

**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 June 24, 2013

TC/TG/MTG/TRG TITLE Plant & Animal Environments
DATE OF MEETING June 24, 2013 LOCATION Denver, CO

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Jim Coogan	2012	Lingying Zhao	2012	Marcus Bianchi (CM) (e)
Bill Dean	2012	Sheryll Jerez	2009	Michael Brugger (CM) (e)
Patrick Carpenter (e)	2011	Yuanhui Zhang	2011	Carol Donovan (CM)
				Henry Hays (CM)
				Dave Rausch (CM)
				Chris Robbian (CM)
				Kristin Schaefer (CM)
				Xinlei Wang (e) (CM)
				Doug Friedman (e)
				Jason Acousta
				Andrés Alfonso
				Tom Sobieski, Section Head

DISTRIBUTION

All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head:	Tom Sobieski
TAC Chair:	William McQuade
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 MDT by Jim Coogan

Welcome and Introduction / Attendance Sheet

All in attendance introduced themselves and signed in.

Quorum: 3 of 6 voting members in attendance.

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

Revise and Accept Agenda

Agenda reviewed.

Motion: to accept the agenda as distributed.

Moved: Kristin Schaefer Seconded: Carol Donovan; **Approved 3 – 0 – 0 CV**

Approve Minutes from the Previous Meeting

Minutes reviewed, no errors reported.

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

Moved: Patrick Carpenter Seconded: David Rausch. **Approved 3 – 0 – 0 CV**

Report from Section Head

Tom Sobieski visited. Tom was pleased that we had a quorum using the electronic meeting.

No issues to discuss. Announcements will cover the major issues.

Announcements

- If you want the ASHRAE President to send your employer a thank-you letter, sign up on the ASHRAE website.
- The dates for ASHRAE Conference submissions were reviewed.
- Other ASHRAE sponsored conferences were reviewed.
- The use of electronic meetings was discussed.
- The availability of interim electronic GoToMeetings was discussed.

Status of the committee

The electronic meeting is helping the committee to get a quorum and generate discussion around our major themes. Overall it is a positive trend for the committee.

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 New York meeting in January. Final edits are due at the or shortly after the Annual meeting in Seattle June 2014.

- We need to add vivarium content.
- We need to identify what parts are out of date.
- Bill will send the chapters to the full committee roster
- Someone will need to read each entire chapter to ensure a common approach to the text.
- What is missing from these sections?

Research – Henry Hays

RP 1475 (Updating Heat and Moisture Production Rates from Modern Swine) is now nearing the end. All of the research work is complete. The Technical Paper has been received and should be presented at the New York Meeting. The final research report is due August 31 2013. Moisture and heat production has changed since the data was last published.

Motion: That the deadline for the research report for RP 1475 be extended to August 31, 2013.

Moved: Henry Hays (subcommittee Chair); **Approved 3 – 0 – 0 CV**

RTARS:

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

Seed Storage Conditions: Larry Howlett supports a project on seed storage conditions. Larry has designed seed facilities he wants to formalize the idea and develop it. Larry has been considering an improved theory for osmosis and vapor pressure in seed storage. David Rausch volunteered to contact Larry for flesh out the idea.

Energy Use in Agricultural Buildings: Xinlei could not find any good data on energy use in Ag buildings. A document related to this subject has been posted to the TC website. 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 various types of animals will have slightly different boundary points. Does ASHRAE have any food production TC's (e.g. refrigeration) that we would need to interface with? 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 will lead the effort with Patrick, Xinlei and Jason assisting.

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

Vivarium Ventilation Rates: 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?

Doug Friedman, Henry Hays, Carol Donovan, David Rausch and Chris Robbian agreed to work on this potential RTAR.

Program

Xinlei Wang organized submission of papers to be presented in the New York Conference. Pat will submit forms to schedule the session. Forms are due August 13.

New Program ideas:

- Energy Use in Agricultural Buildings – Chicago or Atlanta Conferences 2015.

Standards

No activity.

Should we have a liaison to AAALAS?

Roster

New roster will take effect on July 1, 2013.

Old business

David Rausch brought the current list of MTG's for consideration. The group identified 2 that seem worth a further inquiry to see if the TC should participate. Jim will look into the groups on Building Performance Metrics and Classification of Air Cleaning Devices.

New Business

None

Brainstorming: other ideas for the TC's consideration that may be out of scope: Emissions from Agricultural facilities, recovery of methane, net-zero energy Ag-buildings.

Jim will prepare and issue an action items list for the committee and issue it as soon as possible.

Adjourn

Motion to adjourn at 6:25 by Kristin Schaefer. Carried.