

MEETING MINUTES
TC 2.3 - Gaseous Contaminants/Removal Equipment
Standards Subcommittee Meeting
Monday June 25 2018, 2:15-3:15, Hilton, Room 355 C

1) Introductions and Sign-In

In the absence of Paolo Tronville, the meeting was chaired by Paula Levasseur. The meeting was called to order at 2:15 pm. Attendees were:

Nick Agopian
Dara Feddersen
Peter Freeman
Vivek Gaur
Henry Greist
Dan Haas
Sanjeev Hingorani
Chrystal Jolliffe
Gemma Kerr
Brian Krafthefer
Kevin Kwong
Paula Levasseur
Ashish Mathur
Matt Middlebrooks
Kathleen Owen
David Schaaf
John Simenson
Christine Sun
Paolo Tronville (arrived late)
Mark Tucker

2) New Subcommittee Chair

- The committee needs a new Chair as Paolo has been appointed to the Research Activities Committee (RAC). Peter Freeman agreed to take over the position.
- TC 2.3 Standards has only one face-to-face meeting at the Summer Meeting, plus an online meeting before the Winter meeting (to avoid losing attendees to the show).

3) Update on standards within scope of ASHRAE TC 2.3

- a) GPC 27P “Procedures for measurement of gases in indoor environments” – *Gemma Kerr*
 - All comments from the fourth Public Review have been resolved. The fifth Public Review draft is half completed. This will be a partial review.
- b) ASHRAE Std. 145.1-2015 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media” – *Matt Middlebrooks*
 - No action currently
- c) ASHRAE Std. 145.2-2016 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices” – *Matt Middlebrooks*
 - The committee is amending the Standard to include testing of reactive media and electronic devices. There is continued interest in a recirculation or chamber type test, however we may leave this development to ISO whose standard is already in process

4) ASHRAE SPCs/SSPCs/TCs/TGs/TRGs activities

- a) TC 2.4 “Particulate Air Contaminants and Particulate Contaminant Removal Equipment” – *Gemma Kerr*
 - Gemma requested to remove reporting under this heading as all of TC 2.4’s standards activities are reported below.
- i) GPC35P “Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices” – *Matt Middlebrooks*
 - There was no meeting of this committee in Houston. The Guideline cannot be completed until the results of RP-1734 are available.
- ii) SSPC 52.2 “Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size”- *Gemma Kerr*
 - There is continued discussion of ISO 16890 and whether it provides a credible alternative to Standard 52.2. Also on whether 52.2 should add an Annex calculation to determine ePM so that there is a similar output to 16890. There is interest in pursuing a recirculation test for filters that would use a 52.2 test rig linked to a large environmental chamber. The work statement for round robin testing to evaluate the recently revised 52.2 has been accepted by RAC.
- b) TC 2.9 “Ultraviolet Air and Surface Treatment” – *Ashish Mathur*
 - There is nothing new from this committee.
 - (1) SPC 185.1-2015 “Method of Testing UVC Devices for use in air handling units or air ducts to inactivate airborne microorganisms” – *Kathleen Owen*
 - There is no action
 - (2) SPC 185.2-2014 “Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts on Irradiated Surfaces” - *Kathleen Owen*
 - Round Robin testing has been proposed. An RTAR for this has been approved
- c) TC 9.11 “Clean Spaces” – *TBD*
 - There was no report
- d) SSPC 62.1 “Ventilation for acceptable Indoor Air Quality” – *Chris Muller*
 - Nothing relevant to this committee is happening
- e) SSPC 62.2 “Ventilation and acceptable Indoor Air Quality in residential buildings” – *Bob Burkhead*
 - There is discussion about a new standard for testing residential filtration devices.
 - Unvented combustion devices are still a concern

5) Information Exchange

- a) AFS – *Christine Sun*
 - The Fall Conference will take place September 11-12 2018 in Charleston SC
- b) ASTM D22.05 “Air Quality” SC “Indoor Air” – *Peter Freeman*
 - There is a meeting upcoming to discuss collaboration in the area of method detection limit
 - Systematic reviews of some of the standards shown below are underway
 - D4861** Practice for Sampling and Selection of Analytical Techniques for Pesticides and Polychlorinated Biphenyls in Air
 - There was no update
 - D5116** Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products
 - There was no update
 - D6485** Guide for Risk Characterization of Acute and Irritant Effects of Short-Term Exposure to Volatile Organic Chemicals Emitted from Bedding Sets
 - There was no update
 - D7034** Guide for Deriving Acceptable Levels of Airborne Chemical Contaminants in Aircraft Cabins Based on Health and Comfort Considerations
 - There was no update

