 07/01/2018 to 06/30/2022

Mr Paul Francisco

University of Illinois at Urbana-Champaign YES
2111 S Oak St Ste 106
Champaign, IL 61820-0908
Phone:(217)244-0667 Fax: (217)244-9973
Email:pwf@illinois.edu
Interest Category: General

PCVM-GENERAL; CHAIR, INDOOR AIR QUALITY SUBCOMMITTEE

8277671 009 Voting
Term in Position: 07/01/2018 to 06/30/2022

Patricia Mason Fritz

1853 Indian Fields Rd Not returned
Feura Bush, NY 12067-1912
NYS DOH
Phone:518 402 7800 Fax:
Email:patricia.fritz@health.ny.gov
Interest Category: General

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE; SSPC 62.1 LIAISON

5151330 Voting
Term in Position: 07/01/2019 to 06/30/2022

Mr Gregg Gress

8448 S 100 W NO
North Judson, IN 46366
International Code Council
Phone:(219) 689-3190 Fax: 708 799-0320
(4343)
Email:greggagress@gmail.com
Interest Category: General

PCVM-OWNER/OPERATOR/OCCUPANT; INDOOR AIR QUALITY SUBCOMMITTEE

2051047 064 Voting
Term in Position: 07/02/2020 to 06/30/2023

Dr Mark C Jackson

146 Ridgewood Dr YES
Magnolia, TX 77355-4320
Daikin North America, LLC
Phone:(713)423-7805 Fax:
Email:mark.jackson@daikincomfort.com
Interest Category: Owner/Operator/Occupant

PCVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

8197288 049 Voting
Term in Position: 07/01/2018 to 06/30/2022

Dr David E Jacobs

National Center for Healthy Housing Not returned
1006 Wesley Ave
Oak Park, IL 60304-2020
Phone:(202)607-0938 Fax: (443)539-4150
Email:djacobs@nchh.org
Interest Category: General

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-OWNER/OPERATOR/OCCUPANT; INDOOR AIR QUALITY SUBCOMMITTEE

3033708 118 Voting

Term in Position: 07/01/2019 to 06/30/2022

Mr Richard Karg

R.J. Karg Associates and Residential Energy Dynamics, LLC

596 Grover Hill Rd

Bethel, ME 04217-3405

Phone: (207)824-0025 Fax:

Email: rjkarg@redcalc.com

Interest Category: Owner/Operator/Occupant

YES

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE; SSPC 90.1 LIAISON

5037928 049 Voting

Term in Position: 07/02/2020 to 06/30/2021

Mr Darren B Meyers, PE

International Energy Conservation Consultants LLC

7877 Marquette Dr S

Tinley Park, IL 60477-4560

Phone: (708)790-4602 Fax:

Email: dmeyers@ieccode.com

Interest Category: General

NO

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

8185085 001 Voting

Term in Position: 02/06/2021 to 06/30/2024

Dr Shichao Liu

Worcester Polytechnic Institute (WPI)

Civil and Environmental Engineering
Worcester Polytechnic Institute

Worcester, MA 01609

Phone: (512)965-0863 Fax:

Email: sliu8@wpi.edu

Interest Category: General

YES

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

7965503 081 Voting

Term in Position: 10/04/2017 to 06/30/2021

Mr Jeff R Miller, PE

California Energy Commission

1516 9th St Ms 37 #

Sacramento, CA 95814

Phone: (916)651-6182 Fax:

Email: jeff.miller@energy.ca.gov

Interest Category: General

YES

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8314035 Voting

Term in Position: 02/06/2021 to 06/30/2021

Ms Kimberly Llewellyn

Mitsubishi Electric

2417 Independence Dr

Austin, TX 78745-2078

Phone: (512)590-0481 Fax:

Email: klllewellyn@hvac.me.com

Interest Category: Manufacturer

YES

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

8383501 095 Voting

Term in Position: 07/02/2020 to 06/30/2023

Dr Collin Olson

7850 E Oakbrook Cir

Madison, WI 53717-1607

Energy Conservatory

Phone: (608) 213-7159 Fax:

Email: colson@energyconservatory.com

Interest Category: General

YES

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

2020963 079 Voting

Term in Position: 07/01/2019 to 06/30/2022

Mr Michael R Lubliner

Washington State University

Wsu Energy Program
905 Plum St Se, Suite 400

Olympia, WA 98504-3165

Phone: (360)956-2082 Fax: (360)956-2217

Email: lublinerm@energy.wsu.edu

Interest Category: General

YES

PCVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

5111271 001 Voting

Term in Position: 07/01/2017 to 06/30/2021

Mr Paul H Raymer

Heyoka Solutions

157 Palmer Ave
PO Box 787

Falmouth, MA 02541-0787

Phone: 508 444-8835 Fax: 508 444-8737

Email: paul.raymer@heysol.com

Interest Category: Manufacturer

YES

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-OWNER/OPERATOR/OCCUPANT; SYSTEMS
SUBCOMMITTEE

8357801 Voting

Term in Position: 09/07/2018 to 06/30/2021

Mr John Stephen Saunders

Tempo Partners YES

911 Maryland Dr

Irving, TX 75061-5748

Phone:(214) 801-0070 Fax:

Email:steve@tempopartners.com

Interest Category: Owner/Operator/Occupant

OR/AHRI; PCVM-MANUFACTURER; SYSTEMS
SUBCOMMITTEE

8375923 038 Voting

Term in Position: 10/17/2019 to 06/30/2021

Ms Shannon Corcoran

Air-Conditioning, Heating and Refrigeration Institute

2311 Wilson Blvd

Arlington, VA 22201-5417

Phone:703-293-4864 Fax:

Email:scorcoran@ahrinet.org

Interest Category: Manufacturer

Not voting - See alternate
David Noyes for votePCVM-OWNER/OPERATOR/OCCUPANT; ENVELOPE
SUBCOMMITTEE

1074412 082 Voting

Term in Position: 07/02/2020 to 06/30/2023

Dr Max Sherman

5 El Paraiso Ct YES

Moraga, CA 94556-1311

Phone:(925) 917-0267 Fax: 925 247 0004

Email:mhsheeraman@epbgroup.com

Interest Category: Owner/Operator/Occupant

OR/NPGA; PCVM-GENERAL; INDOOR AIR QUALITY
SUBCOMMITTEE

5141363 090 Voting

Term in Position: 10/17/2019 to 06/30/2021

Mr David C Delaquila

Aquila Consulting, LLC

1760 Portal Dr NE

Warren, OH 44484-1135

Phone:330-469-2727 Fax: (330)469-2727

Email:daviddequila@gmail.com

Interest Category: General

NO

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

5142370 079 Voting

Term in Position: 07/01/2017 to 06/30/2021

Mr Don T Stevens

Stevens and Associates YES

PO Box 398

Keyport, WA 98345-0398

Phone:360-908-7132 Fax:

Email:don.t.stevens@wavecable.com

Interest Category: Manufacturer

OR/NAHB; PCVM-DESIGNER/BUILDER; SYSTEMS
SUBCOMMITTEE

5220342 025 Voting

Term in Position: 07/02/2020 to 06/30/2022

Mr S Craig Drumheller

National Association of Home Builders

1201 15th St NW

Washington, DC 20005-2800

Phone:(202)266-8565 Fax: (202)266-8369

Email:cdrumheller@nahb.org

Interest Category: Designer/Builder

Not voting - See alternate
Armin Rudd for vote

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

5110399 026 Voting

Term in Position: 10/17/2019 to 06/30/2022

Mr Eric D Werling

420 W H St

Purcellville, VA 20132-3214

DOE

Phone:(202) 604-8874 Fax: (202)586-4617

Email:eric.werling@ee.doe.gov

Interest Category: General

OR/AGA; PCVM-GENERAL; INDOOR AIR QUALITY
SUBCOMMITTEE

5162460 026 Voting

Term in Position: 02/01/2019 to 06/30/2021

Mr Ted A Williams

Natural Gas Direct, LLC

Phone:(571) 733-9350 Fax:

Email:ngdllc@outlook.com

Interest Category: General

Not returned

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

AOR/AHRI; PCVM-MANUFACTURER; SYSTEMS
SUBCOMMITTEE

8350313 026 Non-voting

Term in Position: 10/17/2019 to 06/30/2021

Mr David T Noyes

Air-Conditioning, Heating, & Refrigeration Institute

2311 Wilson Blvd Ste 400 NO

Arlington, VA 22201-5420

Phone: 703-600-0337 Fax:

Email: dnoyes@ahrinet.org

Interest Category: General

PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8356069 026 Non-voting

Term in Position: 07/01/2019 to 06/30/2022

Mr Randall L Cooper

Association of Home Appliance Manufacturers

1111 19th ST NW Ste 402

Washington, DC 20036-3627

Phone: (202)872-5955 Fax:

Email: rcooper@aham.org

Interest Category: General

AOR/NAHB; PCVM-DESIGNER/BUILDER; SYSTEMS
SUBCOMMITTEE

2019444 022 Non-voting

Term in Position: 07/02/2020 to 06/30/2022

Mr Armin Rudd

AB Systems LLC ABSTAIN

726 Maple St

Annville, PA 17003-1524

Phone: (717)867-0123 Fax:

Email: arudd@absystems.us

Interest Category: Designer/Builder

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8133650 999 Non-voting

Term in Position: 07/01/2019 to 06/30/2022

Mr Gary Crow

American Aldes Ventilation Corporation

4521 19th Street Ct E Unit 104 Ste 104

Bradenton, FL 34203-3791

Phone: (941)351-3441 Fax: 941 3513442
(312)

Email: gary.crow@aldes.com

Interest Category: Manufacturer

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8398415 Non-voting

Term in Position: 11/05/2020 to 06/30/2024

Mr Oludamilola Adesanya

Carrier HVAC

7304 W Morris St Bldg 9

Indianapolis, IN 46231-1355

Phone: (317)494-3454 Fax:

Email: Oludamilola.Adesanya@Carrier.com

Interest Category: Manufacturer

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8358411 159 Non-voting

Term in Position: 02/01/2019 to 06/30/2021

Mr Stephen E Gatz

Whirlpool Corporation

2800 220th Trl

Amana, IA 52204-0011

Phone: 319 622 2523 Fax:

Email: stephen_e_gatz@whirlpool.com

Interest Category: Manufacturer

PSVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

5138006 025 Non-voting

Term in Position: 07/02/2020 to 06/30/2023

Mr Michael D Blanford

U.S Dept. Of Housing & Urban Development

Office Policy Development & Research
451 7th St SW Rm 8134

Washington, DC 20410-0001

Phone: (202) 402-5728 Fax: (202)708-5873

Email: michael.d.blanford@hud.gov

Interest Category: General

PSVM-GENERAL; ENVELOPE SUBCOMMITTEE

8301624 Non-voting

Term in Position: 07/02/2020 to 06/30/2023

Dr Marian Goebes

TRC

436 14th St Ste 1020

Oakland, CA 94612-2724

Phone: (510) 400-5374 Fax:

Email: MGoebes@trccompanies.com

Interest Category: General

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PSVM-MANUFACTURER; ENVELOPE SUBCOMMITTEE

8112848 053 Non-voting
 Term in Position: 02/06/2020 to 06/30/2023

Mr Paul Grahovac

3741 Greenway Cir
 Lawrence, KS 66046-5441
 Phone: 785-830-7355 Fax: (888)376-3741
 Email: paul.grahovac@prosoco.com
 Interest Category: General

PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8385625 099 Non-voting
 Term in Position: 07/02/2020 to 06/30/2023

Mr Richard E Lambert Jr

BSH Home Appliances
 179 Mine Ln
 Jacksboro, TN 37757-3926
 Phone: 423-563-6101 Fax:
 Email: richard.lambert@bshg.com
 Interest Category: General

PSVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

8061284 034 Non-voting
 Term in Position: 07/01/2018 to 06/30/2022

Mr Henry T Greist

Lennox Industries
 605 NW 53rd Ave Ste A4
 Gainesville, FL 32609-1019
 Phone: (352)559-7023 Fax: (352) 377-7368
 Email: henry.greist@lennoxind.com
 Interest Category: Manufacturer

PSVM-DESIGNER/BUILDER; ENVELOPE SUBCOMMITTEE

5074059 001 Non-voting
 Term in Position: 02/01/2019 to 06/30/2021

Dr Joseph W Lstiburek

Building Science Corp
 68 Main St
 Westford, MA 01886-2507
 Phone: (978)589-5100 Fax: (978)589-5103
 Email: joe@buildingscience.com
 Interest Category: Designer/Builder

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

5173670 034 Non-voting
 Term in Position: 07/01/2017 to 06/30/2021

Dr Sanjeev K Hingorani, PhD

Lennox Industries Inc
 605 NW 53rd Ave Ste A4
 Gainesville, FL 32609-1019
 Phone: (352)559-7026 Fax: 3523777368
 Email: skh@lennoxind.com
 Interest Category: Manufacturer

PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8235421 049 Non-voting
 Term in Position: 07/02/2020 to 06/30/2023

Dr Kashif Nawaz, PhD

2426 Blackberry Ridge Blvd
 Knoxville, TN 37932-2391
 Oak Ridge National Lab
 Phone: (217)377-1528 Fax:
 Email: nawazk@ornl.gov
 Interest Category: General

PSVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

8346315 999 Non-voting
 Term in Position: 02/01/2019 to 06/30/2021

Mr Nicholas Hurst

US EPA
 1200 Pennsylvania Ave NW
 Washington, DC 20460-0001
 Phone: Fax:
 Email: hurst.nicholas@epa.gov
 Interest Category: General

PSVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

8194147 601 Non-voting
 Term in Position: 11/05/2020 to 06/30/2023

Mr Joseph J Pessa

1 Cozy Ct
 Cromwell, CT 06416-2313
 Dynamic Air Quality Solutions
 Phone: (860)502-5258 Fax:
 Email: jpessa@dynamicaqs.com
 Interest Category: Manufacturer

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

8217554 Non-voting

Term in Position: 11/05/2020 to 06/30/2024

James T VerShaw3810 Allendale Dr
Tyler, TX 75701-9417

Ingersoll Rand

Phone: 903.520.6481 Fax:

Email: jim.vershaw@tranetechnologies.com

Interest Category: Manufacturer

TC 5.10 LIAISON

8266831 016 Non-voting

Term in Position: 07/07/2020 to 06/30/2022

Mr Nissun Feiner, C.TechDelta-T Designs
16 Winstar Rd Unit 4

Oro-Medonte, ON L0L 2L0 CANADA

Phone: 705-791-9000 Fax: 705-487-6474

Email: niss@deltatdesigns.ca

Interest Category: General

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE; SSPC
52.2 LIAISON

5225059 010 Non-voting

Term in Position: 07/02/2020 to 06/30/2023

Mr R Vijayakumar, PhDAerfil, LLC
300 Cypress St Unit 41
Liverpool, NY 13088-8802

Phone: (315)506-6883 Fax:

Email: vijay@aerfil.com

Interest Category: Manufacturer

SPLS LIAISON

5124511 016 Non-voting

Term in Position: 07/01/2017 to 06/30/2021

Mr Karl L PetermanVibro-Acoustics
355 Apple Creek Blvd
Markham, ON L3R 9X7 CANADA

Phone: (647)258-5315 Fax: (416)291-8049

Email: kpeterman@vibro-acoustics.com

Interest Category: General

SSPC 62.1 LIAISON

8357095 Non-voting

Term in Position: 02/06/2021 to 06/30/2023

Mr Zalmie HusseinIAPMO
4755 E Philadelphia St
Ontario, CA 91761-2810

Phone: (909)218-8122 Fax: (909)472-4246

Email: Zalmie.Hussein@iapmo.org

Interest Category: General

STAFF LIAISON

5213744 650 Non-voting

Term in Position: 02/15/2005 to

Mr Mark J WeberASHRAE
180 Technology Pkwy Ste 200
Peachtree Corners, GA 30092-2973

Phone: 678-539-1214 Fax: 678-539-2214

Email: mweber@ashrae.org

Interest Category:

SSPC 189.1 LIAISON

1072630 026 Non-voting

Term in Position: 07/02/2020 to 06/30/2021

Mr Lawrence J SchoenSchoen Engineering Inc
10478 Waterfowl Ter
Columbia, MD 21044-2463

Phone: (410)730-9797 Fax:

Email: larry@schoenengineering.com

Interest Category: General

Agenda for SSPC 62.2 Summer Meeting, Toronto, Ontario

- Commitment to the [ASHRAE Code of Ethics](#): “In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests.”
- Times are estimates only and may be adjusted based on the time required for individual topics.
- Schedule and links to attend virtual meeting are posted at: <https://events.rdmobile.com/Sessions/Index/15175>. See Appendix B of this agenda for more information.
- There are no 62.2 subcommittee meetings in Toronto

Friday, June 24, 2022 (Times, in EDT, are approximate)

Room: Sheraton, Birchwood Ballroom (M) (subject to change; confirm on-site)

1. **8:00 – 8:15:** Welcome, quorum check, IT troubleshooting
2. **8:15 – 8:20:** Approve agenda
3. **8:20 – 8:30:** Approve minutes of May 19, 2022, Meeting
Document: “Draft Minutes SSPC 622 20220519.doc”
4. **8:30 – 9:00:** Studying the Optimal Ventilation for Environmental Indoor Air Quality (STOVE IAQ). <https://nchh.org/research/stove-iaq/>. Dave Jacobs will present results from a study on IAQ and health in dwelling units that were rehabilitated to include ASHRAE 62.2-compliant ventilation.
5. **9:00 – 10:00:** Consider AHRI’s unvented combustion proposal, submitted 6/1/2021. Committee is required to respond within 13 months of receipt. Options include:
 - a. accept for public review without modification;
 - b. accept for public review with modification;
 - c. accept for further study; and
 - d. rejectDocument: “CMP - AHRI - Unvented combustion - (0002-001,002)6-1-2021 j.pdf”
6. **10:15 – 12:00:** Process addendum j, “Unvented Combustion Appliances - j.”
Status: PPR completed. Committee responses circulated. 34 unresolved comments from 19 unresolved commenters. Note: since last meeting, Dave Delaquila (PCVM, representing the National Propane Gas Association) led an ad-hoc workgroup seeking an alternative solution to addendum j (the second such workgroup convened for this purpose since November 2021). The workgroup was disbanded by Mr. Delaquila in May after failing to develop consensus on an alternative proposal.
Documents: “62.2j(2019)_1stPPRDraftFINAL_rev (002),” “Addendum j - OCD_Comments_20220610.doc”
 - a. Each unresolved commenter will be given the opportunity to address the committee for up to 5 minutes to:
 - i. summarize their reply to the committee’s response, and
 - ii. provide any new information and/or new language that will resolve their comment(s).

Commenters are asked to refrain from repeating testimony that has been presented at prior meetings and also from repeating testimony of fellow commenters.

- b. Following any input from the commenter, the committee will consider providing further responses to commenters (Document: “Addendum j - unresolvedcommenters - additional responses 20220526.doc”) and will determine its course of action (see Appendix A for options).

7. **12:00 – 1:00:** Lunch

8. **1:00 – 1:30:** Consideration of addendum a, “Unvented Combustion Appliances – a.”

Status: ASHRAE’s Tech Council has determined that addendum j is still an “active standards document,” and ASHRAE staff has requested that 62.2 take action on this addendum.

Document: “Addendum a, Unvented combustion - a, 2ndPPRDraftFINAL.pdf”

- a. If addendum j is not approved with knowledge of unresolved objectors, no action is needed at this time.
- b. If addendum j is approved with knowledge of unresolved objectors, the committee should entertain a “motion to withdraw addendum a effective immediately upon the publication of addendum j.” This will clearly communicate that addendum j is the committee’s preference and is expected to leave the committee the option of revisiting addendum a in the case that addendum j fails.

9. **1:30 – 2:30:** Process addendum i, “Electronic Air Cleaners.” Discussion to be led by Pat Fritz, IAQ Subcommittee Chair.

Status: Second PPR completed. Committee responses circulated. One unresolved comment from one unresolved commenter: Mr. Larry Fletcher.

Documents: “Addendum i, electronic air cleaners - draft second PPR - FINAL – 20220117.doc,” “Addendum i - OCD_Comments_20220610”

- a. Each unresolved commenter will be given the opportunity to address the committee for up to 5 minutes to:
 - i. summarize their reply to the committee’s response, and
 - ii. provide any new information and/or new language that will resolve their comment(s).
- b. Following any input from the commenter, the committee will determine its course of action (see Appendix A for options).

10. **2:30 – 3:45:** Process addendum m, “MERV 11 Filtration.” Discussion to be led by Kimberly Llewellyn, Systems Subcommittee Chair.

Status: PPR completed. Committee responses circulated. Five unresolved comments from two unresolved commenters.

Documents: “Addendum m, MERV 11 filtration - 1stPPRDraft,” “Addendum m - OCD_Comments_20220610”

- a. Each unresolved commenter will be given the opportunity to address the committee for up to 5 minutes to:
 - i. summarize their reply to the committee’s response, and
 - ii. provide any new information and/or new language that will resolve their comment(s).
- b. Following any input from the commenter, the committee will determine its course of action (see Appendix A for options).
- c. **3:00 – 3:15:** Break

11. **3:15 – 4:15:** Consider termination separation proposal. Discussion to be led by Marian Goebes.
Status: this proposal was heard by the main committee in its May 19th meeting and has been revised following receipt of comments.
Document: “CMP - Goebes - Min sep distance 20220606.doc”
12. **4:15 - 4:25:** IAQ Procedure Workgroup update. Discussion to be led by Max Sherman.
13. **4:25 – 4:40:** Installation Workgroup update. Discussion to be led by Nick Agopian.
14. **4:40 – 5:00:** Humidity Workgroup update. Discussion to be led by Kimberly Llewellyn.
15. **5:00:** Adjourn

Saturday, June 25, 2022 (Times, in EDT, are approximate)

Room: Sheraton, Chestnut (M)

1. **8:00 – 8:10:** Welcome and quorum check
2. **8:10 – 8:30:** Range Hood Rating Metrics Workgroup update. Discussion to be led by Randy Cooper.
3. **8:30 – 9:00:** Rick Karg and Paul Raymer will present on the ASHRAE Residential Issue Brief, Ventilation IEQ and Sleep Quality in Bedrooms.
4. **9:00 – 10:00:** Acceptable Air Quality Definition. Discussion to be led by Paul Francisco, Envelopes Subcommittee Chair.
Document: “CMP - Acceptable Ventilation Air_0622.doc”
5. **10:00 – 10:05:** Addendum k, “Title, Purpose, and Scope” update.
6. **10:05 – 10:20:** Break
7. **10:20 – 10:40:** Housekeeping item to address Max Sherman’s continuous maintenance proposal to remove “dwelling units in multifamily buildings that have a path of egress into a corridor” from the scope of 62.2. The committee rejected this proposal in its meeting on October 9, 2020. We must provide an official reason statement to complete processing this proposal in the ASHRAE OSR website. Proposed reason statement:
“This proposal was rejected by the committee during its meeting on October 9, 2020. All non-transient dwelling units are within the scope of 62.2, as coordinated with ASHRAE 62.1, and the committee's preference is that they remain so. Please see the committee minutes for more information.”
Document: “CMP - Sherman - Interior Corridors in MF Buildings – 20200529.doc”
8. **10:40 – 12:00:** IAQ Subcommittee update. Discussion to be led by Pat Fritz, IAQ Subcommittee Chair.

9. **12:00 – 1:00:** Lunch

10. **1:00 – 3:00:** Continue business from prior day, as necessary. New business.

11. **3:00:** Adjourn

Next meeting: The next in-person meeting of the project committee is expected to be February 3-4, 2023, in Atlanta, GA. A virtual meeting of the project committee may be held prior to this date.

Update your ASHRAE bio information at the [ASHRAE](#) website.

Appendix A: Reference from the PC's Guide to PASA

Potential Actions Following Close of PPR and Review of Comments

The following is a list of choices the PC has:

- A. No changes need to be made to the draft. If there are unresolved comments the PC votes to recommend approval for publication with knowledge of unresolved objectors. If there are no comments the original vote to recommend approval for publication public review stands.

- B. The PC finds only editorial changes need to be made (i.e. no requirements to the standard are made). The PC needs to vote that the changes are editorial. Same voting actions apply as in option A. If there is a disagreement between Staff and the Chair on whether or not the change is editorial, then the matter is referred to SPLS for a decision.

- C. The PC makes substantive changes and votes to recommend approval of a draft for publication public review. This new vote supersedes the prior vote.

- D. The PC decides the draft should be discontinued.

Appendix B: Virtual Meeting Access

Please note that link and access information has been embedded in the [online conference schedule](#) and ASHRAE 365 app. Guests or members can easily access this information by visiting the schedule, clicking your meeting and clicking “Enter Meeting” under the Sessions Access and Resources section.

