

Meeting Minutes

ASHRAE SSPC 52.2

MOT - General Ventilation Air-Cleaning Devices for Removal Eff. by Particle Size
Saturday, 28 January 2017, 8:00 am – 12:00 pm
Forum 11/Caesars/(Pool)
Las Vegas, NV

Votes: Font is Bold, Black
Task Groups: Font is Bold, Blue
Action Items: Font is Bold, Red

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- 1) Call to Order
 - a) Introductions
 - b) Roll call & quorum confirmation – 14 Members attending 2 Absent
 - Michael Corbat -
 - Kathleen Owen
 - Todd McGrath
 - Keith Chesson -
 - K.J. Choi -
 - David Christopher
 - Chris Fischer -
 - Leslye Sandberg -
 - Donna Sullivan -
 - Tom Justice - Absent
 - Paolo Tronville -
 - NAFA Rep (Tim Lott) -
 - John Zhang -
 - Dara Fedderson - Absent
 - Bob Burkhead -
 - Sanjeev Hingorani -
 - **14 Present, 2 Absent of 16**
- 2) Review of Code of Ethics – **Mike C to add to minutes**
- 3) Review of Agenda

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- 4) Review of St Louis 2016 minutes
- 5) Vote to approve Minutes St Louis 2016 – Moved by Keith Chesson, Seconded by Sanjeev Hingorani : **(13, 0, 1, 2, 16) Approved**
- 6) Review of letter Ballot for Addendum H
 - a) Letter Ballot Addend H - Stating MERV 14 E1x, E2x, E3x
 - b) “The MERV classification and related labeling usage for all MERV classes shall include the minimum threshold for PSE ranges E1, E2 and E3”
 - c) **Vote did not pass (6, 8, 0, 2, 16)**
- 7) Chair’s Remarks
 - a) Roster Planning
 - (1) Leslye Sandberg has volunteered for Secretary
 - b) Republication for 2017
 - (1) It has been published for 2017
 - (2) Addend A-G and I
 - (3) Eliminates parts of E1
 - c) ISO 16890
 - (1) Officially a standard
 - (2)
- 8) Liaison Report
 - a) Standards – Larry Markel - lawrence.markel@csra.com
 1. None
 - b) SSPC 62.2 – Ian Walker – Not present
 1. None
- 9) Interpretation Request
 - a) Request - “The final static pressure must be at least twice the initial static pressure.” Is that correct?
 - b) Reply - “Yes, unless the filter hits less than 85% of its max arrestance and the test is terminated.”
 - c) Motion Kathleen Owen, Second Leslye Sandberg
 - d) **(14, 0, 0, 2, 16) - Approved**
 - e) **Mike will add a comment**

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10) Task Group Review Vijay's idea

- a) Is the PM mass based and if so how different than 16890
- b) Vijay's Replies
 - (1) Use the current system of 52.2 and incorporate the statutory elements of the PM inlets.
 - (2) You will get the size cuts by the statue, PM10, PM 2.5. Don't have PM1 but know how to do it based off the other sizes.
 - (3) Measured values are true PM
 - (4) If the aerosol changes size distributions you will get different results
 - (5) We need to fix the aerosol - Define the distribution
 - (6) Reference made about MIL-STD 282
 - (7) A standard sets a value of 90% of the mass of the aerosol between 2 values.
- c) PM mass vs PM aerosol
 - (1) Since aerosol is know it won't matter between count and converting it to mass
- d) How will different PM inlets differ performance?
 - (1) They should not as they should be made to a specification and perform the same.
- e) If mass based, distribution is still a lab based test
 - (1) Yes it is a lab based test

General Room Comments

Concern of the challenge aerosol distribution to be uniform. 16890 takes out the aerosol distribution by using a "known" rural and urban distributions.

Can we make the cut points of the inlets and apply to efficiency mathematically? Can do for spherical but not for other sizes.

Inlets would get PMS of just that lab aerosol.

If it were possible to set the distribution in a duct would it work? Some say very hard to do, some said it is possible.

Some room concern about real time mass measurements and how long it would take to get good counts.

Mike Corbat

Straw Pole of the room - What to do with this?

