

MEETING Minutes
TC 2.3 - Gaseous Contaminants/Removal Equipment
Standards Subcommittee Meeting
Monday, June 26th 2017, 2:15-3:15 p.m.
Room Nieto, Renaissance Hotel, Long Beach, CA, USA

1) Introductions and Sign-In

The meeting was called to order at 2:18 pm by Chair Paolo Tronville. Present were:

Tim Ahn
Len Duello
Mick Flom
Ahwah Francis
Dan Haas
Sanjeev Hingorani
Steve Hon
Gemma Kerr
Brian Krafthefer
Kevin Kwong
Paula Levasseur
Ed Light
Daniel Mason
Matt Middlebrooks
Kathleen Owen
Dave Shaaf
John Simenson
Paolo Tronville

2) Approval of the agenda

- Approved as distributed.

3) Liaison Report (Do we have a Standards liaison? Who is he/she?)

- No liaison was present. The liaison is identified in the TC 2.3 roster, but has never attended this meeting.

4) Update on standards within scope of ASHRAE TC 2.3

- a) GPC 27P “Procedures for measurement of gases in indoor environments” – *Gemma Kerr*
- Guideline 27 is going out for its fourth Public Review in July, and hopefully will be published later this year
- b) ASHRAE Std. 145.1-2015 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media” – *Matt Middlebrooks*
- There are currently no change proposals active for this standard.
- c) ASHRAE Std. 145.2-2016 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices” – *Matt Middlebrooks*
- This Standard plans to expand its scope to include in-duct electronic air cleaners. An application to ASHRAE to change the Title, Purpose and Scope to remove the restriction that excluded electronic air cleaners will be made shortly. Some changes to the sampling protocol in the existing Standard will be necessary to investigate by-product production. An RTAR to fund a literature search on the different technologies and existing test methodologies has been prepared.

There also is an interest in a chamber test, which would be a separate standard.

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

- a) TC 2.4 “Particulate Air Contaminants and Particulate Contaminant Removal Equipment” – *Gemma Kerr*
 - The TC is presently not considering applying to start any new Standards or Guidelines.
 - i) GPC35P “Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices” – *Brian Krafthefer*
 - A new draft of the Guideline was discussed at this meeting. Issues included some of the equations and combination (particle/gas) filters. Two teleconferences are planned before Chicago to advance the document. Completion is not expected until 2021 because of the need to wait for data from RP-1734.
 - ii) SSPC 52.2 “Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size”- *Gemma Kerr*
 - Most of the discussion in Long Beach centered on where publication of ISO 16890 leaves 52.2. The Standard 62.2 committee has stated its intention to change from referring to 52.2 to referencing ISO 16890 because of explicit mention of PM_{2.5} in the latter. 52.2 will either make a formal response to 62.2 before the Chicago meeting, or comment if they go ahead with the change and send out an Addendum for Public Review. It was determined that it is too early for SSPC 52.2 to make a decision on whether to keep 52.2 going, adopt 16890 as is, or pursue other option.
- b) TC 2.9 “Ultraviolet Air and Surface Treatment” – *Ashish Mathur*
 - There was no report.
 - i) SPC 185.1-2015 “Method of Testing UVC Devices for use in air handling units or air ducts to inactivate airborne microorganisms” - *Ashish Mathur*
 - The committee voted today to remove a Poisson calculation that is inappropriate to use when sampling bio-aerosol.
 - ii) SPC 185.2-2014 “Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts on Irradiated Surfaces” - *Ashish Mathur*
 - A Round Robin RTAR is being written to validate the method.
- c) TC 9.11 “Clean Spaces” – *TBD*
 - There was no report. Rumor suggests their Design Guide is nearing completion.
- d) SSPC 62.1 “Ventilation and IAQ High Rise Buildings” – *TBD*
 - i) Research
 - There was no report.
 - ii) Education
 - There was no report.
- e) SSPC 62.2 “Ventilation and IAQ Low Rise Buildings” – *TBD*
 - There was no report.

6) Information Exchange

- a) AFS – *KJ Choi*
 - The AFS Fall Conference will take place September 18-20, 2017 at the Marriott St. Louis Airport Hotel, St. Louis, MO
 - The AFS Spring Conference will take place April 25-28, 2018 at the Mystic Lake Conference Center and Resort, Minneapolis, MN
- b) ASTM D22.05 “Air Quality” SC “Indoor Air” – *Peter Freeman*
 - There was no report.
- c) ASTM D28.04 “Activated carbon” SC “Gas Phase Evaluation Tests” – *Paula Levasseur*
 - i) D6646-03 (2014) “Standard Test Method for Determination of the Accelerated Hydrogen

Sulfide Breakthrough Capacity of Granular and Pelletized Activated Carbon”

- No changes to report.

- d) ISO/TC 142 “Cleaning Equipment for Air and Other Gases” – *TBD*
 - 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” *Matt Middlebrooks*
 - Action is starting up again, there will be a meeting to discuss this project at the ISO/TC 142 Plenary Meeting in Paris in September.
 - 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”
 - The WG has a new Convenor and will hold a face-to-face meeting on this project shortly. Some difficulties are anticipated in reconciling the different approaches used in the national standards that will contribute to this document.
 - (2) ISO/PWI 17970-2 “Measurement of the performance of portable room air cleaners - Part 2: Performance against gases”
 - Work on this part has not started yet.
 - iii) US Technical Advisory Group (TAG) to ISO/TC 142 – *Rahul Bharadwaj*
 - The US may put together a proposal to host the 2018 Plenary Meeting because there is currently no proposal from Asia (whose turn it is to host the Plenary).
 - e) ISO/TC 205 “Building environment design” – *TBD*
 - i) 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)
 - They are concentrating on building controls rather than contaminants and their control.
 - f) USGBC – *Charlene Bayer*
 - There was no report.
 - g) CEN/TC 156 “Ventilation for buildings” – *Paolo Tronville*
 - i) 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)” (Replaces EN 13779);
 - This is a performance standard. It will need to be modified to show replacement of EN 779 by EN ISO 16890.
 - ii) 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)” (Replaces EN 13779)
 - (1) It contains information to support the correct understanding and use of EN 16798-3.
 - this is a technical document to support the use of 16798-3
 - h) Other ISO TCs (and also CEN, ITRI, etc.)
 - there were no reports from these organizations.
 - i) <http://www.cluster-essc.eu/> - The European Sensor-Systems Cluster (ESSC): They have a project called SensIndoor which has produced some interesting low cost sensors.

7) New business

- a) Ed Light’s proposal about MTG on VOCs (combined effect of mixtures of VOCs) and request for Committee sponsorship
 - AIHA recently published a document on VOCs in building construction. A literature search was included. The conclusions from analyzing the literature included lack of correlation between measured data and occupant health.

8) Any other business

- There was none.

9) Adjourn

- The meeting was adjourned at 3:20 pm.