6/24/2022

8:00:00 AM– 12:00:00 PM **Eastern Time (ET)**

Meeting Link: <https://ashrae.webex.com/ashrae/j.php?MTID=m5c401325c3d9f169ae44739503a22199>

Access Info:

Meeting number: 2330 649 0134 Password: SSPC62.2 Join by phone 18662994153 United States of America Toll Free +14702385742 US Toll Access code: 2330 649 0134

6/24/2022

1:00:00 PM– 5:00:00 PM **Eastern Time (ET)**

Meeting Link: <https://ashrae.webex.com/ashrae/j.php?MTID=m63ec4a9770e7d6ff5bce7c91286fce60>

Access Info:

Meeting number: 2345 719 4312 Password: SSPC62.2 Join by phone 18662994153 United States of America Toll Free +14702385742 US Toll Access code: 2345 719 4312

6/25/2022

8:00:00 AM– 12:00:00 PM **Eastern Time (ET)**

Meeting Link: <https://ashrae.webex.com/ashrae/j.php?MTID=ma0a18b2c806cc026a7a6633c810efdd8>

Access Info:

Meeting number: 2343 022 5780 Password: SSPC62.2 Join by phone 18662994153 United States of America Toll Free +14702385742 US Toll Access code: 2343 022 5780

6/25/2022

1:00:00 PM– 3:00:00 PM **Eastern Time (ET)**

Meeting Link: <https://ashrae.webex.com/ashrae/j.php?MTID=m6d80921e95bcd2b9a36f190fbd970547>

Access Info:

Meeting number: 2346 354 0345 Password: SSPC62.2 Join by phone 18662994153 United States of America Toll Free +14702385742 US Toll Access code: 2346 354 0345

EMAIL CORRESPONDENCE EVIDENCING INVITATION TO MEETINGS

From: Mike Moore <mmoore@statorllc.com>

Sent: Friday, June 10, 2022 10:06 PM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'daviddelaquila@gmail.com' <daviddelaquila@gmail.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>; 'dwd48@yahoo.com' <dwd48@yahoo.com>

Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>; Jordan Clark <clark.1217@osu.edu>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear unresolved commenters to 62.2 addendum j,

Attached is the agenda for the 62.2 virtual summer meeting (in-person location: Toronto, ON). As noted in the email below, unresolved commenters will have another opportunity to address the committee on Friday, June 24. If you wish to address the committee, please observe the following:

Each unresolved commenter will be given the opportunity to address the committee for up to 5 minutes to:

- i. summarize their reply to the committee's response, and

- ii. provide any new information and/or new language that will resolve their comment(s).
Commenters are asked to refrain from repeating testimony that has been presented at prior meetings and also to refrain from repeating testimony of fellow commenters.

Thank you,

Mike

Mike Moore
Stator LLC
mmoore@statorllc.com
303.408.7015

From: Mike Moore <mmoore@statorllc.com>
Sent: Thursday, May 12, 2022 11:59 AM
To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'daviddequila@gmail.com' <daviddequila@gmail.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'mccormickj@hearthnhome.com' <mccormickj@hearthnhome.com>; 'megan.mcnulty@servidyne.com' <megan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>; 'dwd48@yahoo.com' <dwd48@yahoo.com>
Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>
Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear unresolved commenters to 62.2 addendum j,

Please note that the May 2022 version of the ASHRAE Journal has published the unvented combustion “white paper” that was referenced in ASHRAE 62.2 discussions of addendum j, with the title of “Impacts of Unvented Space Heaters.” You may obtain a copy through the [ASHRAE Technology Portal](#). During the summer meeting, June 24-25 in Toronto, the 62.2 committee is expected to consider the replies submitted by commenters through the ASHRAE Online Comment Database to the responses that were provided by the committee. Virtual attendance will be an option, with more information forthcoming. When your replies are considered, unresolved commenters will be invited to present additional data/new information.

Thank you,

Mike

Mike Moore

Stator LLC

mmoore@statorllc.com

303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Tuesday, January 25, 2022 1:57 PM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiczicki@npga.org' <bswiczicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'daviddelaquila@gmail.com' <daviddelaquila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com' <gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'John.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthony@gmail.com' <rangeranthony@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>; 'dwd48@yahoo.com' <dwd48@yahoo.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>

Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear commenters to 62.2 addendum j,

Attached is the updated draft agenda for the 62.2 winter meeting in Las Vegas. The workgroup tasked with producing a compromise alternative to addendum j was not able to develop consensus around a counter-proposal, so the placeholder for discussion of the anticipated workgroup solution has been removed from the agenda. Please note that each commenter will have the opportunity to address the committee for up to 5 minutes during the appointed time on Friday to provide a brief

synopsis of their comment(s) and/or identify language that will resolve their comment(s).

Thank you,

Mike

Mike Moore

Stator LLC

mmoore@statorllc.com

303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Monday, January 10, 2022 11:20 AM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'daviddelaquila@gmail.com' <daviddelaquila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com' <gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'john.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthony@gmail.com' <rangeranthony@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>; 'dwd48@yahoo.com' <dwd48@yahoo.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>

Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear commenters to 62.2 addendum j,

Attached is the draft agenda for the upcoming 62.2 winter meeting in Las Vegas, during which, the committee plans to discuss addendum j. Please see the attachment for more detail. Virtual WebEx meeting links are available online through the links below by clicking on "Enter Meeting" on the

applicable meeting date(s). A workgroup led by AHRI's Mary Koban has been working diligently to develop an alternative to addendum j that is intended to resolve commenters, and I hope that the workgroup is able to produce something for consideration at the meeting. If the workgroup fails to produce a proposal or if their proposal is rejected by the committee, then the committee will continue to process comments to addendum j by working to develop responses.

Schedule and links to attend virtual meeting are posted on the Las Vegas meeting schedule at <https://events.rdmobile.com/Sessions/Index/14492>

SSPC 62.2 (Standard 62.2) Ventilation and Acceptable IAQ in Residential Buildings

Friday 8:00 am-12:00 pm and 1:00 pm to 5:00 pm (Pacific) (In-person + Virtual WebEx)

Room: Caesars Palace, Milano VIII (P)

Virtual WebEx (8:00 am to 12:00 pm): <https://events.rdmobile.com/Sessions/Details/1263322>

Virtual WebEx (1:00 pm to 5:00 pm): <https://events.rdmobile.com/Sessions/Details/1263323>

Saturday 8:00 am-12:00 pm and 1:00 pm to 3:00 pm (Pacific) (In-person + Virtual WebEx)

Room: Caesars Palace, Milano VIII (P)

Virtual WebEx (8:00 am to 12:00 pm): <https://events.rdmobile.com/Sessions/Details/1263324>

Virtual WebEx (1:00 pm to 3:00 pm): <https://events.rdmobile.com/Sessions/Details/1263325>

Sincerely,

Mike

Mike Moore

ASHRAE 62.2 Chair

Stator LLC

mmoore@statorllc.com

303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Friday, December 3, 2021 1:17 PM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'daviddelaquila@gmail.com' <daviddelaquila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com' <gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'john.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>;

'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthonyc@gmail.com' <rangeranthonyc@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>; 'dwd48@yahoo.com' <dwd48@yahoo.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>
Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Copying commenter Don Denton on this email.

Mike Moore
Stator LLC
mmoore@statorllc.com
303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Friday, December 3, 2021 1:01 PM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>; 'daviddequila@gmail.com' <daviddequila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com' <gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'john.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthonyc@gmail.com' <rangeranthonyc@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>

Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear 62.2 Addendum j Commenters:

Thanks to those of you who participated in yesterday's meeting, which was dedicated solely to addendum j efforts. In accordance with ASHRAE procedures, during the meeting, the committee heard from commenters, debated the issues raised to determine if comments could be accepted/resolved, and held two straw polls. The first straw poll was whether to modify addendum j in some fashion based on comments that were submitted (the one comment recommending a modification that was not considered in yesterday's meeting was a comment on expanding the addendum to also address unvented cooking appliances). A narrow majority voted to proceed without modification.

As chair, I need to respect yesterday's voting majority on this point, so I expect that some committee volunteers will begin drafting responses to your comments that align with this majority position. However, there was also a strong minority position on the committee in yesterday's meeting to work towards a modified addendum j that could resolve commenters and be acceptable to the committee. In recognition of this strong minority position, I am moving to convene a workgroup of committee members to work on an alternative, compromise proposal in advance of ASHRAE 62.2's winter meeting (January 28-29), for consideration at that meeting. This group will be led by Mary Koban of AHRI (also a negative commenter on addendum j).

The second straw poll was on whether to discontinue (withdraw) addendum j. The overwhelming majority rejected this option.

Best regards,

Mike

Mike Moore
Stator LLC
mmoore@statorllc.com
303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Wednesday, December 1, 2021 10:50 AM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>; 'daviddequila@gmail.com'

<daviddelaquila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com' <gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'john.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdllc@outlook.com' <ngdllc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthonyc@gmail.com' <rangeranthonyc@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>

Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: RE: ASHRAE 62.2 Addendum j Comments

Dear 62.2 Addendum j Commenters:

For your reference, attached are an updated agenda and a presentation that will be used to navigate through your comments during tomorrow's 62.2 meeting. I have increased the time that we will focus on addendum j to allow for more testimony from commenters.

Looking forward to tomorrow's discussion,

Mike

Mike Moore
Stator LLC
mmoore@statorllc.com
303.408.7015

From: Mike Moore <mmoore@statorllc.com>

Sent: Friday, November 19, 2021 2:25 PM

To: 'adair@hpba.org' <adair@hpba.org>; 'bdresner@empirecomfort.com' <bdresner@empirecomfort.com>; 'bhgreene@bellsouth.net' <bhgreene@bellsouth.net>; 'blairpouncey@yahoo.com' <blairpouncey@yahoo.com>; 'bmassey@eastern.com' <bmassey@eastern.com>; 'brian.vandrak@us-egi.com' <brian.vandrak@us-egi.com>; 'BrianStreisel@ghpgroupinc.com' <BrianStreisel@ghpgroupinc.com>; 'bswiecicki@npga.org' <bswiecicki@npga.org>; 'co1@austin.rr.com' <co1@austin.rr.com>; 'danielle.lattanzi@pgworks.com' <danielle.lattanzi@pgworks.com>; 'daviddelaquila@gmail.com' <daviddelaquila@gmail.com>; 'folgerg@tds.net' <folgerg@tds.net>; 'gerrymisel@georgiagas.com'

<gerrymisel@georgiagas.com>; 'haroldspropane@bellsouth.net' <haroldspropane@bellsouth.net>; 'jcantrell@blossmangas.com' <jcantrell@blossmangas.com>; 'jeff.bush@us-egi.com' <jeff.bush@us-egi.com>; 'john.phillips@ihp.us.com' <john.phillips@ihp.us.com>; 'jranfone@aga.org' <jranfone@aga.org>; 'KLEASON@USAPROCOM.com' <KLEASON@USAPROCOM.com>; 'lisa@alabamapropane.com' <lisa@alabamapropane.com>; 'mccormickcj@hearthnhome.com' <mccormickcj@hearthnhome.com>; 'meghan.mcnulty@servidyne.com' <meghan.mcnulty@servidyne.com>; 'ngdlc@outlook.com' <ngdlc@outlook.com>; 'pbaker@maxitrol.com' <pbaker@maxitrol.com>; 'psuphy1988@gmail.com' <psuphy1988@gmail.com>; 'rangeranthony@gmail.com' <rangeranthony@gmail.com>; 'ranrainre@aol.com' <ranrainre@aol.com>; 'rcooper@aham.org' <rcooper@aham.org>; 'rfreeman@freemangas.com' <rfreeman@freemangas.com>; 'rlani@apga.org' <rlani@apga.org>; 'ronsmith@smithtot.net' <ronsmith@smithtot.net>; 'sneville@eufaula.rr.com' <sneville@eufaula.rr.com>; 'ststurdivant@blossmangas.com' <ststurdivant@blossmangas.com>; 't.busbee@evergreenpropane.com' <t.busbee@evergreenpropane.com>; 'ventfree@comcast.net' <ventfree@comcast.net>; 'Wricha2796@aol.com' <Wricha2796@aol.com>
Cc: 'Weber, Mark' <mweber@ashrae.org>; Larry Markell <markellc@ornl.gov>; Marian Goebes - W <mgoebes@trccompanies.com>

Subject: ASHRAE 62.2 Addendum j Comments

Thank you for providing comments to ASHRAE 62.2 addendum j. The comments have been distributed to the 62.2 committee and will receive their initial review at the next virtual committee meeting on December 2nd.

You may register for the SSPC 62.2 Full Committee Webinar on Dec 2, 2021 11:00 AM EST at: <https://attendee.gotowebinar.com/register/3064520744014967566>

During this meeting, the 62.2 Committee will discuss the themes presented by the negative comments. Following is the portion of the draft agenda that has been allocated to this effort (final agenda and actual times may vary but are provided as best estimates to respect your time). There will probably not be enough time for each commenter to address the committee, but the time allotted should be sufficient to at least cover the general themes and support the written comments which have been shared with the committee. You are welcome to attend and speak to these themes during the meeting. We will do our best to accommodate as many speakers as possible and request that you limit your testimony to two minutes to permit multiple commenter perspectives to be heard. In the interest of efficiency, repeat testimony will need to be curtailed.