Send to Standards and write a standard - 0

Send to research - **39**

Not move forward - 5

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11) Chamber Test – Bob Burkhead

- a) Bob - Test that recirculates the 52.2 Test duct air into a Chamber to evaluate IAQ in Chamber.
- b) Blend of a CADR Test
- c) Bob is doing self-evaluation currently and testing
- d) Looking to have something at Long Beach for possible RP
- e) End result goal is a Tool for 62.2 plus more

12) Task Group Reports and Discussions

- a) TG for Air Density calculation - Monroe Britt
 1. More work to be done – Open Action Item
- b) Recommendation - Do we want to make an appendix that defines the options? Define Initial and other things. Task Group on what to do - Bob Burkhead, Phi Winters, Keith Chesson, Kathleen Owen, Christine Sun, Rahul Bharadwaj, Zied Dries, Donna Sullivan, Mike Corbat
 1. **Task will be dropped**

13) Open Action Items

- a) MERV –NC Trademark – Mike and Barney
 1. **Mike Corbat will follow up on it (Post meeting note, Barney communicated to ASHRAE and requires no more action from SSPC 52.2)**
- b) EAC List of Contacts – Eric Brodsky
 1. Eric is going to follow up on the list.
- c) Letter ballot regarding air density equation - Mike
 1. **Mike Corbat will be re-work and send out**

14) New Business

- a) Open Letter to Committee Submitted and sent to VM after meeting
- b) Examples in the standard may need to be updated to reflect updated table
- c) Al Vatine - Need to look at particle drying method.
 1. **Mike Corbat - Get that info to correct PES**
- d) Eric B - Is there a way to correlate the test to various sizes of filters.
 1. Yes, for face dims but variations in depth and media sq ft No.
- e) Thad P - Evaluate pressure drop reading with instrumentation
 - (1) Issues with condition
 - (2) RR that shows more of the current variability of inter and intra lab reports.

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(3) Thad Ptak volunteered to help with RR in 52.2 Research

f) EN-779 in Netherlands and Britain has been replaced by ISO 16890

15) Adjourn Motion Bob Burkhead, Todd McGrath Second 10:00

16) Stay for SSPC 52.2 Research

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Appendix: Attendees (72)

Name	Company	Name	Company
Todd McGrath	Glasfloss	Mike Corbat	Custom Filter
Don Thornburg	Camfil	Stephen Nicholas	Air Industries
Bruce McDonald	Living Life	Kathleen Owen	RTI
Keith Chesson	Clarcor	Duncan Phyfe	Alden
Dan Haas	Clarcor	Geoff Crosby	Lydall
Paolo Tronville	Politecnico Torino	Andrea Yarbrough	Freudenberg
Anja Coenen	Freudenberg	Bobby Singer	Blue Heaven
Matt Middlebrooks	Filtration Group	John Copiey	Custom Filter
Andy Untz	Donaldson	Connie Burk	Blue Heaven
Monroe Britt	Green Leaf	Barney Burroughs	BWCI
Mick Flom	3M	Kevin Morrow	Kimberly-Clark
Robert Martin	Kimberly-Clark	Stevan Brown	Tex-Air Filter
Michelle Czoser	NAFA	Jim Rosenthal	Tex-Air Filter
Vivekanand Gaur	Columbus Ind	Wili Hoffman	Klimaiv
Tim Hudson	Camfil	Jack Element	Camfil
Enrique Orozco	Camfil	Chris Fischer	Donaldson
John Simenson	Johns Manville	David Christopher	HDK
Joel Davis	AAF Flanders	Rahul Bharadwaj	AAF Flanders
Satish Dinakaran	AAF Flanders	Mark Seitz	Columbus Ind
Chrystal Jolliffe	Columbus Ind	Kyung-Ju Choi	Clean & Science
Len Duello	Georgia Pacific	Sanjeev Hingorame	Lennox
Thad Ptak	AOSMITH	Daniel Vangilder	Camfil
Chris Stone	AHRI	Traveil Morgan	Kimberly-Clark

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Jayesh Doshi	eSpin	Tandeep Chadha	Applied Plastics
Al Vatine	LMS	Peter McKinney	Carrier
Donna Sullivan	Lydall	Jay Reese	3M
Phil Maybee	The Filter Man	Kevin D.	BGE
Zied Driss	Camfil	Gemma Kerr	Living Life
Donna Kasper	H&V	Vijayakumar	Aerfil
Bob Burkhead	Blue Heaven	John Zhang	3M
Bruce Duffy	TriDim	Timmy Lott	NAFA
Leslye Sandberg	Permatron	Christine Sun	FTI
Eric Brodsky	Research Prod	Tin Ahn	Clean & Science
Mustafa Ozturk	Fibrix	Kevin Kwong	LMS
Soochul Choi	Clean & Science	Steve Han	Clean & Science
Mike Harriman	Irema		

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