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.
      - 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 PM$_{1}$, PM$_{2.5}$, and PM$_{10}$ 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
  - There is currently no action on this Standard
  - 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
    - 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”
      - 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(Modes 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-esse.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