As part of ASHRAE's process, the committee will need to determine how to respond to your comments. As chair, I will seek committee recommendations on the disposition of the comments' themes. Following the meeting, you will be contacted again to inform you of the direction that the committee has decided to take and what your options are for follow-up engagement. If you have any questions in the interim, please let me know.

1. **11:10 – 12:20:** Addendum j “Unvented Combustion” comments: Comments have been grouped into the following topics. The committee will hear from commenters on the various themes and, after discussion, will provide direction to the chair regarding the disposition of

the comment themes.

- a. **11:10 – 11:30:** Testimony from commenters; **11:30 – 11:50:** Committee discussion and straw polls. Topic: Consider AHRI's counter-proposal (i.e., prior addendum a) and/or develop other alternative compromise language related to sizing/listing/controls. The proposal has 4 main components, summarized below. *Note: components i, i/ii, i/ii/iii, and iii were also submitted as individual comments by various commenters.*
 - i. ANSI Z21.11.2 listing (most of the individual comments requested this listing as the sole replacement for addendum j)
 - ii. Input limitations and installation/venting requirements of Section 12.3.2 of NFPA 54/ANSI Z223.1, National Fuel Gas Code, or Section 501.8 of the IFGC
 - iii. Thermostatic control
 - iv. Heating capacity based on volume of room, heating capacity of equipment, and air-free NO2 test result
- b. **11:50 – 12:00:** Testimony from commenters; **12:00 – 12:10:** Committee discussion and straw poll. Topic: Withdraw the addendum (various reasons given, several based on the cited references not supporting a ban)
- c. **12:10 – 12:15:** Testimony from commenters; **12:15 – 12:20:** Committee discussion and straw poll. Topic: Expand the addendum to address combustion cooking appliances

Thank you,

Mike

Mike Moore
ASHRAE 62.2 Chair
mmoore@statorllc.com
303.408.7015

From: jkeen@ksu.edu
To: [Meyers-Lisle, Tanisha](#)
Cc: [Barbaree, Connor](#); [Reiniche, Stephanie](#)
Subject: Re: Delaquila Response - COI issue
Date: Monday, February 13, 2023 5:19:44 PM
Attachments: [image093854.jpg](#)
[image404011.png](#)
[image685321.png](#)
[image519863.png](#)
[image066061.png](#)
[image129083.png](#)
[image916060.png](#)

I have no reason to believe Roger Hedrick brought bias to the decision-making process.

Based on the fact that the panelists were asked to declare if they felt they had a conflict prior to calling the first meeting of the panel, I have to believe that he does not think the conflict exists.

The votes were unanimous for each appeal and the conversation was not dominated or persuaded by any one panelist. Based on this, we would have the same outcome even if we were to remove Roger from the panel. I feel confident in the work conducted by the Appeals Panel.

Julia Keen, P.E., PhD, FASHRAE, HBDP
Professor, Bob and Betty Tointon Engineering Chair
Coffman University Distinguished Teaching Scholar
GE Johnson Department of Architectural Engineering and Construction Science
Kansas State University
2062 Seaton Hall
706 N Martin Luther King Jr Drive
Manhattan, KS 66506
Office (785)532-3575

From: Meyers-Lisle, Tanisha <TMeyers-Lisle@ashrae.org>
Sent: Monday, February 13, 2023 3:08 PM
To: Julia Keen <jkeen@ksu.edu>
Cc: Barbaree, Connor <CBarbaree@ashrae.org>; Reiniche, Stephanie <sreiniche@ashrae.org>
Subject: Delaquila Response - COI issue

This email originated from outside of K-State.

Hi Julia,
David Delaquila has brought to our attention an oversight that he and the other appellants weren't offered the option to review the Appeals Panel membership. He states that if he (they) were able to review the panel members ahead of time, he (they) would have requested removal of Roger Hedrick. His reasons are stated below:

“The member we’ve identified as having a conflict is Roger Hedrick. I have past documentation for his past involvement with addendum “be” to ASHRAE standard 189.1-2014 that is a severe restriction on the installation of unvented heaters. And his support for publication of addendum “a” to ASHRAE standard 62.2-2016, prior to the first successful appeal. As well as other past activities in this area that raises questions about his participation on the panel.”

After discussing with Stephanie and Connor we do not agree because Addendum *be* to 2014 of Standard 189.1 is too far removed from this issue. I believe that was in the 2017 version of the standard and that was 6 years ago. Roger was never on 62.2 and never voted for publication of addendum a.

As Panel Chair, do you believe Roger was fully capable to hear the arguments of the appeals and make an informed decision without bias?

Thanks,
Tanisha



ashrae.org

Tanisha Meyers-Lisle
Procedures Administrator

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Peachtree Corners, GA 30092
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TMeyers-Lisle@ashrae.org

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ATTACHMENT G

✓	APPEAL PROCESS CHECKLIST	NOTES
	Update Task Sheet	
	Publication Approval - Negative PC Commenters and Unresolved Commenters are offered a Right to Appeal	
	Right to Appeal Letters - should be drafted and sent within 15 days of publication approval	
	Receipt of Appeals are due within 15 working days	
	Appeals Received - forward copies to Appeals Board Chair; cc Jeff Littleton and current ASHRAE President, StdC Chair, Tech Council Chair and the cognizant PC Chair.	Clarified
	Ask Appeals Board if they are eligible to serve/have a conflict of interest.	
	Email Appellant(s) and Respondent(s) to see if they believe a member of the Appeals Board has a conflict of interest and should be recused. If so , Appeals Panel Chair will determine if a true conflict exists.	Clarified
	Random selection of Appeals Board members to form an Appeals Panel. Chair and 4 members with 2 alternates are needed.	
	Notify Appeals Board of Appeals Panel.	
	Schedule an Appeals Panel Conference Call to discuss appeals received - determine if it should be dismissed, hold a hearing, uphold without a hearing.	
	At the direction of Appeals Panel Chair, if a rebuttal is needed, request it from the cognizant PC Chair. It will be due within 5-7 working days.	
	Schedule an Appeals Panel Conference Call to go over rebuttal. Panel can decide if the appeal should be dismissed, schedule a hearing, or uphold without a hearing.	
	Options (Dismiss, Hearing, Uphold without a hearing)	
	Dismissal:	
	Appeals Panel Chair drafts decision. Send to entire Panel for edits. Finalize draft.	
	Notify ALL Parties that appeal will be dismissed. (Panel, Appellants, PC Chair, Jeff Littleton, ASHRAE President, Co-sponsors and ASHRAE Staff)	
	Hearing is scheduled:	

	Schedule a Hearing: Poll Dates. Panel can announce a hearing schedule at the time of the rebuttal request or wait until after rebuttal is received.	
	Notify ALL parties that a hearing will be scheduled. (Panel, Appellants, PC Chair, Jeff Littleton, ASHRAE President, Co-sponsors and ASHRAE Staff)	
	A full rebuttal shall be requested from the PC Chair. The rebuttal shall be distributed to the Appeals Panel and the Appellants.	
	The Appellant(s) and Respondent(s) shall provide oral Presentations that shall be distributed to Staff. (No new issues can be raised)	
	Appellant and Respondent can have up to 3 people to speak on their behalf. Each party is only allowed a designated amount of time and that time will be shared by any and all people speaking for that party.	
	Notification of Attendance: Anyone planning to attend the hearing shall notify the MOS no less than 15 days prior to the hearing date.	
	Guests that are not designated to speak on behalf of the Appellant or Respondent are not allowed to speak during the hearing or during the question period.	
	Appeals Panel member may ask Questions of the Presentation. No time limit unless specified by the Appeals Panel Chair.	
	Following Q&A - Executive Session for Panel Deliberation	
	Panel Decision due within 15 days of the hearing or after the receipt of the rebuttal, by majority vote, that the appeal, or any parts of the appeal, be upheld or denied.	
	The Appeals Panel Chair shall, within 14 days following the Appeals Panel's decision, notify the Appellant(s), Chief Staff Officer, Director of Technology, Manager of Standards, President, Chair of Technology Council, Chair of the Standards Committee, and Chair of the PC of the decision.	
	Uphold without a hearing:	
	The Appeals Panel Chair shall, within 14 days following the Appeals Panel's decision, notify the Appellant(s), Chief Staff Officer, Director of Technology, Manager of Standards, President, Chair of Technology Council, Chair of the Standards Committee, and Chair of the PC of the decision.	

ATTACHMENT H

B6.3 The MOS shall acknowledge receipt of the appeal, copy acknowledgement to the Chief Staff Officer, notify the President, and send copies of the appeal to the Appeals Board Chair and to the Chairs of Technology Council, Standards Committee, and the Project Committee (PC) which developed or revised the Standard or Guideline, ~~if applicable~~. Upon receipt of the appeal, an Appeals Panel will be established in accordance with Section B8 for the purpose of determining if the appeal will be heard or if the appeal will be dismissed without a hearing or upheld without a hearing.

B8.3 Panel Consideration of Adjudicating the Appeal Without a Hearing

The Appeals Panel shall decide if the appeal shall be dismissed without a hearing. In order to assess whether the appeal should be dismissed, the Appeals Panel Chair may request a rebuttal from the cognizant PC Chair. The rebuttal shall be shared with the Appellant(s) prior to the issuance of a decision by the Appeals Panel. No written response to the rebuttal is permitted. The Appeals Panel Chair or the Chairs designee shall notify the ASHRAE President, the Appellant and the chair of the cognizant PC in writing of the decision. Non-compliance with Section B5 or lack of grounds for an appeal may be reasons for dismissal.

Run Date: 6/23/2022 2:41:41 PM

ASHRAE Roster

As of 06/24/2022

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

CHAIR; PCVM-MANUFACTURER; INDOOR AIR QUALITY
SUBCOMMITTEE

8009091 073 Voting

Term in Position: 07/01/2021 to 06/30/2023

Mr James (Mike) C Moore, III

5313 Fox Hollow Ct ABSTAIN

Loveland, CO 80537-7977

Stator LLC

Phone: (303)408-7015 Fax: (301)889-0019

Email: mmoore@statorllc.com

Interest Category: Manufacturer

Final Vote: 19-3-2-2-4

PCVM-DESIGNER/BUILDER; ENVELOPE SUBCOMMITTEE

4007464 079 Voting

Term in Position: 10/17/2019 to 06/30/2022

Mr David A Baylon

922 34th Ave YES

Seattle, WA 98122-5135

Phone: (206)322-3753 Fax: (206)325-7270
(206)

Email: davidbaylon45@outlook.com

Interest Category: Designer/Builder

VICE CHAIR; PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

8301624 Voting

Term in Position: 07/01/2021 to 06/30/2025

Dr Marian Goebes

TRC YES

436 14th St Ste 1020

Oakland, CA 94612-2724

Phone: (510) 400-5374 Fax:

Email: MGoebes@trccompanies.com

Interest Category: General

PCVM-OWNER/OPERATOR/OCCUPANT; SYSTEMS
SUBCOMMITTEE

72198 029 Voting

Term in Position: 07/01/2019 to 06/30/2022

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Interest Category: Owner/Operator/Occupant

SECRETARY; PCVM-GENERAL; INDOOR AIR QUALITY
SUBCOMMITTEE

8347433 073 Voting

Term in Position: 02/06/2021 to 06/30/2024

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Interest Category: General

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

1016897 068 Voting

Term in Position: 02/03/2022 to 06/30/2026

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Interest Category: Manufacturer

PCVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

2008563 999 Voting

Term in Position: 02/06/2021 to 06/30/2022

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Interest Category: Manufacturer

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

5057464 025 Voting

Term in Position: 07/02/2020 to 06/30/2023

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Interest Category: General

*SSPC 62.2 meeting 6/24/2022 (Toronto) Continuation
ballot open 7/26/2022, close 8/2/2022
Recirculation ballot open 8/3/2022, close 8/10/2022

Total Voting: 30

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VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

2033347 508 Voting

Term in Position: 07/01/2019 to 06/30/2022

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Interest Category: General

PCVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

2051047 064 Voting

Term in Position: 07/01/2021 to 06/30/2024

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Interest Category: Manufacturer

PCVM-GENERAL; CHAIR, ENVELOPE SUBCOMMITTEE

5184990 050 Voting

Term in Position: 10/20/2021 to 06/30/2025

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Interest Category: General

PCVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

8197288 049 Voting

Term in Position: 07/01/2018 to 06/30/2022

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Interest Category: General

PCVM-GENERAL; CHAIR, INDOOR AIR QUALITY SUBCOMMITTEE

8277671 009 Voting

Term in Position: 07/01/2018 to 06/30/2022

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Interest Category: General

PCVM-OWNER/OPERATOR/OCCUPANT; INDOOR AIR QUALITY SUBCOMMITTEE

3033708 118 Voting

Term in Position: 07/01/2019 to 06/30/2022

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Interest Category: Owner/Operator/Occupant

