



**Agenda**  
**Technical Committee 3.3 - Refrigerant Contaminant Control**  
**Palmer House Clark 5 (Floor 7)**  
**Tuesday, June 23, 2018; 3:30 PM - 6:00 PM**

Name	Affiliation
<b>Voting Members</b>	
Joe Nigro – <b>Chair / Program</b>	CPI Fluid Engineering
Chris Reeves - <b>Vice Chair</b>	Sporlan Division of Parker Hannifin
Rob Yost - <b>Standards</b>	National Refrigerants
Brad Boggess	Emerson Climate Technologies, Inc.
Joe Karnaz	Shrieve Chemical
Roberto Urrego	Lanxess
Ivan Rydkin	Daikin America
Debbie Kennoy	Arkema, Inc.
Elyse Sorenson	Ingersoll Rand
Alice Riemer (non-quorum)	Danfoss Automatic Controls
<b>Non-Voting Members</b>	
Tony Barthel - <b>Research</b>	CPI Fluid Engineering
Elyse Sorenson - <b>Webmaster</b>	Ingersoll Rand
Angel Mendez - <b>Handbook</b>	CPI Fluid Engineering
Frank Nagy - <b>Secretary</b>	UOP LLC

**1. CALL TO ORDER**

- a. Introduction of Members and Guests (Joe Nigro)
- b. ASHRAE Code of Conduct
- c. Discuss Roll Over Roster (Frank Nagy)
- d. Quorum Determination (Frank Nagy)
- e. Announcements

**2. AGENDA REVIEW**

**ACTION:** *Approve/revise the agenda for the meeting.*

**3. MINUTES OF LAST MEETING**

**ACTION:** *Approve/revise the minutes of the Long Beach 2017 meeting.*

**4. TC CHAIRS' BREAKFAST REPORT**

This meeting provides the Section Three Chairs a forum for distribution of current direction and guidelines for any requirements related to ASHRAE activities including technical and research direction, standards, publications, etc.

5. **LIAISON COMMENTS** (may be adjusted to accommodate the liaison's schedule)
6. **SUBCOMMITTEE REPORTS**
  - a. **Program – Joe Nigro**

**Section 3 Group Research Meeting starts at 10:30 am until noon on Monday 1/22/18 at the Palmer House Room Clark 5 (on the 7<sup>th</sup> floor)**

**The Section 3 Refrigeration Mini Track for Chicago has come together! Four separate seminars will take place on Monday January 22<sup>nd</sup> at the AHR Expo. The sessions are as follows:**

**AHR EXPO SESSION 2- ROOM S101B: 1/22/18 – 11 am – Noon – Lubricant Changes for Low GWP Next Generation Equipment (sponsor 3.4 & Low GWP MTG)**

- **Lubrication Considerations for Lower GWP R-410A Alternatives – Julie Majurin, CPI Fluid Engineering**
- **Understanding Lubricant Requirements for Next Generation Low Global Warming Refrigerants – Ed Hessel & Roberto Urrego, Lanxess Corporation**
- **Lubricant Changes for Low GWP Next Generation Equipment – Joe Karnaz – Shrieve Chemical**

**AHR EXPO SESSION 4- ROOM S101B: 1/22/18 – 1:00 pm – 2:30 pm - Some Low GWP Next Generation Refrigerant will be Flammable: What does it mean to be Flammable? (Sponsor TC 3.1 & Low GWP MTG)**

- **Flammable Refrigerant Basics – Stephen Kujak, Trane, Ingersoll Rand**
- **Flammability: A Continuum Vs. Discrete Boundary – Gregory Linteris, National Institute of Standards and Technology**
- **AHRI Flammable Refrigerant Research – Xudung Wang, AHRI**
- **Developing Guidelines for Flammable Refrigerant Use – William Goetzler & Matt Guernsey, Navigant**

**AHR EXPO SESSION 6- ROOM S101B: 1/22/18 – 2:45PM – 3:45PM - Next Generation of Lower or Low GWP Next Generation HVAC&R Equipment (Sponsor TC 3.1 & TC 8.2)**

- **Low GWP Refrigerant Alternatives for Chillers – Barbara Minor, Chemours**
- **Low GWP Systems for Commercial Refrigeration – K.C. Kolstad, Target**
- **Key Learning from Conversions of Commercial Refrigeration Systems to Low GWP Alternatives – Charles Allgood, Chemours**

**AHR EXPO SESSION 8- ROOM S101B: 1/22/18 – 4:00pm – 5:00pm - Contaminant Control: What is the Same and What is New When Using Low GWP refrigerants? (Sponsor TC3.3 & Low GWP MTG)**

- **Chemistry Considerations and Contaminant Control fro Low GWP Refrigerants – Joe Karnaz, Shrieve Chemical**
- **Impact of Contamination on the Stability of Low GWP Refrigerants – Sarah Kim, Arkema**

- **Effect of Contaminants on the Stability of HFO Refrigerant Systems – Ngoc Dung (Rosine) Rohatgi, Spauschus Associates**

Please support section 3 and attend as many of the sessions as time permits!

**b. Handbook – Angel Mendez**

Refrigeration Chapter 7 (Control of Moisture and Other Contaminants in Refrigerant Systems), next publication is 2018

**c. Standards – Rob Yost**

Standard Number	Title	Contact
SPC 35-2014	Method of Testing Desiccants for Refrigerant Drying	Rob Yost
SPC 63.1	Method of Testing Liquid Line Filter Driers	Jorge Cabrera & John Senediak
SPC 63.2	Method of Testing Liquid Line Filter Drier Filtration Capacity	Glen Steinkoenig
SPC 63.3	Method of Testing Acid Filters	John Senediak
SPC 78	Method of Testing Flow Capacity of Suction Line Filters and Filter Driers	Chris Reeves
SPC 219	Method of Testing Acid Filters	John Senediak

**d. Research – Tony Barthel**

**Section 3 Group Research Meeting starts at 3 PM on Sunday 1/21/18 at the Palmer House Room Clark 5 (on the 7<sup>th</sup> floor)**

Number	Title	Status
1740-TRP	Hydrogen Fluoride Capacity of Desiccants – Alan Cohen	Work Statement to be re-written - Update
1790 - WS	Distribution of Water Vapor and Liquid Phases of Low GWP Refrigerants	New RTAR Approved by letter ballot and submitted to RAC - Update
1774-WS – Sponsored 3.2 / 3.3 Co-	Effect of System Chemicals towards the Breakdown of Lubricants and Lower GWP Refrigerants – Julie Majurin	Phase 1 Completed Phase 2 Underway - Update
New RTAR	Determine effect and allowable limits of moisture and contaminants in CO2 systems	On Hold – need documentation on project goals – need RTAR - Ivan Rydkin and Rob Yost will update
New Ideas – 1) Effects of common contaminants on dielectric properties of refrigerants. 2) Filter dryer needs with low GWP refrigerants.		

**7. WEBMASTER – Elyse Sorenson**

**8. MEMBERSHIP – Frank Nagy**

**Roll Over Roster**

**9. OLD BUSINESS**

**10. NEW BUSINESS**

**ACTION:** Items to be added as needed during agenda review

**11. NEXT MEETING**

Tuesday, June 24<sup>th</sup>, 2018, 3:30 – 6:00 p.m. – Houston, TX

**12. ADJOURNMENT**

**ACTION:** Motion for Adjournment