**MEETING MINUTES**
**TC 2.3 - Gaseous Contaminants/Removal Equipment**
**Standards Subcommittee Meeting**
Monday, January 26th 2015, 6:00-8:00 p.m.
Palmer House Hilton, Lobby Level, Honore

The meeting was called to order at 6:10 pm by Chair Paolo Tronville. Present were:

**Name**
**1)** Paolo Tronville
**2)** Kyung-Ju Choi
**3)** Mick Flom
**4)** Dan Haas
**5)** Gemma Kerr
**6)** Chang-Seo Lee
**7)** Bill Lull
**8)** Ashish Mathur
**9)** Peter McKenney
**10)** Matt Middlebrooks
**11)** Kathleen Owen
**12)** Michael Sexsmith
**13)** Brad Stanley

**1) Update on standards within scope of ASHRAE TC 2.3**

a) GPC 27P "Procedures for measurement of gases in indoor environments" – B*ill Lull*
- Gemma Kerr is leading the writing effort, which is going well. Two telecons are expected between this meeting and Atlanta, and the committee is expected to vote on a public review draft in June.

b) ASHRAE Std. 145.1-2008 "Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media" – *Kathleen Owen*
- The new edition galley proofs have been approved, and the standard will be published this year. Main changes are removal of inessential material and improvement of user friendliness.

c) ASHRAE Std. 145.2-2011 "Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices" - *Kathleen Owen*
- The Seattle addenda are now on the ASHRAE website. Other minor addenda are under review.
- A suggestion that the committee needs to expand the SSPC scope to include reactive devices will be brought to TC 2.3. Option 1= do nothing. Option 2= A scope change of 145.2. Option 3= start a new standard with a new committee. A scope change may be easier than starting a new standard. This option should be investigated first.

**2) ASHRAE SPCs/SSPCs/TCs/TGs/TRGs activities**

a) GPC35P "Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices – *Brad Stanley*
- The discussion was on research, then on what to include in the working draft of the Guideline. Technical discussion took place on gaseous filters because pressure drop does not change with age while particulate filter does. There was discussion on whether filter life is within the GPC scope.

b) TC 2.4 "Particulate Air Contaminants and Particulate Contaminant Removal Equipment" – *Kathleen Owen*
- ASHRAE considers the 52.2 standard as code-intended which affects how frequently addenda

can be published between editions of the standard. A decision is needed on waiting for resolution of the fourth addendum (OPC specifications) before publishing all four, or running with three which will delay the last addendum. There is also the issue of MERV 17-20 definitions not having been removed from the Appendix table. Barney Burroughs has submitted change proposals related to reporting of data.

c) TC 2.9 "Ultraviolet Air and Surface Treatment" – *Matt Middlebrooks*
   i) SPC 185.1 "Method of Testing UVC Devices for use in air handling units or air ducts to inactivate airborne microorganisms"
   ii) SPC 185.2 "Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts on Irradiated Surfaces"
   - 185.1 is close to publishing, and 185.2 is published. Now the TC is moving forward with GPC 37 which deals with upper room UV units and how to use them. There is also talk about a guideline on portable UV units.

d) TC 9.11 "Clean Spaces" – *Matt Middlebrooks*
   - Matt did not attend the TC 9.11 meeting so there was no update. He will continue non-attendance so will not report in future

e) SSPC 62.1 "Ventilation and IAQ High Rise Buildings" – *Brad Stanley*
   - An addendum has been published which says how to deal with gas mixtures when using IAQP. Dennis Stanke has submitted three interpretation requests on IAQP, but details are not known.

f) SSPC 62.2 "Ventilation and IAQ Low Rise Buildings" – *Mick Flom*
   - There was talk about increasing the recommended efficiency of residential filters to MERV 11, but this was sent back to committee for more review. Illinois has a program for using MERV 11 filters in homes undergoing energy improvements.