PCVM-COMPLIANCE; SYSTEMS SUBCOMMITTEE

5151330 Voting

Term in Position: 07/01/2021 to 06/30/2024

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Interest Category: Compliance

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

8185085 001 Voting

Term in Position: 02/06/2021 to 06/30/2024

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Interest Category: General

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-MANUFACTURER; CHAIR, SYSTEMS SUBCOMMITTEE

8314035 Voting

Term in Position: 02/03/2022 to 06/30/2025

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Interest Category: Manufacturer

PCVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

5111271 001 Voting

Term in Position: 07/01/2021 to 06/30/2024

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Interest Category: Manufacturer

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

2020963 079 Voting

Term in Position: 07/01/2019 to 06/30/2022

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Interest Category: General

PCVM-DESIGNER/BUILDER; SYSTEMS SUBCOMMITTEE

8357801 Voting

Term in Position: 07/01/2021 to 06/30/2024

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Interest Category: Designer/Builder

PCVM-COMPLIANCE; SYSTEMS SUBCOMMITTEE

8428643 Voting

Term in Position: 07/01/2021 to 06/30/2025

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Interest Category: Compliance

PCVM-OWNER/OPERATOR/OCCUPANT; ENVELOPE SUBCOMMITTEE

1074412 082 Voting

Term in Position: 07/02/2020 to 06/30/2023

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Interest Category: Owner/Operator/Occupant

PCVM-GENERAL; ENVELOPE SUBCOMMITTEE

8383501 095 Voting

Term in Position: 07/02/2020 to 06/30/2023

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Interest Category: General

PCVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

5128655 082 Voting

Term in Position: 07/01/2021 to 06/30/2023

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VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PCVM-GENERAL; SYSTEMS SUBCOMMITTEE

5110399 026 Voting

Term in Position: 10/17/2019 to 06/30/2022

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OR/AHRI; PCVM-INDUSTRY; SYSTEMS SUBCOMMITTEE

8259775 021 Voting

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Interest Category: Industry

PCVM-INDUSTRY; INDOOR AIR QUALITY SUBCOMMITTEE

5162460 026 Voting

Term in Position: 10/20/2021 to 06/30/2025

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Interest Category: Industry

OR/NAHB; PCVM-DESIGNER/BUILDER; SYSTEMS SUBCOMMITTEE

8380803 026 Voting

Term in Position: 03/22/2022 to 06/30/2022

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OR/AGA; PCVM-INDUSTRY; SYSTEMS SUBCOMMITTEE

8440621 038 Voting

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AOR/AHRI; PCVM-INDUSTRY; SYSTEMS SUBCOMMITTEE

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OR/NPGA; PCVM-INDUSTRY; INDOOR AIR QUALITY SUBCOMMITTEE

5141363 090 Voting

Term in Position: 07/01/2021 to 06/30/2023

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Interest Category: Industry

AOR/NAHB; PCVM-DESIGNER/BUILDER; SYSTEMS SUBCOMMITTEE

2019444 022 Non-voting

Term in Position: 07/02/2020 to 06/30/2022

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Interest Category: Designer/Builder

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PSVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

5138006 025 Non-voting
 Term in Position: 07/02/2020 to 06/30/2023

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Interest Category: General

PSVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

8061284 034 Non-voting
 Term in Position: 07/01/2018 to 06/30/2022

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PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8356069 026 Non-voting
 Term in Position: 07/01/2019 to 06/30/2022

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PSVM-GENERAL INDOOR AIR QUALITY SUBCOMMITTEE

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Interest Category: General

PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

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Interest Category: Manufacturer

PSVM-GENERAL; INDOOR AIR QUALITY SUBCOMMITTEE

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PSVM-MANUFACTURER; ENVELOPE SUBCOMMITTEE

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 Term in Position: 02/06/2020 to 06/30/2023

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Interest Category: General

PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8385625 099 Non-voting
 Term in Position: 07/02/2020 to 06/30/2023

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Interest Category: General

VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS - T-STDs-SSPC 62.2

PSVM-GENERAL; SYSTEMS SUBCOMMITTEE

8235421 049 Non-voting
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Interest Category: General

SSPC 189.1 LIAISON

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Interest Category: Designer/Builder

PSVM-MANUFACTURER; INDOOR AIR QUALITY SUBCOMMITTEE

8194147 601 Non-voting
 Term in Position: 11/05/2020 to 06/30/2023

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Interest Category: Manufacturer

TC 5.10 LIAISON

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PSVM-MANUFACTURER; SYSTEMS SUBCOMMITTEE

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Interest Category: Manufacturer

SPLS LIAISON

463522 099 Non-voting
 Term in Position: 07/01/2021 to 06/30/2025

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Interest Category: General

SSPC 62.1 LIAISON

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Interest Category: General

STAFF LIAISON; WEBMASTER

5213744 650 Non-voting
 Term in Position: 02/15/2005 to

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Interest Category:

Supplement to Responses to Comments on proposed 62.2 Addendum j

This document is a supplement to the specific responses to comments on the first public review draft of addendum j to ASHRAE 62.2 and should be considered part of the formal response.

Purpose and Scope

The purpose and scope of 62.2j is to address the fact that unvented combustion space heaters produce contaminants of concern which can lead to unacceptable indoor air quality. IAQ is the purpose of 62.2 and so addressing contaminants of concern is within the scope. SSPC 62.2 is not, for example, specifically considering appliance safety as might CPSC.

The main contaminants of concern that SSPC 62.2 is considering for this addendum are carbon dioxide, carbon monoxide, nitrogen dioxide and water vapor. Other contaminants (e.g. acrolein, formaldehyde, PM) can be produced by incomplete combustion but were not explicitly part of the PC's deliberations.

Technical Approach

Generally, summaries of many years of committee work and detailed technical analyses supporting addenda are not part of the ASHRAE process when developing the information distributed with public review drafts. The committee is, however, open to comments that include specific technical support and will respond with in-kind technical rebuttal or support.

In addition to Z21.11.2 there are other standards (e.g. ASHRAE 189.1, NFPA, IFGC, etc.) that are ostensibly more lenient than this addendum, but they are constituted to address different aspects (e.g. safety) and have different purposes and scopes. ASHRAE standard 62.2 is the only ANSI standard constituted to address acceptable indoor air quality.

The committee considered several contaminants of concern: NO₂, CO, CO₂ and H₂O in order to see what use conditions would lead to acceptable indoor air quality. Exposures were calculated using allowed emission rates from the ANSI Z21 Standard for NO₂ and CO, unavoidable emission rates for CO₂ and H₂O, and allowable concentrations of concern for health from the WHO, EPA and other authorities as well as peer-reviewed research.

The committee reached consensus that there was no practical capacity limit of an unvented combustion space heater that allows for acceptable IAQ. In doing so, the committee consulted a great deal of literature and considered many options. Individual committee members provided technical analyses to the committee, which has resulted in a peer-reviewed journal article. The PC has used those peer-reviewed assumptions, but would consider revisions should they be sufficiently technically supported and have a significant impact on the result.

The addendum is the result of many years of study and discussion, including the studies referenced in the comments. Other technical references that are relevant to this addendum include, but are not limited to:

- Apte S, "Residential Ventilation and Carcinogenesis" J. Excipients and Food Chem. 7 (3) 2016
- ANSI Standard Z21.11.2 "Gas-Fired Room Heaters, Volume II, Unvented Room Heaters" 2019
- ASHRAE Standard 55, "Thermal Environmental Conditions for Human Occupancy" 2017
- ASHRAE Standard 189, "Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings" 2020.
- [ASHRAE Position Document \(PD\) on Unvented Combustion Devices and Indoor Air Quality.](#)
- ASHRAE [Position Document on Indoor Air Quality](#),
- Chan W.R, et al. "Ventilation and Indoor Air Quality in New California Homes with Gas Appliances and Mechanical Ventilation" PIR-14-007 Final Report, California Energy Commission, 2018
- Chandra S, et al, "Bedroom Ventilation Review of existing evidence and current standards", Building and Environment, 184, (2020) <https://doi.org/10.1016/j.buildenv.2020.107229>
- Dutton, Steven, et al. "Indoor Pollutant Levels from Use of Unvented Natural Gas Fireplaces in Boulder Colorado", J. Air & Waste Management. 2001
- European Committee for Standardization, "Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics" EN-15251 (2012)
- EPA, National Pollutant Trends; https://gispub.epa.gov/air/trendsreport/2019/#naaqs_trends
- Francisco, P.W. et al, "Measured concentration of combustion gasses from the use of unvented gas fireplaces," Indoor Air (20) pp370-379; 2010
- Harriman, Lewis, et al. "Damp Buildings, Human Health and HVAC Design" ASHRAE Special Publication, ASHRAE 2020.
- Persily, A. (2018) Development of an Indoor Carbon Dioxide Metric, *39th AIVC Conference*, Antibes Juan-les-Pins, France, 791-800.
- Thom, Stephen et al. "Increased carbon dioxide levels stimulate neutrophils to produce microparticles and activate the nucleotide binding domain-like receptor 3 inflammasome", Free Radical Biology and Medicine (106) pp406-16, 2017.
- Thom, Stephan et al. "Inflammatory responses to acute elevations of carbon dioxide in mice" J. Appl. Physiology (123) pp 297-30, 2017a.
- toXcel LLC. The Impact of Unvented Gas Heating Appliances on Indoor Nitrogen Dioxide Levels in "tight" homes. March 12, 2013.
- Traynor GW et al. Macromodel for Assessing Indoor Concentrations of Combustion Pollutants: Model Development and Preliminary Predictions for CO, NO₂, and Respirable Suspended Particles. LBL-25211, Lawrence Berkeley National Laboratory, Berkeley, (1989)

- Whitmyre, G.K. and Pandian M.D. 2018. “Probabilistic assessment of the potential indoor air impacts of vent-free gas heating appliances in energy-efficient homes in the United States. *Journal of the Air & Waste Management Association*. 68:6, 616-625, DOI: 10.1080/10962247.2018.1426652

Is the Proposed Addendum a Ban?

Some commenters have called this requirement a *ban*. While some jurisdictions have effectively banned this technology, ASHRAE has no regulatory authority to ban a product. This requirement does not even suggest a ban on the production, sales or installation of combustion appliances. What this requirement does is prohibit unvented combustion heaters in any home that wants to meet ASHRAE Standard 62.2 in the same way that it prohibits noisy fans. Similarly, there are no restraint-of-trade issues for placing performance requirements on products or systems that have a direct bearing on the purpose of the standard. It must also be noted that *vented* combustion heaters are not prohibited.

Conflict with ANSI Z21.11.2

ANSI Z21.11.2 is an appliance standard and not an IAQ standard and therefore is not in conflict with Standard 62.2; it is not mentioned in this addendum. ASHRAE standards committees and appeals panels have already adjudicated this topic and determined that there is no conflict. The Z21 standard does, however, set a limit on (steady-state) nitrogen dioxide and carbon monoxide emissions. These limits were used in evaluating those concentrations that would result from using such an appliance in an otherwise 62.2 compliant home.

In using such limits and consulting the state of the art, the committee found that nitrogen dioxide levels and carbon dioxide levels would separately reach their limits at around a heater capacity of 0.4 Btu/h-ft³. Carbon monoxide would not generally become a contaminant of concern for a properly functioning device. As indicated in ASHRAE’s recent position document on mold and moisture, the moisture load from unvented combustion could be problematic but depends on a variety of details and was not part of the limiting calculation.

This resulting limit was considered both by the committee and the industry to be too low to allow practical use of unvented combustion space heating appliances—and virtually no products are made in this range.

Fuel Poverty and emergency heat

It is beyond the scope of the 62.2 Standard to address issues of fuel poverty and emergency heat. The 62.2 Standard is concerned with indoor air quality and cannot grant an exemption with regards to indoor air quality based on how and when heating systems are operated.

Steady-State vs. Thermostatically controlled

The PC has done its evaluation based on steady state concentrations that would occur for a given thermal capacity. Transient analyses are possible to do if the emission rates of the contaminants of concern during cold startup are known, but they are not. Concentrations of contaminants will not be in steady state throughout the dwelling and the space with the appliance in it is likely to have a much higher exposure.

More to the point is that the thermal conditions of the space are not known or controlled by either the appliance manufacturer or 62.2. It is reasonable to assume then that the appliance will be run at full capacity long enough to reach steady state frequently enough, even if it were thermostatically controlled. For example, a well-insulated home running at constant temperature requires less heat than a poorly insulated home or one coming off set-back. Such thermal considerations are out of scope for 62.2 and the committee assumes that any appliance will run without thermal cycling for long enough to reach steady state.

