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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 January 28, 2020

TC/TG/MTG/TRG TITLE Contaminant Control

DATE OF MEETING June 25, 2019 LOCATION Kansas City, MO

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	(Program)
Elyse Sorenson (Webmaster)	2021	Roberto Urrego	2021	Frank Nagy (Secretary / Membership)
Ivan Rydkin (Handbook)	2020	Rosine Rohatgi	2022	Ed Hessell, Sarah Kim, Julie Majurin,
Brad Boggess	2020	John Senediak	2022	Amber Saylor, Jian SunBlanks, Mike Costello
Jian Sun-Blanks	2021			Marc Scancarello, Glen Steinkoenig
Joe Karnaz	2021			Eric Schweim, Greg Smith, Stephen Splatzer, Scott Wujek
Valerie Lisi	2022			Scott Gustafson, Mandi Lippard
				Steve Baker, Justin Allemann, Joe Nigro
				Rashid Zakeri, Barbera Minor, Lydia Dobler

**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, June 25, 2019. The meeting was held at the Kansas City Convention Center, Room 2201. Guests were recognized and welcomed. After introduction of members and guests, a quorum was confirmed with 8 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 Kansas City agenda was made by Jian-Sun Blanks & Joe Karnaz seconded. Motion passed 7-0-0 CNV

**MOTION #2:** to approve the Atlanta minutes as written was made by Jian-Sun Blanks & Brad Boggess seconded. Motion passed 7-0-0 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:

- All TCs met at once and new format was surveyed and well received.
- CEC has a standing request for suggestions for program tracks for future conferences. Seeking volunteers to chair program sessions and review papers. Contact Tony Giametti if interested.
- Professional Development Committee (PDC) looking for input for new ideas for the ASHRAE Learning Institute. Contact Karen Murray if interested.
- TAC recognized and commended the efforts of TC 3.X groups to meet as one for Research and Programs meetings.
- Austin (Summer 2020) conference paper abstracts due August 12th with papers due December 2nd .

#### Upcoming Meetings:

- Orlando, FL – February 1-5
- Austin, TX – June 27 – July 1

## Liaison Comments:

- Barbara Minor (TAC Section 3 Chair): reviewed ASHRAE’s response to feedback received regarding the reorganization suggestions made at the 2019 Winter meeting. Major reorganization announcements are not to be expected but rather for individual TCs to corroborate and lead efforts to improve overall effectiveness of the organization. Also, at the TC Chair breakfast, a special mention was made for Section 3’s efforts and success in proactively combining research and program subcommittee meetings.

## Sub-Committee Reports

### 3) Program – Steve Kujak (per Chris Reeves)

- Seminar for Orlando titled: “Service Practices in Contaminant Controls: Yeas & Nays” is on track specific to contaminant control and the 125-year celebration; Angel Mendez is Chair and has two speakers (Amber Saylor and Glen Steinkoenig) to date. Rob Yost 3.8 Chair suggested co-sponsoring the seminar having two speakers as well for a similar Seminar planned for Orlando titled: “Effects of Contaminants and Leakage.” **MOTION #3:** to combine seminars with TC 3.8 for Orlando was made by Brad Boggess & Ivan Rydkin seconded. Motion passed 7-0-0 CNV
- In follow up to the previous meeting in Atlanta where a list of topics came out of the Section 3 combined programs meeting below: Marc Scancarello added that the scope of contaminant control would expand to include ionic solutions and dehumidification outside of vapor compression technology.
  - 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

### 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 Orlando to begin revision for 2022 publication.

### 5) Standards – Rob Yost

- Discussions were held followed by **MOTION #4:** to merge SPC 35-2014 with SPC 63.1 was made by Rob Yost & Elyse Sorenson seconded. Motion passed 7-0-0 CNV
  - SPC 35-2014 – “Method of Testing Desiccants for Refrigerant Drying”- This standard is in revision. Amber Saylor is the sub-committee chair.
  - SPC 63.1 – “Method of Testing Liquid Line Filter Driers” – is under revision. The sub-committee Chair, Chris Reeves provided an update (there are still some concerns with the Karl Fisher method and repeatability).
- 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 is John Senediak. The final draft should be ready within a year and will align with industry practices.

#### 6) **Research – Tony Barthel**

- RP 1740: “Hydrogen Fluoride Capacity of Desiccants” – This project went out again for bid and there were no interested bidders (as no one wants to work with HF). Rob Yost will update a new bidders list and re-submit.
- WS 1790 - “Water Solubility and the Distribution of Water between Vapor and Liquid Phases of Low GWP Refrigerants” – Brad Boggess sent out re-bid last March with two new bidders added as there was concern about original bidder inexperience and awaits follow up.
- 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 was 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 updated by Ivan Rydkin after original was rejected with comments. **MOTION #5:** to approve RTAR with change in cost from \$140K to \$120K and with addition of process fluids including PVE oil was made by Vlaerie Lisi & Rob Yost seconded. Motion passed 7-0-0 CNV
- 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 still being considered.

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

- Website is up-to-date; 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 (two completed & one just started).
- 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; Elyse Sorenson, Webmaster

- **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; Angel Mendez
- **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. The Chair & Vice Chair of each TC will meet for further discussions in Orlando. The member sentiment on the potential future merge was positive overall.

12) **Adjournment**-a motion was made to adjourn the meeting at 4:48PM.

Respectfully submitted,  
Frank Nagy, Secretary TC 3.3