

MEETING MINUTES
TC 2.3 - Gaseous Contaminants/Removal Equipment
Standards Subcommittee Meeting
Friday, January 4th 2019, 10:00-noon EST
Web Meeting – no room

1) Introductions

The meeting was chaired by Peter Freeman and was called to order at 10:05 am. Participants were:
Peter Freeman (Subcommittee Chair)
Sanjeev Hingorani
Gemma Kerr
Brian Krafthefer
Kevin Kwong
Paula Levasseur
Jeff Roseberry
Christine Sun

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).

2) The Agenda was approved unanimously.

3) TC 2.3's current Standards Liaison is Niels Bidstrup. Gemma noted that Liaisons usually do not attend this meeting, focusing rather on GPC 27 and SSPC 145.

4) Update on standards within scope of ASHRAE TC 2.3

- a) GPC 27P "Measurement Procedures for Gaseous Contaminants in Commercial Buildings" – *Gemma Kerr*
 - The fifth Public Review draft was submitted to ASHRAE on January 2. 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" – *Gemma Kerr for Matt Middlebrooks*
 - No action at present
- c) ASHRAE Std. 145.2-2016 "Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices" – *Gemma Kerr for Matt Middlebrooks*
 - The committee is working to amend the Standard to include testing of reactive media and electronic devices.

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

- a) TC 2.4 "Particulate Air Contaminants and Particulate Contaminant Removal Equipment" – *Gemma Kerr*
 - no standards action except as related to GPC 35 and SSPC 52.2.
- i) GPC35P "Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices" – *Brian Krafthefer for Matt Middlebrooks*
 - the committee has finalized an RTAR to assess the effect of combining particulate and gas filters in series on resistance to air flow.
- ii) SSPC 52.2 "Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size" - *Gemma Kerr*

- A change proposal has been submitted to 52.2 for addition of calculations that will estimate removal efficiency of PM₁, PM_{2.5}, and PM₁₀ particles so that there is a similar output to ISO 16890.
- b) TC 2.9 “Ultraviolet Air and Surface Treatment” – *Ashish Mathur*
 - There was no report.
 - (1) SPC 185.1-2015 “Method of Testing UVC Devices for use in air handling units or air ducts to inactivate airborne microorganisms” – *Ashish Mathur*
 - There was no report.
 - (2) SPC 185.2-2014 “Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts on Irradiated Surfaces” - *Ashish Mathur*
 - There was no report.
- c) TC 9.11 “Clean Spaces” – *TBD*
 - There was no report
- d) SSPC 62.1 “Ventilation for acceptable Indoor Air Quality” – *Chris Muller*
 - There was no report.
- e) SSPC 62.2 “Ventilation and acceptable Indoor Air Quality in residential buildings” – *Nick Agopian*
 - There was no report.

6) Information Exchange

- a) AFS – *Christine Sun*
 - AFS Filtcon will be held April 1-4, 2019 in Cherry Hill, NJ
 - The 13th World Filtration Congress (WFC13) will take place April 20-24, 2020 at the Hilton Bayfront Hotel in San Diego, CA, USA
- b) ASTM D22.05 “Air Quality” SC “Indoor Air” – *Peter Freeman*
 - info coming from Peter
 - 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 is currently no action on this Standard
 - D5116** Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products
 - There is currently no action on this Standard
 - D6485** Guide for Risk Characterization of Acute and Irritant Effects of Short-Term Exposure to Volatile Organic Chemicals Emitted from Bedding Sets
 - There is currently no action on this Standard
 - D7034** Guide for Deriving Acceptable Levels of Airborne Chemical Contaminants in Aircraft Cabins Based on Health and Comfort Considerations
 - There is currently no action on this Standard
 - D7339** Test Method for Determination of Volatile Organic Compounds Emitted from Carpet using a Specific Sorbent Tube and Thermal Desorption / Gas Chromatography
 - There is currently no action on this Standard
 - D5791** Guide for Using Probability Sampling Methods in Studies of Indoor Air Quality in Buildings
 - There is currently no action on this Standard
 - D6332** Guide for Testing Systems for Measuring Dynamic Responses of Carbon Monoxide Detectors to Gases and Vapors
 - There is currently no action on this Standard
 - D6306** Guide for Placement and Use of Diffusion Controlled Passive Monitors for Gaseous Pollutants in Indoor Air
 - There is currently no action on this Standard

D6245 Guide for Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality and Ventilation

- Revision of this Standard has started

- c) ASTM D28.04 “Activated carbon” SC “Gas Phase Evaluation Tests” – *Peter Freeman*
 - info coming from Peter
 - (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” – *Gemma Kerr for Matt Middlebrooks*
- i) WG8 “Gas-phase air cleaning devices”
 - (1) 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”
 - the document has been completed and has been posted for approval vote.
- 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”
 - IEC is now in a position to collaborate with WG 11, and a joint meeting will be held Wednesday afternoon in Atlanta to discuss the document on performance against particles.
 - (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) US Technical Advisory Group (TAG) to ISO/TC 142
 - There was no report.
- 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);
 - There was no report.
 - (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)
 - There was no report.
- h) Other ISO TCs (and also CEN, ITRI, etc.)
 - There were no reports
- i) <http://www.cluster-essc.eu/> - The European Sensor-Systems Cluster (ESSC)
 - There was no report

7) New business

- There was no new business.

8) Any Other Business

- There was no other business.

9) Adjourn

- The meeting was adjourned at 10:20 am