Kitchen Ventilation

A kitchen is any room with cooking equipment—regardless of the fuel used for the cooking. 62.2 requires that all kitchens have local exhaust (i.e. be vented) in Section 5. So, appliances such as a gas stove are not considered *unvented* by the standard. Typical cooking activities are not considered high-polluting events.

Studies circulated with the public review draft

The individual studies circulated with the public review draft were provided for information only at the suggestion of ASHRAE Staff and initial discussions with Standards Committee. The committee deliberations are not based solely on these studies, or any individual study.



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Built Environment Today

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From: Stephanie Reiniche, ASHRAE
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Tanisha Meyers-Lisle, Assistant Manager
of Standards-Administration

Attachment C

Date: September 12, 2023

ASHRAE RESPONSE TO ADDITIONAL ExSC QUESTIONS REGARDING JOINT APPEAL FROM MR. ERIC ADAIR, MS. SHANNON CORCORAN, MR. DAVID DELAQUILA, MR. DON DENTON AND MR. RON SMITH REGARDING ADDENDUM J TO ANSI/ASHRAE STANDARD 62.2-2022, VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY IN RESIDENTIAL BUILDINGS

Thank you for the opportunity to provide additional clarity to the ExSC regarding ASHRAE's rebuttal and other referenced documents. The technical paper referred to as "the white paper" was shared with the committee in August of 2020 but was not shared beyond the committee until published in the ASHRAE Journal in May of 2022 with the title of "*Impacts of unvented space heaters.*" This document included a summary of the calculations used to justify the committee's decision to approve addendum j. The Publications team at ASHRAE communicated that the white paper should not be shared beyond the SSPC until it was published, per its convention. (See Attachment A.)

1. **ASHRAE is asked to give greater detail and clarity in the timeline included as Attachment A of ASHRAE's reply:**
 - a. **Please list specific actions that were taken to address the appeals panel decision dated 3/25/21 for addendum a. In the timeline, once the appeals panel upheld the appeal on addendum a, what happened?**

ASHRAE Response: Please see the attached revised timeline (Attachment B) for specific information. The first appeal of addendum a to Standard 62.2-2016 was

upheld because the SSPC failed to document that the SSPC engaged the commenters. Per PASA, the minimum required to attempt to resolve commenters is responding to commenters in the online comment database. This was done, and the SSPC had indicated in its rebuttal the engagement of unresolved objectors at the meetings; however, the engagement was not documented. After the Appeals Panel decision was issued, SSPC 62.2 went back to the unresolved objectors, invited them to attend another meeting, and to provide additional information for consideration by the consensus body (SSPC). The unresolved objectors attended, and those who were not able to attend were afforded the opportunity to provide written documentation. The submitted documentation was sent to the SSPC and read at the SSPC meeting. Attending unresolved objectors presented their information and were asked questions by the SSPC. The SSPC was not swayed by the presentations or responses to questions and approved the draft addendum for publication with knowledge of unresolved objectors. The summary of all discussions was included in the minutes.

b. Please include for every entry, the specific addendum and edition of 62.2 to which each entry on the timeline relates.

ASHRAE Response: Please see the updated timeline for the editions. The topic addressed by addenda a, c, and j were addenda to Standards 62.2-2016, 62.2-2019, and 62.2-2022.

2. Complainant states that the first public review for addendum j was September 2019, but the timeline in ASHRAE’s response lists multiple dates in 2021. Please explain the discrepancy.

ASHRAE Response: The complainant stated in their appeal: “When addendum “j” to 62.2 was first circulated for public review in September 2019, it was presented as an amendment to ASHRAE Standard 62.2-2019 edition. The title of the public review document stated, “Proposed addendum ‘j’ to standard 62.2-2019.”” ASHRAE surmises that the complainant was referring to which version of the standard addendum j first modified. The 1st full publication public review of addendum j was October 1, 2021 to October 31, 2021. There were no prior public reviews. ASHRAE’s public review dates are correct. Addendum j was originally an addendum to Standard 62.2-2019. It is now an addendum to 62.2-2022 because it was not published (due to appeals) in time to be included in the 2022 version of the standard.¹

¹ ASHRAE’s standards on continuous maintenance that are referenced by codes are generally republished every three years. The addenda to the previous version was added to the new version and the new version becomes the base standard for which addenda are then created to amend the standard. For example, all addenda to Standard 62.2-2019 are rolled in and become Standard 62.2-2022. Any addenda that did not complete the process moves to the next version.

3. **Please provide three separate timelines (one for each addendum) that identify the key actions taken in relation to the processing of Addendum a, Addendum c and Addendum j.**

ASHRAE Response: Please see the attached revised timeline that separates each of the addenda and actions related to processing.

White Paper

1. **It is unclear as to how much of the consensus decision on the content of addendum j was based on the white paper and therefore, an explanation is requested of the timing of when the white paper was released to the entire membership of the consensus body for review.**

ASHRAE Response: The white paper was written by its authors to document technical information on the performance of unvented combustion appliances. Technical articles that are submitted to the ASHRAE Journal are peer reviewed. ASHRAE's process requires that if a technical paper is submitted for the ASHRAE Journal, it is to have a blind review (meaning reviewers hadn't seen the article yet) and that the final technical article be published first in the Journal. ASHRAE agrees that there is confusion with the letter received by the authors, requesting that the white paper not be disseminated beyond the committee, and the subsequent letter received by Mr. Delaquila from the ASHRAE journal editor, who is no longer with ASHRAE. ASHRAE Standards staff will work with the ASHRAE Publications staff to create better clarity in what can be shared in such instances. It may be as simple as requesting a change to their initial submission email. ASHRAE's Appeals Panel has confirmed that the committee acted in accordance with PASA requirements in its treatment of the white paper and subsequent Journal article, their dissemination, and its provision for commenter engagement on the topic.

The SSPC, which included Mr. Delaquila, was provided the "white paper" on August 8, 2020. When the ASHRAE journal finally published the technical article on May 12, 2022, unresolved commenters were notified and had approximately six weeks to review the article. This is in line with the same amount of time that addenda are out for public review and comment. On June 24, 2022, all unresolved commenters were invited to present any additional comments on addendum j as a result of reading the article to the full SSPC. The SSPC listened to the commenters, reviewed the materials from the commenters, and reviewed the technical materials listed below in response to question 2 for the development of addendum j. The SSPC did not rely solely on the Journal article to make its determination on addendum j. Rather, the white paper / Journal article was one piece of technical information used in making its determination.

The responses to unresolved commenters included a summary of technical information relied on by the SSPC. This is in line with ASHRAE's process.

2. What function did the white paper play in the consensus process? Was it essential to the development of addendum j as suggested in the Complaint? (See paragraph 4, page 1 of the Complaint dated March 23, 2023)

ASHRAE Response: The white paper/ASHRAE Journal technical article was one of many sources that the SSPC considered in the development of addendum j. As can be seen in the list below, the SSPC also reviewed requirements in other standards and looked at similar documents that provided information on the effects of unvented gas appliances in dwelling units. This list was also included in the forward of the addendum:

CSA. 2019. *CSA/ANSI Standard Z21.11.2, Gas-Fired Room Heaters, Volume II, Unvented Room Heaters*. Toronto, Canada: CSA Group.

• ASHRAE. 2017. [ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy](#). Peachtree Corners, GA: ASHRAE.

• ASHRAE. 2020. [ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1](#), Standard for the Design of High-Performance

Green Buildings Except Low-Rise Residential Buildings. Peachtree Corners, GA: ASHRAE.

(*Note: Standard 189.1 comprises the technical content of the [International Green Construction Code \[IgCC\]](#), and is available in North America in that format.*)

• ASHRAE 2020. [ASHRAE Position Document \(PD\) on Unvented Combustion Devices and Indoor Air Quality](#). Approved by ASHRAE Board of Directors January 25, 2012 and reaffirmed by ASHRAE Technology Council June 29, 2020; expires June 29, 2023. Peachtree Corners, GA: ASHRAE.

• ASHRAE. 2020. [ASHRAE Position Document on Indoor Air Quality](#). Approved by ASHRAE Board of Directors July 1, 2020; expires July 1, 2023. Peachtree Corners, GA: ASHRAE.

• Dutton, S.J., M.P. Hannigan, and S.L. Miller. 2001. *Indoor pollutant levels from use of unvented natural gas fireplaces in Boulder Colorado*. Journal of the Air & Waste Management Association 51(12):1654–61.

• Francisco, P.W., J.R. Gordon, and B. Rose. 2010. *Measured concentration of combustion gasses from the use of unvented gas fireplaces*. Indoor Air 20(5):370–79.

• Whitmyre, G.K., and M.D. Pandian. 2013. Summary: The impact of unvented gas heating appliances on nitrogen dioxide levels in “tight” homes. Paper prepared by toXcel, LLC, for the Vent-Free Gas Products Alliance, Arlington, VA.

• Traynor, G.W., J.C. Aceti, M.G. Apte, B.V. Smith, L.L. Green, A. Smith-Reiser, K.M. Novak, and D.O. Moses. 1989. *Macromodel for Assessing Indoor Concentrations of Combustion Pollutants: Model Development and Preliminary Predictions for CO, NO₂, and Respirable Suspended Particles*. LBL-25211. Berkeley, CA: Lawrence Berkeley National Laboratory.

• Sherman, M., P. Fairey, and R. Crawford. 2022. *Impacts of unvented space heaters*. ASHRAE Journal 64(5):32-49.

• Whitmyre, G.K., and M.D. Pandian. 2018. *Probabilistic assessment of the potential indoor air impacts of vent-free gas heating appliances in energy-efficient homes in the United States*. Journal of the Air & Waste Management Association 68(6):616–25.

These, along with the published journal article, were all referenced in the foreword of the addendum and in responses to the commenters. This list is also included in the galley proof of the publication draft of addendum j. This is not a practice that ASHRAE normally would do in a public review of a standard or addendum but did so out of special consideration for the public on this sensitive subject, so that the public would understand what was reviewed.

The unresolved objectors, in particular Mr. Delaquila, also shared information. He presented a counter proposal along with rebuttal information to the white paper. In

addition, Mr. Delaquila provided counter presentations to the SSPC at the December 2, 2021, web meeting and the June 23, 2021, face to face meeting.

As shown above, the referenced white paper was just one of the items considered by the SSPC and not the only item considered.

3. Do ASHRAE’s procedures allow for reliance on a non-public, confidential document in the development of a proposed revision to an ASHRAE standard? Is it allowable to rely on such a document as part of the basis for a response to public comments?

ASHRAE’s Response: ASHRAE’s procedures are silent on what a consensus body can consider in the development of technical content of the standard. For example, consensus bodies can base changes to a standard on just professional judgment. The guidance provided to consensus bodies is that a summary of the technical materials be provided to unresolved objectors upon request of the commenters, which was done in this case. In the event that an unresolved objector requested the technical justification from the consensus body, and it was not provided, the reviewing bodies (Standards Committee and the Board of Directors) would send the standard back to the consensus body for further work. In this case, the technical article titled: “*Impacts of unvented space heaters*” was shared with the unresolved objectors as soon as it was available and approximately six weeks prior to the SSPC taking any vote for publication with knowledge of unresolved objectors.

Of note, ASHRAE does require that if a standard or other publication is referenced it must be readily available. In this instance, the journal article isn’t referenced in the body of the standard. The complainants are adding a step in the process that would lengthen the amount of time standards and addenda are processed and completed. The complainants would require that consensus bodies allow commenters months and months of additional time to do their own research and present that to the consensus body. The main reason ASHRAE utilizes the continuous maintenance process is when new information becomes available anyone can submit a proposed change to the standard with the additional technical justification for the change for consideration by the consensus body. Such technical information is not required to be published. In the case of addendum j, the committee went above and beyond PASA’s requirements by referencing published resources and providing ample time for the negative commenters to review all referenced resources prior to acting on addendum j.

Potential Product Exclusion

1. Does ANSI/ASHRAE 62.2-2022 (including addendum J) exclude, prohibit or ban the use of unvented combustion heaters?

ASHRAE Response: BSR/ASHRAE/ANSI Addendum j to ANSI/ASHRAE Standard 62.2-2022 does not exclude, prohibit, or ban the use of combustion heaters. The addendum includes the requirements that must be met for combustion heaters to be

installed in a dwelling unit and align with the standard’s objective of maintaining acceptable indoor air quality. The SSPC determined, based on technical analysis, that the criterion for such appliances was venting to the exterior. The standard has similar restrictions for other product categories. For example, bathroom fans must meet sound performance requirements to provide a reasonable level of confidence that their noise levels will be acceptable to users and that they will actually be operated. Another example would be that you cannot have known sources of contaminants within 10’ of an air inlet, or comply with operable windows that are not accessible, or have leaky ducts in a garage, or an undersized local exhaust. This requirement is just one of many source-control requirements necessary to meet 62.2. In the case of combustion heaters, prescribes the performance criteria required for compliance for the product class.

