

MEETING MINUTES
TC 2.3 - Gaseous Contaminants/Removal Equipment
Standards Subcommittee Meeting
Monday, January 30th 2017, 2:15-3:15 p.m.
Room Sicily, Floor Emp, Caesars Palace, Las Vegas, NV, USA

1) Introductions and Sign-In

The meeting was called to order at 2:17 pm by Chair Paolo Tronville. Present were:

Name

- 1) Paolo Tronville
- 2) Tandeep Chadha
- 3) Len Duello
- 4) Mick Flom
- 5) Dan Haas
- 6) Gemma Kerr
- 7) Brian Krafthefer
- 8) Paula Levasseur
- 9) Dan Mason
- 10) Ashish Mathur
- 11) Kathleen Owen

2) Approval of the agenda

Approved as distributed

3) Liaison Report

No liaison present. The Chair does not know who the liaison is. Paula agreed to find out.

4) New Business

- This item has been moved from the end to ensure time available to discuss;
- TC 2.3 Research looking into a standard for chamber assessment of reactive air cleaners. An RTAR is being prepared;
- There is discussion of a possible multi-gas challenge for use with 145.1 or 145.2. Difficult to specify a representative mixture;
- Is there a method for testing combination particle/gas filter systems? No, but probably should be because most gas phase systems have protective particle filters before and after, or are particle filters impregnated with carbon. TC 2.3 and 2.4 should collaborate on this, possibly 2.9 also. Tests on gas and particle properties need to be simultaneous.

5) Update on standards within scope of ASHRAE TC 2.3

GPC 27P “Procedures for measurement of gases in indoor environments” – *Gemma Kerr*

- Committee busy responding to comments on the Third Public Review draft. Collaborating with American Industrial Hygiene Association IAQ committee on revision because most of the recent comments came from them. Expect to submit document for fourth Public Review deadline May 15.

ASHRAE Std. 145.1-2015 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Loose Granular Media” – *Kathleen Owen*

- Standard recently published and in good shape.

ASHRAE Std. 145.2-2011 “Laboratory Test Method for Assessing the Performance of Gas-Phase Air Cleaning Systems: Air Cleaning Devices” – *Kathleen Owen*

- Standard 145.2 wants to change its scope to include reactive air cleaners. Since it is not clear how to do this an RTAR is being prepared for research to investigate the process.

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

TC 2.4 “Particulate Air Contaminants and Particulate Contaminant Removal Equipment” – *Gemma Kerr*

- See below
 - GPC35P “Method for Determining the Energy Consumption Caused by Air-Cleaning and Filtration Devices” – *Gemma Kerr*
 - They are aiming to have a first draft ready by the June meeting.
 - SSPC 52.2 “Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size”- *Gemma Kerr*
 - New edition just published. Potential new standard methods are being discussed: a 52.2 rig plus chamber in a loop for simulating effect of air recirculation on filters; and a PM version of 52.2 with particle sampling through a PM_{2.5} inlet.
- b) TC 2.9 “Ultraviolet Air and Surface Treatment” – *Ashish Mathur*
 - SPC 185.1-2015 “Method of Testing UVC Devices for use in air handling units or air ducts to inactivate airborne microorganisms” - *Ashish Mathur*
 - Published but not used. Need to validate this test.
 - SPC 185.2-2014 “Method of Testing Ultraviolet Lamps for Use in HVAC&R Units or Air Ducts on Irradiated Surfaces” - *Ashish Mathur*
 - RTAR for round robin in progress. TC 5.10 has a research project for UV and kitchen exhaust that may be relevant.
- c) TC 9.11 “Clean Spaces” – *TBD*
 - No report
- d) SSPC 62.1 “Ventilation and IAQ High Rise Buildings” – *Brad Stanley*
 - Research
 - No report
 - Education
 - No report
- e) SSPC 62.2 “Ventilation and IAQ Low Rise Buildings” – *Tadeep Chadha*
 - They want to include non-vented combustible heaters in the standard, need to cover NO_x emissions

7) Information Exchange

AFS – *KJ Choi*

- They are becoming more interested in carbon, Paula has presented on this at 2016 meeting;
- The AFS Spring Conference has theme Advanced Filtration Technologies, and will take place April 10-13, 2017, in the Galt House, Louisville, KY.
- The AFS Fall Conference will take place September 18-20, 2017, in the Marriott St. Louis Airport, St. Louis, MO.

ASTM D22.05 “Air Quality” SC “Indoor Air” – *Peter Freeman*

- No changes to these standards

ASTM D28.04 “Activated carbon” SC “Gas Phase Evaluation Tests” – *Paula Levasseur*

D6646-03 (2014) “Standard Test Method for Determination of the Accelerated Hydrogen Sulfide Breakthrough Capacity of Granular and Pelletized Activated Carbon”

- No changes to this standard

ISO/TC 142 “Cleaning Equipment for Air and Other Gases” – *Brad Stanley*

WG8 “Gas-phase air cleaning devices”

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”

- No meeting at Plenary in Sept 2016. No advancement on this project.

WG11 “Portable room air cleaners for comfort applications”

ISO/NP 17970-1 “Measurement of the performance of portable room air cleaners - Part 1: Performance against non-viable particulate matter”

- the Convenor has resigned, and the project is temporarily stalled;

ISO/PWI 17970-2 “Measurement of the performance of portable room air cleaners - Part 2: Performance against gases”

- the Convenor has resigned, and the project is temporarily stalled;

US Technical Advisory Group (TAG) to ISO/TC 142

- No report

ISO/TC 205 “Building environment design” – *TBD*

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)

- No report

ISO/TC 209 “Cleanrooms and associated controlled environments” (see IEST) – *TBD*

ISO 14644-8:2013 “Cleanrooms and associated controlled environments - Part 8: Classification of air cleanliness by chemical concentration (ACC)”

- No report

ISO 14644-10:2013 “Cleanrooms and associated controlled environments - Part 10: Classification of surface cleanliness by chemical concentration”

- No report

ISO/DIS 14644-13:2016 “Cleanrooms and associated controlled environments - Part 13: Cleaning of surfaces to achieve defined levels of cleanliness in terms of particle and chemical classifications”

- No report

ISO/AWI 14644-16 (2014) “Cleanrooms and associated controlled environments - Part 16: Code of practice for improving energy efficiency in cleanrooms and clean air devices”

- No report

USGBC – *Charlene Bayer*

- No report

CEN/TC 156 “Ventilation for buildings” – *Paolo Tronville*

FprEN 16798-3:2016 “Energy performance of buildings - Part 3: Ventilation for non-residential buildings - Performance requirements for ventilation, air conditioning and room-conditioning systems” (Replaces EN 13779);

- Out for formal approval vote

prTR 16798-4:2016 “Ventilation for non-residential buildings — Performance requirements for ventilation, air conditioning and room-conditioning systems (Replaces EN 13779)

- Out for formal approval vote

Other ISO TCs (and also CEN, ITRI, etc.)

- No report

8) Any other business

- None

9) Adjourn

- The meeting was adjourned at 3:15 pm.