- D7339** Test Method for Determination of Volatile Organic Compounds Emitted from Carpet using a Specific Sorbent Tube and Thermal Desorption / Gas Chromatography
 - There was no update
- D5791** Guide for Using Probability Sampling Methods in Studies of Indoor Air Quality in Buildings
 - There was no update
- D6332** Guide for Testing Systems for Measuring Dynamic Responses of Carbon Monoxide Detectors to Gases and Vapors
 - There was no update
- D6306** Guide for Placement and Use of Diffusion Controlled Passive Monitors for Gaseous Pollutants in Indoor Air
 - There was no update
- D6245** Guide for Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality and Ventilation
 - There was no update
- c) ASTM D28.04 “Activated carbon” SC “Gas Phase Evaluation Tests” – *Peter Freeman*
 (1) D6646-03 (2014) “Standard Test Method for Determination of the Accelerated Hydrogen Sulfide Breakthrough Capacity of Granular and Pelletized Activated Carbon”
 - There is a move to change the method to reduce the challenge concentration of hydrogen sulfide which is highly toxic
- d) ISO/TC 142 “Cleaning Equipment for Air and Other Gases” – *Matt Middlebrooks*
- i) WG8 “Gas-phase air cleaning devices”
 (1) The recent 10121-2 systematic review received some comments which will need to be addressed
 (2) ISO/NP 10121-3 “Test method for assessing the performance of gas-phase air cleaning media and devices for general ventilation — Part 3: Classification system for treatment of make-up air”
 - It is still early in the development process for this standard. An online meeting to discuss it is planned for early July
- ii) WG11 “Portable room air cleaners for comfort applications”
 (1) ISO/NP 17970-1 “Measurement of the performance of portable room air cleaners - Part 1: Performance against non-viable particulate matter”
 - Progress is in a holding position because IEC is working on an equivalent document. There is going to be collaboration, but not until approval by both organizations in the Fall
 (2) ISO/PWI 17970-2 “Measurement of the performance of portable room air cleaners - Part 2: Performance against gases”
 - Work on this will not start until completion of the particle filter standard
- iii) WG 13 “Biological equipment for waste gas treatment”
 - this is a new working group, probably not relevant to ASHRAE since the treatment cannot be used for indoor air
- iv) US Technical Advisory Group (TAG) to ISO/TC 142
 - This is a management committee not a Standards committee. Do not include this item on the Agenda again
- e) ISO/TC 205 “Building environment design” – *TBD*
 (1) ISO 16814:2008 “Building environment design - Indoor air quality - Methods of expressing the quality of indoor air for human occupancy” (reviewed and confirmed in 2014)
 - There was no report
- f) USGBC – *Charlene Bayer*
 - There was no report

- g) - CEN/TC 156 “Ventilation for buildings” – *Paolo Tronville*
 - This standard has 18 parts and is complicated.
 - (1) EN 16798-3:2017 “Energy performance of buildings - Ventilation for buildings - Part 3: For non-residential buildings - Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)” (Supersedes EN 13779:2007);
 - This is being revised to add gas filtration.
 - (2) CEN/TR 16798-4:2017 “Energy performance of buildings - Ventilation for buildings - Part 4: Interpretation of the requirements in EN 16798- 3 - For non-residential buildings - Performance requirements for ventilation and room-conditioning systems (Modules M5-1, M5-4)” (this document contains information to support the correct understanding and use of EN 16798-3)
 - This part is also under revision
- h) Other ISO TCs (and also CEN, ITRI, etc.)
 - There were no reports

6) New business

- Matt reported that the Forum on the Wednesday Program is intended to gauge interest in a test method for combinations of filters/air cleaners. Perhaps an application guideline is needed, or an MTG since several TCs are interested (including 2.3, 2.4, and 2.9).
- Paula reported that GPC 36, which deals with sequencing of HVAC equipment, suggests including gas phase filters for new buildings. This would be quite complicated to do if energy implications are included (more complicated than GPC 35). The proposal came from TC 1.4 which is their cognizant committee. Paula has distributed the proposal for comment.
- Christine Sun reported on a document she found at the Presidential lunch.

7) Adjourn

- The meeting was adjourned at 3:12 pm