

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING  
ENGINEERS, INC.  
1791 Tullie Circle, N.E./Atlanta, GA 30329  
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**TC/TG/MTG/TRG MINUTES COVER SHEET**

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. 2.2 DATE January 29, 2014

TC/TG/MTG/TRG TITLE Plant & Animal Environments  
DATE OF MEETING January 20, 2014 LOCATION New York, NY

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Jim Coogan Chair VM	2012	Yuanhui Zhang VM	2011	Doug Friedman (e)
Carol Donovan VM	2013			Morgan Hayes
Bill Dean Vice Chair VM	2012			Andrés Alfonso
Dave Rausch VM	2013			Kurt Mankell
Kristin Schaefer VM	2013			Amanda Hickman
Lingying Zhao VM	2012			Curt Wenger
Rich Gates CM (e)	1996			Ted Kussow
Marcus Bianchi CM	2012			
Henry Hays CM	2012			
Larry Howlett CM (e)	2012			
Xinlei Wang (CM)	2012			
Joe Zulovich CM (e)	2007			

**DISTRIBUTION**

<i>All Members of TC/TG/MTG/TRG plus the following:</i>	
TAC Section Head:	Tom Sobieski
TAC Chair:	Walter Grondzik
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	
Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche Mike Vaughn

### Call to Order

Meeting called to order at 4:20 EST by Chairman Jim Coogan

### Welcome and Introduction / Attendance Sheet

All in attendance introduced themselves and signed in.

Quorum: 6 of 7 voting members in attendance.

4 attended by web meeting. Noted by (e) beside the name on the cover sheet.

### Revise and Accept Agenda

Agenda reviewed.

Motion: to accept the agenda as distributed.

Moved: Dave Rausch Seconded: Bill Dean; **Approved 5 – 0 – 0 CNV**

### Approve Minutes from the Previous Meeting

Minutes reviewed, no errors reported.

Motion: That the June 2013 minutes be adopted as circulated.

Moved: Carol Donovan Seconded: Kristin Schaefer. **Approved 5 – 0 – 0 CNV**

### Report from Section Head

Tom Sobieski did not attend. Announcements will cover the major issues.

### Announcements

- There is a new section in the ASHRAE Bio for employment sub-categories that should be completed by all members. This will be used in the future for committee balance.
- The deadlines for program submissions were reviewed.
- The dates for ASHRAE Conference submissions were reviewed.
- Other ASHRAE sponsored conferences were reviewed.
- Members should review the ASHRAE Code of Ethics. <http://www.ashrae.org/codeofethics>

### Roster & Status of the committee

The committee is the healthiest it has been in recent memory. The electronic meeting is helping the committee to include the corresponding members and that support is appreciated. There was a lot of energy and discussion within the committee since the Denver meeting. The six voting members at this meeting was also the largest in memory.

The committee roster was reviewed by Jim Coogan. All of the positions were reviewed by those in attendance. Jim will correlate the information and submit the roster changes to ASHRAE HQ by the Tuesday Deadline. Consideration was given to adding one additional voting member.

### Handbook – Bill Dean

Handbook Applications 2015 - Bill reported on the status of the handbook chapters and the pending deadlines. We plan to review and edit the two chapters assigned to our TC before the Seattle meeting in June. Bill will collect all proposed changes by the end of March and

combine them into a single document for committee review. Review of that document will run through April. Final edits are due shortly after the Annual meeting in Seattle June 2014.

**Research – Henry Hays**

RP 1475 (Updating Heat and Moisture Production Rates from Modern Swine) is now complete. The Research Sub-committee has reviewed the final report of the researcher and has voted to accept it. The Technical Paper was received and will be published in the ASHRAE Research Journal. Dr. Brown –Brandl will be presenting a paper at the New York Technical Paper presentation at the Sheraton Hotel on Wednesday morning.

Motion: That the committee accept the research report and the work of the contractor for RP 1475.

Moved: Henry Hays (subcommittee Chair); **Approved 5 – 0 – 0 CNV**

**RTARS:**

Is there any new research we should consider? It should be linked with handbook review.

Seed Storage Conditions: Larry Howlett and David Rausch have a draft RTAR that still requires some work. It should be complete by January 24 and circulated to the committee by March 1.

Energy Use in Agricultural Buildings: Energy could include areas as diverse as water & fertilizer use and the related effects from agriculture. We probably need to place a boundary on the animal environment where we move into food processing. The committee focus would need to be limited to agricultural and research plant and animal environments.

We will start by producing a scope document for Energy Use in Agricultural Buildings. Kristin cannot lead the effort. Patrick, Jason, Doug, Xinlei, Lingying, Joe and Rich have expressed interest in this subject matter. Doug Friedman volunteered to lead the effort to compose the RTAR for this potential research project.

Energy use in Ag buildings is not currently covered in the Handbook Chapter.

Demand Control Vivarium Ventilation: Current Air Changes per Hour (ACH) Rates for live animal vivariums use rule of thumb numbers. There does not appear to be an approved demand based ventilation system in the marketplace. What is acceptable IEQ (air quality & limits) in a vivarium? Is it dependant on the animal type? What are the criteria that effect performance based ventilation for research animal holding facilities?

Objective: What are the air quality parameters that pertain to demand control ventilation for a vivarium? The end goal will be to save energy (money). How would this apply to actual installations. What parameter would be measured, what types of rooms, what types of functions, where are the current requirements? Interested organizations NIH, AAALAS , ALAC, ALAR. What are the issues that designers need to know to design vivarium ventilation systems?

Carol Donovan will lead the group. Doug Friedman, Joe and Rich agreed to work on this potential RTAR. Chris Robbian had previously agreed to work on this.

**Program**

Lingying will be presenting a paper at 9:45 Tuesday TPS XX.

Conference Paper abstracts are due Feb 13 for the Seattle Conference in June.

**New Program ideas:**

- Carol Donovan will make a report to TC 9.10. she will suggest that they co-sponsor a forum on Demand control Ventilation vs. Traditional AC rates in vivaria
- Discussed a lab design mini-conference for Laboratory design and operation for the Atlanta Annual Conference, June 2015.
- Technical papers could be pulled together for the Chicago Conference in January 2015.
- Energy Use in Agricultural Buildings – Chicago or Atlanta Conferences 2015.

**Standards**

No activity.

**Roster**

Jim will be finalizing the roster after the meeting. Dave expressed interest in the secretary position, would consider the VC position in the future. Jim will have further discussions with Carol about leadership roles. Carol Donovan will take the role of program chair. Other subcommittee positions will remain stable for next year.

**Old business**

None

**New Business**

None

**Adjourn**

Motion to adjourn at 6:35 by Kristin Schaefer. Carried.