

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS,  
INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329  
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**TC/TG/TRG MINUTES COVER SHEET**

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

TC/TG/TRG NO 3.3 DATE June 30, 2011

TC/TG/TRG TITLE Refrigerant Contaminant Control <http://tc33.ashraetcs.org/>

DATE OF MEETING June 28, 2011 LOCATION Montreal

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Danny Halel – Chair	VM	Kathrin Juch - IM	VM	Alan Cohen, Don Bivens
Eric Newberg	VM	Jorge Cabrera	VM	Chris Reeves, Ted Li
Scott Gustafson	VM	Doug Gildehaus	VM	Ed Hessell, Brad Boggess
Sonny Sundaesan	VM	Ray Thomas - Research	VM	Dale Carr, Steve Kujak,
Joe Karnaz – Program	VM	Alice Reimer – IM	VM	Maryline Rassi, John Hughes
Rob Yost –Vice Chair & Standards	VM	Frank Nagy - Secy/Membership	VM	John Senediak, Ray Cohen, Charles Stout
		Rosine Rohatgi	VM	Amy Shifflett, Tom Leck
				Julie Majurin, Warren Clough,
				Bianca Hydutsky, Hewitt Gaudin,
				Bill Murphy, Ramon Pons
				Wes Dunn, Knut Petry
				Brett Van Horn, Corey Anderson

**DISTRIBUTION**

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

TAC Section Head:	<b><u>Bill Murphy</u></b>
TAC Chair: TAC Vice-Chair:	<b><u>Charles Culp</u></b>
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	Raymond Cohen, Don Bivens – RAC Ramon Pons – Handbook Doug Abramson – Standards William Fleming – Special Pubs C Brian Wandling – Program Mark Tome – CTTC
Manager Of Standards Manager Of Research & Technical Services	Stephanie C Reiniche Mike Vaughn
Admin Asst – Technical Services	Tara Thomas

Note: "These draft minutes have not been approved and are not the official, approved record until approved by this committee."

### 1) Call to Order

Danny Halel (Chair), called the meeting to order at 3:31 pm on Tuesday, June 28, 2011. The meeting was held at the Cote St Luc room at the Hilton Bonaventure Hotel, Montreal. After introduction of members and guests, a quorum was confirmed with 6/11 voting members present. There were no changes or additions to the minutes; **MOTION** to approve the minutes was made by Rob Yost and seconded by Scott Gustafson. Motion passed 5-0-0 (Chair Not Voting).

### 2) Report on TC 3.0 Chair Breakfast Meeting – Danny Halel

The TC/TG/TRG Manual of Procedures (MOP) has been revised to include a new committee type, Multi-disciplinary Task Groups (MTG's) MTG's are different from TC/TG and TRG's. The objective of the MTG is to first try and better coordinate and focus the activities of the affiliated TC and non-TC groups that make up the MTG on the task for which the MTG was created without duplicating the functions of a TC or TG so that the task can be completed as efficiently as possible. I see these having, depending on the subject, a specific lifespan, however, the Chair, Vice Chair, Members and Alternates do not have term limits.

There are two existing MTG's as of this meeting:

- MTG.EEC Energy Efficient Classification of General Ventilation Air-Cleaning Devices
- MTG.ET Energy Targets

CEC was in attendance and the Section 3 Chairs continued to express their displeasure in the lack of approved programs in the past years. The representative explained that CEC has heard the cry and has responded. We have made 4 of the 10 Tracks in the Chicago meeting and 4 of the 7 Tracks in San Antonio dedicated to HVAC&R.

The TC 3.2 website is up-to-date and is functioning well.

There was a reminder to utilize the ASHRAE Google Groups and Sites

If there is anyone who has a suggestion to nominate a person for the Hightower Award they are due September 1, 2011.

Thank you Letters to Employers – ASHRAE President Lynn Bellenger will send letters of appreciation to employers whose support contributes significantly to employees' participation at all levels of the Society.

Upcoming meetings

- Chicago – January 21-25,2012
- San Antonio – June 23-28, 2012

### Sub-Committee Reports

#### 3) Program – Joe Karnaz

- As a result of pressure on CEC by Section 3 TC's because of rejected programs over the last several years, there are four tracks planned in Chicago involving refrigeration. This is a good opportunity for Section 3 programs to be accepted. Nevertheless, only 50% of proposed programs are accepted.
- TC 3.3 sponsored no programs in Montreal.
- A seminar with co-sponsor TC 3.2 "Issues with CO2 refrigerant" chaired by Ken Lilje is a potential for Chicago. One presenter (Danny Halel) is confirmed
- **MOTION** Joe Karnaz moved to sponsor a forum in Chicago entitled "What contaminants do we need to consider in low GWP refrigerants?" with Rob Yost as moderator. Sonny Sundaresan seconded the motion. The motion passed 5-0-0 (chair not voting).
- Seminar "History of System Chemistry Part II & Contaminant Control" for San Antonio (June 2012)
- "History of Contaminant Control" for San Antonio (June 2012)
- **MOTION** Joe Karnaz moved to sponsor a seminar entitled "Lessons Learned in Contaminant Control" in San Antonio with Joe Karnaz as chair. Sonny Sundaresan seconded the motion. The motion passed 5-0-0 (chair not voting).
- A seminar with co-sponsor TC 3.2 "Acid Number & Other Health Indices for System Chemistry" was postponed until after the Chicago forum.
- The seminar "System Contaminant Control & Retrofits" was postponed for further discussion in Chicago.
- "Contaminant Control in Transcritical Systems" chaired by Joe Karnaz; was tabled to Chicago.

