

**ASHRAE MTG - ACR  
Winter Web Meeting  
Thursday, September 6<sup>th</sup>, 2018  
Meeting Minutes**

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING  
ENGINEERS, INC.  
1791 TULLIE CIRCLE, N.E./ATLANTA, GA 30329  
404-636-8400**

**TC/TG/TRG MINUTES COVER SHEET**

TC/TG/TRG No	MTG -ACR	DATE	September 6 <sup>th</sup> , 2018
TC/TG/TRG TITLE	Multidisciplinary task group on air changes rates		
DATE OF MEETING	September 6 <sup>th</sup> , 2018	LOCATION	Web Meeting

<b>Members Present</b>		<b>Members Absent</b>		<b>Additional attendance</b>	
Kishor Khankari	Chair	Michael Baucom	TC-9.2	Travis English	
Roland Charneux	Vice-	Gaylon Richardson	TC-2.2	Joe Zulovich	
Bob Burkhead	TC-2.4	Gordon Sharp	I2SL	Carl Huber	
Phil Naughton	TC-9.11	Thomas Smith	AIHA	Gary Goodson	
Roger Lautz	TC-9.6	Daniel Doyle	I2SL	Larry Howlett	
Jim Coogan	TC-9.10	Ken Mead	NIOSH	Nick Agopian	
Michael Locke	SSPC 170				
Henry Hays	TC-2.2				
Erich Binder	TC-9.2 ALT				
Clifford Cooper	AIHA ALT				

**DISTRIBUTION**

<b>All Members of TC/TG/TRG plus the following:</b>	
TAC Section Head	
TAC Chair	
All Committee Liaisons As Shown On TC/TG/TRG Rosters	
Standards liaison : Manager of Research & Technical Services	
Research liaison	

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**1. Call to order 15:00 (EST) and Introduction**

Kishor Khankari called the meeting to order and established a quorum with 9 voting plus chair members on 12 voting members. There were 7 members plus 2 alternate and chair.

Kishor reminds every attendee to adhere to the ASHRAE code of ethics.

**2. Approval of the Agenda**

The agenda is approved.

**3. Approval of Minutes**

A motion to approve the April 16<sup>th</sup> 2018, minutes, proposed by Jim Coogan, seconded by Henry Hayes (9-0-0-CNV).

**4. Change in the roster**

Nick Agopian join the committee for SSPC-62.1.

**5. Meeting dates**

The following dates have been proposed for the web meetings: end of November, end of February, end of May and early September.

**6. Status of the work statement – Phil Naughton**

WS 1833 – Literature Review for Evidence of the Basis for Specified Air Change Rates (ACR) for Cleanrooms, Laboratories, laboratory animal facilities, and health care facilities with medium to high ACR. RFP is expected to be released in the fall 2018.

Following members agreed to serve on Project Evaluations Subcommittee (PES)

- Phil Naughton                      Chair
- Erich Binder                        Member
- Jim Coogan                         Member
- Travis English                     Member
- Henry Hayes                        Member
- Michael Meteyer                  Member

**7. ASHRAE meeting program**

A forum on generation rate is proposed by Kishor for Atlanta.

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## **8. Reports from members**

### 8.1. TC-9.11 – Phil Naughton

- ✓ Generation rate research in cleanroom is completed and report should be published soon;
- ✓ Research 1604 on demand control ventilation almost completed.

### 8.2. TC-9.02 Erich Binder

- ✓ Future guides to be produced:
  - Industrial HVAC guide – ACR;
  - Gas factories – ACR.
- ✓ Michael Baucom could present these guides at a MTG-ACR meeting.

### 8.3. SSPC-170 Michael Locke

- ✓ M. Locke gave conferences presentation to TAB, NEBB and AABC Associations on practical measurement of ACR for OR, isolation rooms and procedure rooms.

### 8.4. TC-2.4 Bob Burkhead

- ✓ MERV will be replaced by ISO definitions;
- ✓ Recirculation rates could be required;
- ✓ Test methods for air filtration under study.

### 8.5. SSPC-170 Travis English

- ✓ In many countries operating room are tested as cleanrooms. Viable and non-viable;
- ✓ Code equivalence, performance;
- ✓ Type of cleanliness produced with code specified ACR.

### 8.6. TC-9.6 Roger Lautz

- ✓ Correlate ACR with: risks, infections...;
- ✓ Survey of factual on literature to scientifically support the ACR;
- ✓ Presentation of the potential.

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8.7. TC-9.10 Jim Coogan

- ✓ Emission of contaminants in labs;
- ✓ Isopropyl alcohol to replace SF-6 for fume hood testing;
- ✓ Lab classification guide published;
- ✓ Presentation to I25L and NREL groups;
- ✓ Adam Bare or Tom Smith could make a presentation to our group. (more or less 15 minutes).

8.8. Cliff Cooper to present the 28th at SimBuilt conference on tracer gas for ACR determination.

8.9. Kishor Khankari has written two articles on the HVAC for hospital operating room in the ASHRAE Journal showing that airflow patterns are not very different with low or high airflow rates. However, the HVAC configuration plays important role than ACR.

## **9. New Research Projects**

9.1. Generation rates – Literature review – no leader yet.

9.2. Ventilation efficiency – no leader yet

- ✓ Do some CFD analysis on typical cases to maximize effectiveness;
- ✓ Correlation between CFD and field measurements;
- ✓ Clarify the definition of ventilation effectiveness.

9.3. Acceptable level of contaminants

- ✓ What is the acceptable levels, hygienist, epidemiologists ?
- ✓ This could be out of our scope.

9.4. Items 9.1 and 9.2 should be our priorities.

## **10. Meeting in Atlanta**

Kishor will plan for an unofficial meeting in Atlanta.

## **11. No old business**

## **12. No new Business**

**ASHRAE MTG - ACR  
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**13. Meeting adjourns at 5 pm.**