**3) Information Exchange**

a) AFS – *KJ Choi*
   - This year's AFS Annual Conference will be held at the Sheraton, Charlotte, NC, April 27-29 2015. The theme is "Filtration and Separations in Power Generation – Unmet Needs and Advanced Technology Offering".
   - The Fall Conference on "Advanced Technologies in Filter Media" will take place at the Franklin Marriott, Cool Springs. Franklin, TN, October 5-7 2015.

b) ASTM D22.05 "Air Quality" SC "Indoor Air" – *Stephany Mason*
   - There was no update. It is not clear whether Stephany will be able to continue reporting to this committee.

c) ASTM D28.04 "Activated carbon" SC "Gas Phase Evaluation Tests" – *Brad Stanley*
   i) D6646 - 03(2008) "Standard Test Method for Determination of the Accelerated Hydrogen Sulfide Breakthrough Capacity of Granular and Pelletized Activated Carbon"
   - Minimal changes have been made recently to this document. This is an industrial scrubber application. Is it relevant to this committee?

d) ISO/TC 142 "Cleaning Equipment for Air and Other Gases" /WG8 "Gas-phase air cleaning devices" – *Matt Middlebrooks*
   i) ISO 10121-2:2013 "Test methods for assessing the performance of gas-phase air cleaning media and devices for general ventilation - Part 2: Gas Phase Air Cleaning Devices (GPACD)"
   - no action.
   ii) FDIS 10121-1:2014 "Test methods for assessing the performance of gas-phase air cleaning media and devices for general ventilation - Part 1: Gas Phase Air Cleaning Media (GPACM)"
   - no action.
   iii) ISO/PWI 10121-3 Classification system
   - This document was deactivated then reactivated with a narrower scope. Matt is concerned about the classification test gases not relating to the ones people typically use with 10121-2.

These test gases relate to outdoor air, not indoor. Pressure drop is not part of the classification.

iv) US Technical Advisory Group (TAG) to ISO/TC 142
- The TAG is looking for a location for the US to host the 2016 Plenary Meeting. One suggestion is to combine with the AFS Fall meeting in October, another is to meet at the ASHRAE HQ

e) ISO/TC146 "Air quality" /SC6 "Indoor air" - *Stephany Mason*
- This committee is similar to D22.05.
- There was no update.

f) ISO/TC 205 "Building environment design" – *Stephany Mason*
i) ISO 16814:2008 "Building environment design - Indoor air quality - Methods of expressing the quality of indoor air for human occupancy"
- There was no update.

g) ISO/TC209 "Cleanrooms and associated controlled environments" – *Matt Middlebrooks*
i) ISO 14644-8:2013 "Classification of airborne molecular contamination" (under revision)
ii) ISO 14644-10:2013 "Cleanrooms and associated controlled environments - Part 10: Classification of surface chemical cleanliness"
- These relate to design of cleanrooms. Matt has no information on action.
- IEST holds the secretariat

h) USGBC – *Charlene Bayer*
-The USGBC is concerned that the restriction of 145.2 tests to adsorptive media devices discriminates against other types of gaseous contaminant filters. Using 145.2 for testing of filters is mandatory in LEED version 4.

i) Other ISO TCs (and also CEN, ITRI, etc.)
- There were no reports.

**4) New Business**

a) Information exchange and coordination between ASHRAE SSPC 145 and ISO/TC142/WG8
i) ISO/PWI 10121-3 "Test method for assessing the performance of gas-phase air cleaning media and devices for general ventilation - Part 3: Classification system for assessing the performance of gas-phase air cleaning devices for general filtration"
- There is a catch-22 situation: if classification is to be useful it needs to be simple, but if it is to be valid it will not be simple. It therefore may be impossible to achieve an effective classification system. The question here is whether ASHRAE should pursue this or leave action on this topic to ISO. Should the current ISO information be circulated to the TC for review to allow a decision to be made about further action? This should be discussed at the TC meeting.

**5) Adjourn**

**-** The meeting was adjourned at 7:37 pm.