2. If so:

a. What is the technical justification for doing so?

ASHRAE Response: As stated previously, the standard does not prohibit combustion heaters or appliances. The technical justification for requiring combustion heaters to be vented to the exterior was summed up by the committee’s statement to unresolved commenters that the committee determined, “through peer-reviewed literature and its own calculations that unvented combustion heaters—including Z21.11.2 compliant ones—will generally produce unacceptable levels of contaminants of concern at the ventilation rates in ASHRAE Standard 62.2.” The details of this technical determination were discussed across multiple committee meetings throughout the development of addendum j. The products are expected to emit harmful contaminants at levels not controllable by 62.2 ventilation rates.

b. Has ASHRAE considered whether doing so poses trade competition or antitrust issues?

ASHRAE Response: ASHRAE staff did not seek a formal legal opinion on this question but does not believe this will pose trade competition or antitrust issues. ASHRAE requests further clarification on what the ExSC means by ASHRAE. Does that mean the project committee, the approving bodies, or ASHRAE staff?

3. Has ASHRAE consulted its legal counsel with respect to the technical content of addendum j to ANSI/ASHRAE 62.2-2022?

ASHRAE Response: No ASHRAE did not consult legal counsel. However, consultation with legal counsel is protected by attorney client privilege and not part of ASHRAE’s approved standards development procedures (PASA).

From: Max Sherman, Principal <mhsherman@epbgroup.com>
Sent: Friday, December 23, 2022 11:12 AM
To: mmoore@statorllc.com
Cc: 'Philip Fairey' <pfairey@fsec.ucf.edu>; 'Roy Crawford' <roy.crawford@jci.com>
Subject: RE: Submission date for white paper to ASHRAE Journal

Mike,

In Submittable it is recorded as being submitted Sept 17, 2020; their response is below:

From: Sarah Foster
To: Max Sherman
Subject: RE: [ASHRAE Journal] Impacts of Unvented Space Heaters
Dear Max Sherman,

Thank you for sending us "Impacts of Unvented Space Heaters." We will be sending it for peer review soon. Typically, this process takes between six to eight weeks.

Please remember that it is important not to share your paper in any way (for example, email, social media, websites, etc.) during the peer review process.

To ask a question about your submission, please go to <https://manager.submittable.com/user/submissions>. Please whitelist emails from [submittable.com](https://manager.submittable.com).

*Best Regards,
Sarah Foster, editor
ASHRAE Journal*

Revised Development Timelines for Addendum a, c and j to Standard 62.2¹

Development of Addendum a to Standard 62.2

2015

In 2013 the SSPC begins development of the addenda on unvented combustion room heaters that will officially become addendum a to Standard 62.2.-2016. The initial development was done in subcommittee and working groups starting in 2015 and working on the language through the publication public review. SSPCs typically start addenda with smaller groups that bring the proposed addendum to the full consensus body for deliberation and approval or disapproval.

2017

1/27/17-SSPC approves publication public review on addendum a to Standard 62.2-2016 at a face-to-face meeting in Las Vegas and a continuation letter ballot is issued, closing on 2/6/17. A recirculation ballot with the negative votes with reason is issued and closed on 2/13/17.² The final vote count was 14-5-0-4-0 (Yes-No-No without comment, abstain, unreturned). Please note that Mr. Delaquila was a voting member of the SSPC.

4/7/17 – 5/7/17- First full public review of addendum a to Standard 62.2-2016 occurs. At the close of the public review there are 13 comments from 10 commenters. At the close of the public review the committee determined that the addendum would be modified to address comments and that there would be a second full public review. Per PASA, no response to commenters is required.

8/31/17 – Second full public review draft of addendum a to Standard 62.2-2016 approved by SSPC via letter ballot (includes recirculation letter ballot) closes 8/31/17. The final vote was 14-5-0-3-0 (Yes-No-No without comment-abstain-unreturned). Responses to negative votes with reason were circulated.

9/24/17 – Staff sends notice to 1st Full public review commenters notifying them of the availability of the second full public review draft of addendum a to Standard 62.2-2016.

10/13/17 – 11/12/17 – 2nd full public review of addendum a to Standard 62.2-2016 occurs. Email was sent by ASHRAE staff to all commenters on the prior public review (April 2017) of addendum a notifying them of the new comment period.³ Upon close of public review 19 comments from 14 commenters were sent to the SSPC to review and respond to.

¹ ASHRAE's standards that are developed under continuous maintenance are revised by addenda on a three-year cycle. All addenda approved for publication and ANSI approved are then incorporated into a new base standard. For example, ANSI approved addenda to Standard 62.2-2013 would roll into Standard 62.2-2016. If addenda have not completed that process, they become addenda to the next base standard. In this case addendum a to 62.2-2013 was not ANSI approved when 62.2-2016 was published and would then become addendum a to 62.2-2016 (formerly 62.2-2013).

² ASHRAE allows for organizational members. At the time of this vote AGA (organization of Shannon Cochran), NPGA (Mr. Delaquila) and ASHRI were members of the committee.

³ Note this included Mr. Delaquila, another person from AHRI, Mr. Smith, and a representative of NPGA. The SSPC was also notified.

2018

1/19/18- 1/20/18 -Prior to the meeting a small group of the SSPC was designated to craft draft responses to the commenters from addendum a to Standard 62.2-2016 for consideration, review, editing and approval (or disapproval) by the full SSPC. SSPC reviews, edits, and approves responses to commenters that had been drafted in advance. This was at a face-to-face open meeting.

1/20/18 – SSPC Chair sends responses to commenters⁴. Replies from commenters due 2/19/18.⁵

2/21/18 - Staff notifies SSPC of the resolution status of the comments on addendum a to Standard 62.2-2016. At the close of the comment reply period, there were 17 unresolved comments.

3/12/18 – Letter ballot to approve the publication of addendum a to Standard 62.2-2016 with knowledge of unresolved objectors is issued. The ballot closes on 3/26/18. The draft of the addendum, the publication public review tally that included the negative votes with reason, and the comment report (shows replies from commenters as well as their resolution status) were included with the ballot.

3/26/18 – Letter ballot tally was 15-5-1-2-1 (Yes-No-No without comment-Abstain-Not returned).

3/28/18 – A recirculation ballot was issued that included the negative votes with reason, including a power point presentation from Mr. Delaquila. The ballot was open until April 11, 2023, and provided everyone the opportunity to vote or change their vote.

4/12/18 – SSPC is notified of the final count approving addendum a to Standard 62.2-2016 for publication with knowledge of unresolved objectors⁶. The final vote was 14-6-1-2-1 (Yes-No-No without comment-Abstain-Not returned). Each negative voter with reason was also sent a response from the chair indicating the reasoning why the committee was not persuaded by the negative votes with reason.

6/28/18 – Standards Committee and the ASHRAE Board of Directors approves addendum a for publication.⁷

7/2/18- Unresolved objectors sent notice of right to appeal.

7/22/18 – Appeal received from Don Denton.

7/23/18 – Appeal received from Frank Stanonik who was from AHRI.

7/23/18 – Appeal received from David Delaquila.

7/23/18 – Appeal received from Greg Achman.

9/6/18 – Rebuttal requested from the SSPC Chair.

9/20/18 – Rebuttal statement received from SSPC Chair.

⁴ ASHRAE's online comment database has the chair send out the SSPC approved responses (simple majority is the requirement to approve comment responses). The chair can also request staff to set a designee to send out the comment responses.

⁵ ASHRAE process says commenters are automatically resolved if there is no response by deadline.

⁶ This includes unresolved commenters and negative votes with reasons.

⁷ These approvals were done at the face to face meetings at ASHRAE's annual conference. Commenters and PC members were present and addressed by the Standards Committee and the Board of Directors

9/27/18 – Rebuttal shared with Appellants and notification of a hearing date.

11/1/18 – Appeals Panel hearing held at ASHRAE headquarters.

11/20/18 – Appeals Panel decision issued. The Appeals Panel upheld one process claim due to lack of documentation by the SSPC and direction to make better documentation of efforts to resolve commenters. In particular, the concerns expressed were that while the commenters were at the January 2018 meeting, the record did not reflect engagement with the commenters. Alternatively, the Panel had commented that while not the consensus body, the working group drafting responses could have also engaged with the commenters, and that was not documented if it had occurred. The Appeals Panel directed the SSPC to correct the procedural issues.

2019

4/26/19 – As a result of the Appeals Panel upholding a portion of the issues raised on appeal, the SSPC invited the unresolved commenters on addendum a to Standard 62.2-2016 to attend the 5/13/19 SSPC meeting to again attempt comment resolution. Those unable to attend were advised they could provide a summary in advance. Mr. Delaquila attended, and Mr. Denton provided a summary document.

5/13/19 – SSPC meeting to hear from unresolved commenters on addendum a to Standard 62.2-2016. All unresolved objectors⁸ in attendance were given the opportunity to address the SSPC. Per deficiencies pointed out by the Appeals Panel, the SSPC Chair included a summary of the discussions in the minutes. After the discussion with the unresolved objectors in attendance, as well as hearing the pre-submitted summaries, a member of the SSPC made a motion for publication approval with knowledge of unresolved objectors.

5/16/19 – Continuation letter ballot for publication approval with knowledge of unresolved objectors was issued for absent members. This ballot included the vote count from the meeting, including negative votes with reasons, and allowed for anyone to vote or change their vote.

5/23/19 – Recirculation ballot issued to circulate negative votes with reason (2 additional negative votes with reason were received during the continuation ballot). The ballot also included a rebuttal from the chair. The ballot provided an opportunity for all members to change their vote (including vote) or reaffirm their existing vote. The Final vote was 19-7-0-4-0 (Yes-no-no-no without comment-abstain-not returned).

6/7/19 – Staff emails all unresolved objectors notifying the unresolved objectors that the addendum a to Standard 62.2-2016 will be on the Standards Committee⁹ agenda for consideration and invited them to submit a request to address the Standards Committee to indicate their concerns with the process.

6/22/19 – Standards Committee meeting to review the publication approval request of addendum a to Standard 62.2-2016.

⁸ This included others than Mr. Delaquila and Mr. Denton but those did not appeal the outcome. The others present included Ted Williams from the American Gas Association., Armin Rudd, Greg Achman, and Bruce Swiecicki'

⁹ If approved by Standards Committee the PASA in force at that time would have the addendum be considered by the Board of Directors. Unresolved objectors were aware of this process.

6/23/19 – Several unresolved objectors address the Board of Directors during the open microphone portion of the meeting regarding concerns.

6/26/19- The Board of Directors disapprove the publication of addendum a to Standard 62.2-2016 with no reasons provided.

Late 2019 – Standards requests clarification on the Board of Directors reasoning. None were provided, and Standards later provided training on the need to provide the process reasons for disapproving a standards action. Standards Committee struggled with what direction to take and to provide the committee, as did ASHRAE staff.

2020

2/1/20 – Standards Committee considers SSPC 62.2's request to resubmit publication of addendum a. Motion to approve for publication is postponed so that a 62.2a Ad Hoc¹⁰ can be formed to determine if process on addendum a to Standard 62.2-2019¹¹ had been followed.

3/17/20 – The 62.2a Ad Hoc meets to discuss possible next steps and direction for SSPC 62.2 based on ASHRAE's procedures. During the discussion, the Ad Hoc agreed it would also look at whether there may be a compromise available.

4/3/20 – The 62.2a Ad Hoc meets again to continue discussions with 62.2 leadership and industry representatives to recommend next steps and help to find a compromise for all parties. The group comes up with a suggested compromise to share with SSPC 62.2 for consideration. This becomes proposed addendum c to Standard 62.2-2019.

6/19/20 – After receiving the proposed compromise and at a face -to -face meeting, there is a motion to approve addendum c (compromise addendum from the Ad Hoc) for publication public review. This is followed by a continuation letter ballot and recirculation ballot. Nothing is done with addendum a to Standard 62.2-2019 at this time.

7/2020- The SSPC determined that there were errors in the proposed addendum c to Standard 62.2-2019, and a motion to discontinue addendum c to Standard 62.2-2019 was made, and a motion to resubmit addendum a to Standard 62.2-2019 for publication approval was also made.

11/18/20 – ASHRAE Standards Committee and the Board of Directors approves addendum a for publication.

11/19/20 – Right to appeal letters are sent out to unresolved objectors.

12/21/20 – Appeals are submitted to the publication approval of addendum a to Standard 62.2-2022 by David Delaquila, Don Denton, Frank Stanonik, Ken Belding, Martin Yan and Ron Smith.

2021

¹⁰ The ad hoc had 2 representatives from Standards Committee, 2 from SSPC 62.2, 1 from the Board of Directors and 2 unresolved objectors.

