*Rate-Rationale Document Discussed*

# SSPC 62.1 Actions in NYC

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During the 2008 ASHRAE Winter Meeting in New York, Standing Standards Project Committee (SSPC) 62.1 continued to work to maintain and improve Standard 62.1-2007. In addition, several sessions related to the standard were held, including a seminar discussing potential conflicts between Standard 62.1 and Standard 90.1, and a seminar about the ventilation-calculation spreadsheet that comes with the Standard 62.1-2007 *User's Manual*. And, in a related but independent action, the ASHRAE board of directors began the process of gathering input about ventilation and IAQ-related issues from the membership, in the form of questions to be included in the 2008 membership ballot. Here are some highlights from the committee meeting.

### Education and Research Efforts

Some key topics addressed by our education subcommittee included code change proposals, a rate-rationale document, a scripted presentation for use at chapter meetings and ongoing research needs.

To help ASHRAE staff prepare for the February 2008 International Code Council hearings, we discussed and approved SSPC positions on several code change proposals of interest to our committee. Most notably, one proposal would replace the ventilation rates and procedures (which are based on Standard 62.1-2004 and were approved for the International Mechanical Code 2006 Supplement less than a year ago) with considerably lower rates and incomplete calculation procedures, which are apparently based on the local code in Houston. The SSPC strongly opposed these proposed code changes, approving a long list of reasons why the proposed lower rates should not be applied nationally or globally. Perhaps most importantly, the proposed changes would replace requirements developed and refined via an ANSI-approved international consensus process with a local municipal code developed for one specific city.

We discussed the ongoing need for a rate-rationale document, which would establish a historical perspective and a future basis for the rates and procedures embodied in ANSI/ASHRAE Standard 62.1-2007. A draft of this document has been used internally by the committee for a number of years, but we agreed that it should be published to extend its usefulness to a wider audience. We assigned authors and look forward to completion of this document.

A draft of a scripted PowerPoint presentation was discussed. Such a presentation would be provided for use at local ASHRAE chapter meetings, with or without the participation of a current or past SSPC 62.1 member. The chapters have been asking for this type of presentation and, hopefully, it will be finished and available soon after the Annual Meeting in Salt Lake City in June.

Several research needs were discussed. Our committee supports Research Topic Acceptance Requests (RTAR) being developed on several fronts, including: ozone air cleaning (RTAR being pursued by ASHRAE's Environmental Health Committee), ozone removal capabilities of heat recovery devices (Technical Committee 5.7, Evaporative Cooling, has RTAR responsibility), demand controlled ventilation approaches (RTAR being written by TC 1.4, Control Theory and Application) for multiple-zone systems, and the correct value for zone air distribution effectiveness ($E_z$) in systems with cycling overhead heat (RTAR would be the responsibility of either TC 4.3, Ventilation Requirements and Infiltration, or 2.3, Gaseous Air Contaminants and Gas Contaminant Removal Equipment).

### The Addenda

The SSPC took action on the following addenda.

***Addendum 62.1a (Section 4 and 5 Cleanup): Approved for publication with edits.***

Addendum 62.1*a* was initiated to clean up inconsistencies and clarify requirements in Sections 4 and 5 of the standard. After three public reviews, the committee made some minor editorial changes to the text and reaffirmed approval of this addendum for publication in the 2008 supplement.

***Addendum 62.1c (Outdoor Air Cleaning): Approved for third Publication Public Review (PPR), with more stringent ozone air cleaning requirements.***

Addendum 62.1*c* clarifies and adds air cleaning requirements to Section 6. If approved without changes resulting from public review, systems in non-attainment areas for PM2.5 would need to use MERV 11 intake air filters to comply with the standard. Also, systems in non-attainment areas for ozone would need to use 40% ozone air cleaners to comply with the standard. Either or both of these requirements would result in increased filtration and/or air cleaning in many U.S. geographical areas.

***Addendum 62.1d (New Occupancy Categories): Approved for second PPR.***

At least partly in response to recent Change Proposals submitted to the SSPC, Addendum 62.1*d* adds some occupancy categories (which had been overlooked in the 2004 version of the standard), along with associated minimum outdoor airflow requirements and air classes, to Table 6-1. It adds outdoor air requirements for kitchens (which previously had only exhaust requirements), break rooms, dry storage rooms, and banks or bank lobbies. It also adds outdoor air requirements for areas with "sorting, packing, light assembly," general manufacturing, electrical equipment rooms, and hydraulic elevator machine rooms.

***Addendum 62.1i (Outdoor Airflow for ETS Areas): Pending—requires future committee actions in addition to those approved in NYC.***

Addendum 62.1*i* changes minimum outdoor airflow requirements for zones with environmental tobacco smoke (ETS), as described in section 6.2.9. This issue has attracted significant interest and many comments during three public reviews.

In the first Public Review (PR), the addendum would have removed all reference to outdoor airflow requirements in smoking-permitted areas. In a sense, this approach would mean that the standard does not address ventilation for smoking areas, but in another sense, it would mean that ventilation systems for ETS areas could comply with the standard using any amount of outdoor airflow (since no airflow was specified).

For the second PR, the addendum would have required that ETS areas be supplied with more outdoor air than comparable ETS-free areas, and that the outdoor airflow rate be determined using "engineered methods with the approval of the authority having jurisdiction." To some, this approach meant that designs that increase outdoor airflow even by a small amount would comply with the standard, and it meant that dilution ventilation could be used to achieve acceptable IAQ in the presence of ETS. To others, it meant that neither ETS nor ETS-free areas could comply with the standard while providing less than the minimum outdoor airflow required in ETS-free areas.

For the third PR, the addendum replaced the language requiring "engineered methods with the approval of the authority having jurisdiction" with this sentence: "Outdoor airflow rates intended to control comfort and odor shall be greater than those for comparable ETS-free areas." To some this means that outdoor airflow to ETS areas can be used to control comfort and odor, but by implication, it cannot be used to control for health impacts, since many feel that the magnitude of the outdoor airflow needed to reduce health impact of ETS is extremely high. To others, this wording means that increased OA is only needed when the designer intends to control comfort and odor, but it is not needed if the designer has any other intent.

During deliberations in NYC, the SSPC voted on a motion to amend the language, deleting "intended to control comfort and odor." This motion was defeated.

Committee action on this addendum is still pending, with two possible outcomes—the committee could vote to: 1) retain the third PPR language, reject all third PPR comments, and allow the third PPR version to published in the 2008 supplement, or 2) reject the third PPR language, alter the addendum again and consider a revised version for a fourth PPR. Time will tell.

***Addendum 62.1g (DCV): Committee action via letter ballot required.***

This addendum adds specific requirements related to zone-level demand-controlled ventilation. It was discussed in subcommittee and recommended for second PPR, but this recommended action was not discussed in full committee. Action is expected either prior to the 2008 Annual Meeting via letter ballot or during the meeting itself.

## Summary

Work continues to improve Standard 62.1 in response to change proposals, interpretation requests and committee insights. As it does every six months, SSPC 62.1 made progress in NYC, taking steps to improve the ventilation standard by approving one addendum for publication and two for public review. Although better progress on ventilation for ETS areas and for zone-level demand controlled ventilation might have been made, the continuous maintenance process ensures that the committee will continue to work on these topics until all issues are resolved. The SSPC considered several ICC code change proposals and approved recommended ASHRAE positions for the ICC hearings in February. Also, the SSPC made progress on several education issues, including chapter presentations and research requirements.

*Dennis A. Stanke is chair of Standing Standards Project Committee 62.1.*