



1791 Tullie Circle, N.E./Atlanta, GA 30329

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**DRAFT**

**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. 3.3 DATE May 7, 2019

TC/TG/MTG/TRG TITLE Contaminant Control

DATE OF MEETING January 15, 2019 LOCATION Atlanta, GA

MEMBERS PRESENT	Term	MEMBERS ABSENT	Term	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Chris Reeves(Chair)	2020	Alice Reimer (NQM)	2019	Angel Mendez (Vice Chair) Tony Barthel (Research)
Rob Yost (Standards)	2019	Sonny Sundaresan	2022	Steve Kujak (Program)
Elyse Sorenson (Webmaster)	2021			Frank Nagy (Secretary / Membership)
Ivan Rydkin (Handbook)	2020			Ed Hessell, Danny Halel, Sarah Kim, Julie Majurin, Casey Scruggs
Brad Boggess	2020			Morgan Herried, Sheli Porter, Andrew Sumner, Amber Saylor
Jian Sun-Blanks	2021			Yanwei Cen, Knut Petry, Marc Scancarello, Glen Steinkoenig
Joe Karnaz	2021			John Whithouse, Bill Morton, Noboru Kagawa, Shelby Kent
Roberto Urrego	2021			Carolina Cardenas, Chris Campo, Juan Flores, Martha Garcia
Rosine Rohatgi	2022			Steve Baker, Justin Allemann, DeBasis Banerjee
John Senediak	2022			
Valerie Lisi	2022			

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

TAC Section Head: Barbara Minor  
TAC Chair: Thomas Justice

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All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	Steve Kujak - Research Vinod Gupta – Standard Frederick Betz – Handbook Marc Scancarello – MTG
Mike Vaughn, Mgr Research & Technical Services	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

## Minutes – TC 3.3 Refrigerant Contaminant Control

### 1) Call to Order

Chris Reeves (Chair), called the meeting to order at 3:30 pm on Tuesday, January 15, 2019. The meeting was held at the Georgia World Congress Center, 2<sup>nd</sup> floor, Building B, in room B204. Guests were recognized and welcomed. After introduction of members and guests, a quorum was confirmed with 11 of 12 voting members present.

ASHRAE Code of Ethics – A mention of the Code was made to remind all members and visitors of the Code and that it should be adhered to whenever at an ASHRAE meeting.

**MOTION #1:** to approve the Atlanta agenda was made by Elyse Sorenson & Robert Urrego seconded.  
Motion passed 10-0-0 CNV

**MOTION #2:** to approve the Houston minutes as written was made by Robert Yost & Ivan Rydkin seconded.  
Motion passed 10-0-0 CNV

### 2) Report on TC 3.0 Chair Breakfast Meeting – Chris Reeves

The notes from the TC Chair meeting will be uploaded to the website; highlights from the meeting are as follows:

- Barbara Minor is the new Section Head.
- YEA (Young Engineers at ASHRAE) representative encouraged committee chairs to invite young engineers to get involved. Starting in Handbook, Research, RTAR review group, and Programs are great areas to get started.
- ASHRAE is still offering name badges for free to those that do you register. ASHRAE would like people to use this because it provides them with a number count which helps when setting up conferences and hotel space.
- Statistics for abstracts, tech papers, seminars, workshops, forums, and panel discussions for the Atlanta conference presented.
- Reorganization of the ~120 ASHRAE technical committees to optimize meeting times/resources was introduced for discussion/review/feedback. To be discussed further at this TC meeting.

### Upcoming Meetings:

- Kansas City, MO – June 22-26
- Orlando, FL – February 1-5

## **Liaison Comments:**

- Steve Kujak – Research: Webinars available through ASHRAE on the RTAR process; next webinar is within the next couple of months. Some changes will be made to the RTAR submission to include a plain word abstract section, the new form will be available shortly. Comment was also made on utilizing the ASHRAE Basecamp Site for collaboration. \$2.4 million available in funding by members; prioritization of projects takes place in the Fall for bidding.

## **Sub-Committee Reports**

### **3) Program – Steve Kujak**

- We co-sponsored TC 3.2 seminar “Chemistry of New and Retrofit with Low GWP Refrigerants.”
- A list of topics that came out of the Section 3 combined programs meeting was displayed and discussed.
  - Chemistry of Retrofits with Low GWP Refrigerants
  - Life Cycle of HFO Refrigerants
  - Low GWP Refrigerants and Lubricants. What You Need to Know.
  - Estimating Accelerated Chemical Stability Using Equipment Operations
- Discussions specific to contaminant control and the 125-year celebration resulted in a **MOTION #3:** to sponsor a program for Orlando titled “Service Practices in Contaminant Controls: Yeas & Nays” was made by Rob Yost and seconded by Brad Boggess. The motion passed 10-0-0 CNV. Angel Mendez volunteered as Chair and will work with Rob Yost to submit an abstract by July 7.