¹¹ Addendum a became an addendum to Standard 62.2-2019 and was formerly an addendum to Standard 62.2-2016.

1/25/21 -A rebuttal is requested from the SSPC Chair with a due date of 2/15/21.

2/15/21 – SSPC submits rebuttal per request of Appeals Panel.

2/26/21 - Virtual hearings are granted and notices sent.

3/24/21 – Virtual Appeals Panel hearing held.

4/14/21 – Appeals Panel Upholds the appeal based on two process claims: 1.Lack of good faith effort to resolve the commenters as the documentation didn't address whether all commenters were provided equal time to address the SSPC. 2. The vote to resubmit addendum a should have been a standards action vote requiring that all members be given the opportunity to vote, that negative votes with reason be recirculated, and that the members of the committee be provided an opportunity to vote. All appellants and the respondents were provided copies of the decisions. A subsequent interpretation of PASA is approved by Standards Committee stating that even a motion to resubmit a previous standards action motion requires a standards action vote.

Addendum c Timeline (Note some items from a are repeated due to overlap.)

2020

6/19/20 – At a face-to-face meeting there is a motion to approve addendum c to Standard 62.2-2019 (compromise addendum from the Ad Hoc) for publication public review. This is followed by a continuation letter ballot and recirculation ballot. Nothing is done with addendum a to Standard 62.2-2019 at this time.

8/24/2020- Motion to discontinue addendum c and resubmit addendum a for publication approval is approved.

Addendum c is now complete.

Addendum j Timeline

2020

The process to develop addendum *j* (originally modifying ASHRAE Standard 62.2-2019) begins in late 2020. The full SSPC and working groups met 16 times during this process, and at each open meeting process was followed and commenters, SSPC members and interested parties were given time and consideration of their views and objections on the subject addendum.

2021

6/23/21 – SSPC web-meeting with a motion to approve addendum *j* for publication public review. The proposed addendum *j* was continued from the June 9, 2021, agenda. At this meeting Mr. Delaquila presented a power point with a comparison of the model and measured data for CO2.

6/25/21 – SSPC Chair issues a continuation letter ballot including the negative votes with reason allowing all members to vote or change their vote. This included the response from the Chair as required.

7/2/21 – Letter ballot closes with no additional negative votes received. Final vote is 19-3-1-4-5 (Yes, No, No without comment, Abstain, not returned).

7/13/21 – SSPC submits addendum j to Standard 62.2-2019 for publication public review to ASHRAE staff and for review by the oversight committee, Standards Project Liaison Subcommittee.

8/24/21 – Complaint for action/inaction¹² filed by Mr. Delaquila on actions taken by the SSPC 62.2. The complaint alleged that the SSPC Chair misled the committee on the appeals of addendum a to Standard 62.2-2019 and similar allegations about the technical documentation not being shared properly.

8/25/21 – The SSPC Chair provides a response to the complaint for action/inaction filed by Mr. Delaquila according to ASHRAE's PASA.

9/2/21 – Mr. Delaquila indicates that the SSPC's Chair response to the complaint for action/inaction did not resolve his concerns. The response from Mr. Delaquila, along with the SSPC Chair's response and the original complaint were provided to Standards Committee to review and respond.

9/13/21 – Standards Committee approves the SSPC's Chair's response to Mr. Delaquila's complaint for action/inaction. In part of that action Standards Committee recommends that the Standard Project Liaison Subcommittee require that the list of documents relied on by SSPC 62.2 in the development of addendum j to Standard 62.2-2019 be listed in the forward. SPLS to consider the publication public review request on 9/14/21.

9/14/21 – Standards Project Liaison Subcommittee (SPLS) meets and reviews the documentation (not technical content, in accordance with PASA requirements) for process violations and concerns. Mr. Delaquila presented comments to SPLS for consideration in its deliberations. The SSPC Chair then presented the SSPC's perspective. SPLS then approved a motion to approve the document for publication public review with the recommendation to include a list of technical resources relied on by the SSPC in the development of addendum j to Standard 62.2-2019 in the foreword. SPLS agreed that until the Standards Committee response to Mr. Delaquila's complaint for action/inaction was sent, that addendum j to Standard 62.2-2019 would not go out for public review.

9/23/21 – Response from Standards Committee on the Complaint for Action or Inaction filed by Mr. Delaquila for actions taken by SSPC 62.2 was sent to Mr. Delaquila. The Standards Committee determined that process was followed by SSPC 62.2. This allowed the public review of addendum j to Standard 62.2-2019 to move forward.

10/1/21 – 30-day public review of addendum j to Standard 62.2-2019 begins.

10/13/21- Mr. Delaquila indicates that the Standards Committee response does not resolve his concerns. Technology Council declined to hear the complaint in accordance with PASA. This ends the complaint for action/inaction process according to PASA.

10/31/21 – Public review of addendum j to Standard 62.2-2019 closes. 53 comments from 36 commenters were received. The comments were sent to the SSPC.

12/2/21 – SSPC 62.2 web meeting with unresolved commenters to addendum j to explore opportunities for resolution and solicit input from the SSPC on the path forward. Comments were divided into

¹² ASHRAE utilizes complaints for action and inactions to help address process concerns and issues prior to completion of the process. This often reduces the need for appeals.

common themes to allow for fruitful discussion. All commenters were provided an opportunity to present. The SSPC chair forms two working groups to come back with alternate solutions.

2022

1/28/22 – The SSPC meets to consider comments and objections to addendum j to Standard 62.2-2022. One WG group disbanded by its AHRI (i.e., unvented combustion industry) representative chair. Commenters were given a second opportunity to address the SSPC. The agenda was again organized by common comment themes.

2/2/22 – Approved response from SSPC 62.2 were sent to the unresolved commenters via the online comment database. Reply deadline for commenters was March 2, 2022.

3/1/22 – SSPC Chair forms another working group led by Mr. Delaquila to propose alternatives to proposed addendum j to Standard 62.2-2022.

4/5/22 – Mr. Delaquila's working group meets.

4/29/22 - Mr. Delaquila's working group meets.

5/17/22 - Mr. Delaquila's working group meets.

5/23/22 - Mr. Delaquila's working group is dissolved by Mr. Delaquila and no alternative solution is developed.

6/24/22 – SSPC face to face meeting to hear from unresolved commenters and negative committee voters were given time to address the SSPC and respond to questions from the SSPC. After the discussions, the SSPC hears a motion to approve with knowledge of unresolved objectors at the face to face meeting.

7/26/22 – SSPC Chair issues continuation letter with a closing date of 8/2/22. This included the negative votes with reason that were provided during the face to face meeting.

8/3/22 – SSPC Chair issues a recirculation ballot with the additional negative votes with reason.

8/10/22 – Ballot closes with a final vote count of 19-3-2-2-4 (Yes, No, No without comment, abstain, not returned).

10/14/22 – Board of Directors approves addendum j to Standard 62.2-2022.

10/18/22 – Right to appeal letters sent to joint appellants and others.

11/4/22 – Shannon Corcoran , David Delaquila, files appeal of addendum j to Standard 62.2-2022.

11/5/22 – Mr. Don Denton files appeal of addendum j to Standard 62.2-2022.

11/7/22 – Ron Smith files appeal of addendum j to Standard 62.2-2022.

11/14/22 – Eric Adair files appeal of addendum j to Standard 62.2-2022.

2023

1/24/23 – The Appeals Panel meets, reviews all the appeals and, in accordance with PASA, determines the appeals will be dismissed without a hearing. The Appeals Panel determined that the SSPC followed process and that providing the white paper to the unresolved commenters to review for six weeks prior to the vote by the SSPC was sufficient time for the commenters to bring counter positions and evidence to the SSPC.

2/6/23 – Appellants notified of the decision of the Appeals Panel.

ANSI Appeals begin.



Attachment B

February 13, 2024

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Dated Notice

Re: ANSI Appeals Board Decision concerning the jointly-filed Appeal of the ANSI Executive Standards Council (ExSC) decision to dismiss a Complaint against ASHRAE, challenging ASHRAE's approval, as an ANSI Audited Designator, of addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* as an American National Standard (ANS)

Greetings –

In response to the appeal filed jointly by the above-referenced Appellants with the ANSI Appeals Board in connection with the ANSI Executive Standards Council's (ExSC) decision to dismiss their complaint concerning the approval by ASHRAE, an ANSI Audited Designator, of addendum j to ASHRAE Standard 62.2-2022 *Ventilation and Acceptable Indoor Air Quality in Residential Buildings* (addendum j) as an American National Standard (ANS), the ANSI Appeals Board reverses the decision dismissing the appeal and remands to the ANSI ExSC with instructions to hold a hearing so that the ANSI ExSC may fully evaluate the issues presented by Appellants, including the matters raised in the Appellants' brief on appeal.

We take no position on the merits of the arguments presented but only observe that the current record is insufficient to assess whether ASHRAE violated its procedures in the manner described by

Appellants. Appellants have raised a number of serious questions in their December 15, 2023 appeal, questions that warrant further review and fact-finding by the ExSC. In the absence of answers to these questions, Appellants have made a prima facie case that the ANSI ExSC decision is in error.¹

Remand Instructions

1. The ExSC shall fully evaluate the issues presented to the ANSI Appeals Board and develop the necessary written record with respect to their findings and decision.
2. The ExSC shall schedule a hearing in an expeditious manner per established appeals procedures and the ExSC Secretary shall advise both parties of any deadlines relating to the submission of required statements or briefs.
3. Prior to the hearing, ASHRAE shall be directed to respond in writing to Appellants' December 15, 2023 filing with the ANSI Appeals Board and to address, in particular, the following questions:
 - i. Under what conditions are unvented combustion heaters permitted under addendum j?
 - ii. Does addendum j effectively preclude, prohibit or ban the use of unvented combustion heaters?
 - iii. Is there a type of installation where only unvented combustion heaters would be appropriate and if so, how would this be addressed under addendum j?
 - iv. Is the existing CSA standard referenced by the Appellants (*CSA Z21.11.2 Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters* (the "CSA Standard")) relevant to whether ASHRAE 62 addendum j should be approved as an American National Standard (ANS)?
 - v. With respect to the CSA Standard, what harmonization efforts were made by ASHRAE with CSA?
 - vi. Is addendum j contrary to the public interest, does it contain unfair provisions or is it unsuitable for national use insofar as it may preclude, prohibit, or ban a class of products that are subject to certification under an existing standard devoted expressly to that class of products?
 - vii. When in the development process was the "White Paper" made available to consensus body members and the public for comment?
 - viii. Were Appellants given an appropriate amount of time for review and comment on the "White Paper"?

¹ The Appeals Board understands that per ASHRAE's March 27, 2023 communication to the Appellants and the ANSI ExSC, addendum j has not been published and will not be published pending conclusion of the appeals process at ANSI. If this is not the case, ASHRAE is asked to advise the Secretary of the ANSI Appeals Board of its status immediately.

- ix. Did the manner in which Appellants were able to comment on the “White Paper” limit Appellants’ ability to comment or to propose an alternative? Please explain.
 - x. Does the “White Paper” provide an explanation of the technical basis for addendum j? If not, where can the technical basis for addendum j be found and when was that information made available to participants in the consensus process?
 - xi. What was the nature of the conflict-of-interest issue raised in connection with ASHRAE’s appeals process and did this conflict limit Appellants’ opportunity for a fair and impartial appeals hearing and decision?
6. Following receipt of ASHRAE’s brief on these and any other matters ASHRAE deems relevant, the Appellants shall be directed to submit a reply brief, which should address the information presented in ASHRAE’s brief as well as the forgoing questions.
 7. The ExSC may determine, in its discretion, whether it is advisable to seek additional briefing from either party.
 8. The ExSC shall issue a decision on the more-fully developed record that provides its analysis and conclusions.

The ANSI Appeals Board acknowledges that this action to remand will prolong a final resolution of the issues at hand, but is nonetheless compelled to ensure that the future final decision is based on a complete and accurate record and that the provisions of the *ANSI Essential Requirements* are implemented as intended and written.

The Secretary of the ANSI ExSC (the undersigned) will contact both parties at the same time concerning the ExSC’s hearing schedule and with instructions and deadlines for filing the additional statements described above.

The ExSC’s final decision in connection with this remand will be subject to appeal to the ANSI Appeals Board.

Thank you for your attention to this matter. If I may be of assistance to you, please contact me at (212) 642-4914 or send an E-mail to acaldas@ansi.org.

Sincerely,
Anne

Anne Caldas
Secretary, ANSI Appeals Board

cc: ANSI Executive Standards Council
ANSI Appeals Board
Patricia Griffin, ANSI Senior VP & General Counsel
Fran Schrotter, ANSI Senior VP & Chief Operating Officer