#### 4) Handbook – (position open)

- Danny announced that the Handbook Subcommittee Chair position is open. He will appoint someone in time for the Chicago meeting.
- Subcommittee meeting will be scheduled for Chicago for next revision (Chapter 6) due late 2013 [Members: Danny Harel, Sonny Sundaresan, Alan Cohen, Bob Woods, Jay Field.]

#### 5) Standards – Rob Yost

- SPC 35-2010 – “Method of Testing Desiccants for Refrigerant Drying” Complete & published June 2010.
- SPC 63.1 – “Method of Testing Liquid Line Filter Driers” Reaffirmed in 2004; subcommittee chair (Bob Woods) was absent. A meeting is anticipated for Chicago. (Members: Jorge Cabrera, Chris Reeves, Alan Cohen, Jay Field).
- SPC 63.2 – “Method of Testing Liquid Line Filter Drier Filtration Capacity” Reaffirmed in 2009; current with no action required.
- SPC 78 – “Method of Testing Flow Capacity of Suction Line Filters and Filter Driers” Reaffirmed in 2006. Juan Flores was appointed chair of review/revision subcommittee at the Las Vegas (2011-01) meeting (with Sonny Sundaresan to help).

#### 6) Research – Alan Cohen for Raymond Thomas

- TRP 1495 – “Effect of Oil on Distribution of Moisture between Vapor and Liquid Phases of Refrigerants” (Authors: Alan Cohen, Raymond Thomas, Rob Yost, Liz Dixon): TC 3.2 and TC 3.4 are co-sponsors. This is an extension of Refrigeration Handbook Chapter 6, Table 2 data for pure refrigerants revised by Research Project 1239. TRP-1495 deals with the effect of oil. Project went out for bid and three proposals were received. The PES met Sunday to evaluate the proposals and made a recommendation to be considered by TC 3.3 in executive session.
- New RTAR – “Effect of Unsaturated Fluorocarbon Contaminants on the Reliability and Performance of HVAC&R Equipment” – was submitted. Ray Cohen will get a number assigned to it.
- New RTAR – “Adsorption of HF on Desiccants” – Alan Cohen reported the RTAR was not written and asked how this differs from RP-793 “MOT for inorganic acid capacity of desiccants used in liquid line filter dryers” which was completed in 1998.
- Rob Yost will write an RTAR: “Determine maximum allowable level of impurities in natural (non-fluorocarbon) refrigerant systems.”
- “MOT for Capillary Tube Plugging” – **MOTION** Sonny Sundaresan moved to create an SPC to develop a standard for “MOT for capillary tube plugging” to be chaired by Sonny Sundaresan. Rob Yost seconded the motion. In discussion it was felt that TPS (title, purpose, scope) was needed prior to voting on the motion. **MOTION** Joe Karnaz moved to postpone consideration of the motion until the next meeting in Chicago. The motion was seconded by Scott Gustafson. The motion to postpone was carried by vote of 4-0-1 (chair not voting). The chair appointed an ad-hoc subcommittee to write the TPS: Sonny Sundaresan (chair), Rob Yost, Julie Majurin, Brad Boggess, & Warren Clough.
- [Item from 2011-01 Las Vegas Minutes: RTAR-“Breakdown of Lubricants at High Discharge Temperature in Transcritical Systems”-Sonny Sundaresan to write RTAR for discussion. Was not brought up at the meeting. Retained in minutes for next time.]

#### 7) Webmaster – Alan Cohen

- Website is in compliance and up-to-date on ASHRAE server (<http://tc33.ashraetcs.org>).

8) **Membership – Frank Nagy**

- In Frank Nagy's absence, Alan Cohen reported on roster changes.
- As of July 1, 2011: Roll off from voting member status: Rob Yost, Jorge Cabrera, Eric Newberg, Kathrin Juch (international, non-quorum). Roll on to voting member status: Debra Kennoy, Julie Majurin.

9) **Old Business**

- None

10) **New Business**

- None

11) **Adjournment**-MOTION to adjourn meeting was made by Joe Karnaz & seconded by Scott Gustafson; meeting was adjourned at about 4:40 PM.

Respectfully submitted,

Alan Cohen  
Acting Secretary TC 3.3