### **4) Handbook – Ivan Rydkin**

- Handbook Refrigeration Chapter 7 (Control of Moisture and Other Contaminants in Refrigerant Systems) was published in 2018. A follow up for sub-committee volunteers will be made in Kansas City to begin revision for 2022 publication.

### **5) Standards – Rob Yost**

- SPC 35-2014 – “Method of Testing Desiccants for Refrigerant Drying”- This standard is being revised. Amber Saylor is the sub-committee chair and is looking for volunteers for the committee.
- SPC 63.1 – “Method of Testing Liquid Line Filter Driers” – is still under revision. The sub-committee Chair, Chris Reeves provided an update (there are still some concerns with the Karl Fisher method and repeatability). He is looking for additional committee volunteers.
- SPC 63.2 – “Method of Testing Liquid Line Filter Drier Filtration Capacity” – this standard is in the 5-year cycle (published 2017) and will not require reauthorization until 2021.
- SPC 78 – “Method of Testing Flow Capacity of Suction Line Filters and Filter Driers” – this standard is in the 5-year cycle (published 2017) and will not require reauthorization until 2021.
- SPC 219 - “Method of Testing the Ability of Absorbents to Remove Organic Acids” – The sub-committee Chair John Senediak, provided an update (it is in final edits for 1<sup>st</sup> draft).

### **6) Research – Tony Barthel**

- RP 1740: “Hydrogen Fluoride Capacity of Desiccants” – This project will go out again for bid. Rob Yost will update the new bidders list and re-submit.
- WS 1790 - “Water Solubility and the Distribution of Water between Vapor and Liquid Phases of Low GWP Refrigerants” – will go out for re-bid in the Spring as there was concern about bidder inexperience.
- WS 1774 (co-sponsor for 3.2) – “Effect of System Chemicals Towards the Breakdown of Lubricants and Lower GWP Refrigerants” – this work is complete and final report given in Atlanta via Rosine Rohatgi.
- RTAR 1856 – “Determine the Effect and Allowable Limits of Moisture and Contaminants in CO<sub>2</sub> Systems. Was rejected with comments; Ivan Rydkin will re-submit.
- New Research Ideas – potential to expand on the white paper work currently being done by TC 3.1 on odorants for HFO refrigerant use. Co-sponsor potential being considered.

#### 7) **Webmaster – Elyse Sorenson**

- Website is up-to-date and the final minutes will be uploaded once received from the chair.

#### 8) **Low GWP MTG – Marc Scancarello**

- The Low GWP MTG is working to accelerate acceptance of A2L refrigerants by removing road blocks to the use of these products and incorporating into Codes and Standards.
- Three research projects are in various forms of investigation and completion.
- Some other research is being considered addressing combustion by-products of HFO refrigerants and another on leak detection.
- Implementation into codes and standards has been targeted for 2021 which will be questionable if can be completed or 2024 which will be more achievable.

#### 9) **Membership – Frank Nagy**

- **Committee and Voting Members for next society year:**
  - **Committee:** Chris Reeves, Chair; Angel Mendez, Vice Chair, Steve Kujak, Program; Ivan Rydkin, Handbook; Rob Yost, Standards; Tony Barthel, Research; Frank Nagy, Secretary / Membership
  - **Continuing VM:** Chris Reeves ('20); Brad Boggess ('20); Ivan Rydkin ('20); Joe Karnaz ('21); Elyse Sorenson ('21); Roberto Urrego ('21); Jian Sun-Blanks ('21); Valerie Lisi ('22); Rosine Rohatgi ('22); Sonny Sundaresan ('22); John Senediak ('22); Alice Reimer (NQM)
  - **Rolling-Off VM:** Rob Yost
  - **Rolling-On VM:** Casey Scruggs
- **New members: if you are interested in joining TC 3.3, please go to the 3.3 website and register as a Provisional Corresponding Member.**

**10) Old Business**

- None

**11) New Business**

- ASHRAE is collecting feedback on TAC re-organization of TC's to improve and eliminate overlap for better efficiency (currently 110 which would drop to a total of 30). TC 3.2 & TC 3.3 would potentially merge. Plan would be ready by Orlando. The feedback form will be posted on website as well as emailed to members.

12) **Adjournment**-a motion was made to adjourn the meeting at 4:31PM.

Respectfully submitted,  
Frank Nagy, Secretary TC 3.3