



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 June 28, 2018

TC/TG/MTG/TRG TITLE Contaminant Control

DATE OF MEETING June 26, 2018 LOCATION Houston, TX

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Joe Nigro (Chair/Program)		Debra Kennoy		Angel Mendez (Handbook)
Chris Reeves (Vice Chair)		Alice Reimer (NQM)		Danny Halel, Warren Clough
Rob Yost (Standards)				Julie Majurin, Ed Hessel, Rosine Rohatgi
Elyse Sorenson (Web)				Morgan Herried, Steve Kujak
Brad Boggess				Tyler Karnaz, Mike Oitello
Jian Sun-Blanks				John Senediak, Carolina Solano
Joe Karnaz				Rupal Choksi, Shun Ohkubo
Roberto Urrego				Scott Gustafson, Sarah Kim
Ivan Rydkin				Casey Scruggs, Lydia Dobler
				Bill Morton, Chris Campo

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

TAC Section Head: Jay Kohler TAC Chair: Kelley Cramm	<a href="mailto:SH3@ashrae.net">SH3@ashrae.net</a>
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALLI, etc.)	Steve Kujak - Research Niels Bidstrup – Standards Roberto Aguilo – 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

Joe Nigro (Chair), called the meeting to order at 3:30 pm on Tuesday, June 26, 2018. The meeting was held at the Hilton Americas Hotel in Room 330. Guests were recognized and welcomed. After introduction of members and guests, a quorum was confirmed with 9 of 10 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 Houston agenda with minor changes was made by Chris Reeves & Brad Bogges seconded. Motion passed 8-0-0- CNV

**MOTION #2:** to approve the Chicago minutes as written was made by Roberto Urrego & Rob Yost seconded. Motion passed 8-0-0 CNV

### 2) Report on TC 3.0 Chair Breakfast Meeting – Joe Nigro (pertinent documents to be posted on TC 3.3 website)

- Publishing Opportunities – ASHRAE offers the opportunity to publish data in the form of papers, books, ASHRAE magazine, portals & apps etc and they are looking for content. Please take advantage of this opportunity.
- Research paper reviews are needed.
- Its Hightower award time again. Does TC3.3 want to nominate someone for their contributions to ASHARE over the past four years. Due Date September 1, 2018.
- ASHRAE 125-year anniversary celebration will take place over three conferences starting in Kansas City.

### Upcoming Meetings:

- Atlanta, GA – January 12-16, 2019
- Kansas City, MO – June 22-26

**The Chair recognized Joe Karnaz and Danny Halel as recent Distinguished Service Award recipients.**

### Liaison Comments:

- **Jay Kohler** – Section Head: Section 3 – Jay encourage newer participates in the TCs to get involved. Society years run from July 1<sup>st</sup> to June 30<sup>th</sup>, this is the time to check the new roster to make sure there are no issues before it rolls over. Craig Messmer was introduced as the incoming Section 3 Head. Jay was thanked for his service over the past few years to TC section 3. Jay presented a certificate of appreciation to Joe Nigro for his service as chair, the people in the room thanked Joe with a round of applause.
- Steve Kujak – Research: Steve provided some statistics on RTAR, work statement and Innovative Research acceptance and rejection by RAC at this meeting. A new RTAR and work statement form will be used going forward that asks for a plain language section to be used by RAC for a general explanation of the project. Comment was made of the TCs taking advantage of the new Basecamp portal as a depository for information.

## Sub-Committee Reports

### 3) Program – Joe Nigro

- No programs were sponsored or co-sponsored at this conference.
- 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
- The TC voted to co-sponsor a seminar being organized by TC 3.2 titled “Chemistry of New and Retrofit Systems with Low GWP Refrigerants”.

**MOTION #3:** to co-sponsor with TC 3.2 the above-named seminar for Atlanta was made by Joe Karnaz & Brad Boggess seconded. Motion passed 8-0-0 CNV

- The program chair asked if anyone was willing to support any other programs. Some discussion revolved around looking at putting something together for Kansas City and was tabled for further discussion.
- The TC discussed writing a paper specific to TC 3.3 for the 125-year celebration. It was mentioned that the paper being written by TC 3.2 will reference some topics specific to TC 3.3. Since this paper is being written to submit in September and the next due date for abstracts for Orlando or Austin isn't due until December the paper will be reviewed to see if enough topics still exist to write a separate TC 3.3 paper.

### 4) Handbook – Angel Mendez

- Handbook chapter was written and the Handbook has been published. The next revision will be 2021.

### 5) Standards – Rob Yost

- SPC 35-2014 – “Method of Testing Desiccants for Refrigerant Drying”- This standard is being revised. Amber Saylor is leading and looking for volunteers for the committee.
- 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. The committee will be meeting in Atlanta to continue discussion.
- SPC 63.2 – “Method of Testing Liquid Line Filter Drier Filtration Capacity” – this standard is in the 5-year cycle 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 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. The committee will be meeting on Wednesday morning and would like to have a draft put together for discussion in Atlanta.

## 6) Research – Tony Barthel (Joe Nigro Substituting)

- RP 1740: “Hydrogen Fluoride Capacity of Desiccants” – This project will go out for bid for a third time. There is a potential bidder who was not informed of the second request for bid and could have the capability to do this work.
- WS 1790 - “Water Solubility and the Distribution of Water between Vapor and Liquid Phases of Low GWP Refrigerants” – two bidders have been identified. A meeting took place this week to evaluate the bidders. The TC will vote at this meeting on moving forward and report the vote to RAC this week.
- WS 1774 (co-sponsor for 3.2) – “Effect of System Chemicals Towards the Breakdown of Lubricants and Lower GWP Refrigerants” – this work is completed and final report was voted on and accepted by TC 3.2.
- RTAR 1856 – “Determine the Effect and Allowable Limits of Moisture and Contaminants in CO<sub>2</sub> Systems. If this project is accepted there was some discussion of incorporating some type of research on contaminant control into the work statement.
- New Research Ideas – potential to expand on the white paper work currently being done by TC 3.1 on odorants for HFO refrigerant use. This will be investigated once the research is presented.

## 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 – Joe Nigro/Joe Karnaz

- **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); Rob Yost ('19); Debra Kennoy ('20); Brad Boggess ('20); Ivan Rydkin ('20); Joe Karnaz ('21); Elyse Sorenson ('21); Roberto Urrego ('21); Jian Sun-Blanks ('21); Alice Reimer (NQM)
  - **Rolling-On VM:** Valerie Lisi, Rosine Rohatgi, John Senediak & Sonny Sundaresan.
  - **Rolling-Off VM:** Joe Nigro
- **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**

- None

12) **Adjournment**-a motion was made to adjourn the meeting at 4:53PM.

**Executive Session:**

**The room was cleared of non-voting and non-corresponding members and the committee moved to Executive Session to vote on a contractor.**

**The PES for 1790-TRP presented their evaluation of the potential bidders for this project and made their recommendation for selected contractor to the TC voting members.**

**MOTION #1:** to accept the PES recommendation for a contractor for 1790-TRP was made by Rob Yost and seconded by Ivan Rynkin. Motion carried 9-0-0-0 CV.

The required paperwork will be filled out and submitted to RAC.

Respectfully submitted,  
Joe Karnaz Acting Secretary TC 3.3