

DRAFT MINUTES
Technical Committee TC 2.5 (*Global Climate Change*)¹
Atlanta, GA
Tuesday, 30 June 2015, 1:30 - 3:30 pm

1. CALL TO ORDER

- 1.1. Bill McQuade (Chair) called the meeting to order at 1:30 pm. Members and guests introduced themselves. A sign-in sheet was circulated. (**Attachment A**)
- 1.2. Quorum was established. January 2015 minutes from Chicago were approved. 3-0-0-3 (CV)

2. CHAIRMAN'S ANNOUNCEMENTS

McQuade gave a brief summary from the TC/TG Chairs' meeting and distributed a more comprehensive report (**Attachment B**). He reminded participants of the ASHRAE Code of Ethics. He noted that ASHRAE is strengthening its role in the residential sector, and the TC discussed briefly whether we have a specific role in the area. McQuade reminded the TC of the option to hold E&P meetings, and he asked TC members to be sure to input their employment affiliation in their ASHRAE Bio. Members discussed that this input should be requested at the time of membership renewal. Tech Council is assembling an ad hoc committee to develop standardized procedures for E&P. He pointed out the upcoming deadline for Thank You letters to employers, and noted that CEC is requesting ideas for program tracks for the Las Vegas 2017 meeting.

3. McQuade reviewed the 2015-2016 roster, which is up on the ASHRAE website. Voting members for 2015-2016 are Matt Ritter, Eric Sturm, Cynthia Gage, Brian Smith, Julian de Bullet, Alamelu Brooks, and Bill Walter (non-quorum). TC Officers are:

Matt Ritter	Chair
Eric Sturm	Vice-Chair
Cynthia Gage	Secretary
Van Baxter	Handbook Subcommittee Chair
Bill Walter	Standards Subcommittee Chair
Jibonananda Sanyal	Research Subcommittee Chair
Don Brundage	Webmaster
Joel Hall	Climate Change Position Document Subcommittee Chair
Brian Smith	Climate Change Handbook Chapter Subcommittee Chair
John Karakash	Liaison to LowGWP MTG

4. UPDATE REPORTS ON RELATED TREATIES/ACCORDS AND ACTIVITIES

- 4.1. International Treaties on Climate and Ozone reported by Matt Ritter and Julian de Bullet – There are new amendments this year for the HFC proposal to the Montreal Protocol but no traction on getting the HFC amendment approved. The Working Group in April found some agreement on the proposal, but developing countries are hesitant. There is a push to get the amendment done by the end of the year. The plan is to assemble a Contact Group to develop a compromise. Europe is proposing a similar phase-down as North America, but has some differences to the developing country steps. The Climate Conference has five meetings scheduled with a goal to get a document done for Paris. There seems to be a serious push for this as opposed to earlier efforts. A draft document has been developed. The Parties are waiting for some mitigation pledges in Oct. to add to the document. Financial issues associated with the potential implementation still need to be worked out.
- 4.2. European F-Gas Update reported by Bill McQuade - The F-gas regulation passed. Now the issue is implementation. A quota system is starting and testing the relevance of the selected values. HFC production step down will start in 2016. Achieving quotas may be done by auctioning or taxes.

¹ SCOPE: TC 2.5 is concerned with the impact that the activities of the HVAC&R industry may have on the global environment, including greenhouse warming and ozone depletion. This Task Group coordinates activities and planning for the Society to address these issues. This includes identifying factors within the scope of the HVAC industry, which may impact, favorably and unfavorably, the global environment and the role that ASHRAE is serving and could serve.

- 4.3. North America reported by Bill McQuade - EPA put out a SNAP delisting rule to disallow use in specific apps such as R134a for car ACs. The draft rule came out last year. Comments have returned and a final rule is expected to be out before the next Meeting of the Parties in July, 2015. Canada has started meetings to implement a similar reg. The strawman poll includes regulations for stand-alone AC systems. Regarding EPA and the phase-out of HCFCs, Julian de Bullet requested that TC 2.5 convey to Tech Council concerns about EPA's rule on dry equipment. (**Action item #1**)
 - 4.4. China and Rest of Asia – There was some thinking that a Great Britain standard would be developed into ISO5149 standard (comparable to ASHRAE 15) for use in China.
 - 4.5. Japan reported by Osami Kataoka - Japan has a phase-out of R22. There are limits on use of flammables in systems greater than 10 kW. Products using flammables are already on market. Some gases will then be classified as non-flammable such as R-32 or other A2L. Flammable gases will define as those which are explosive. Small units upon gas release will not reach flammable limit in small areas. Then gas is classified as “inert”. But additional rules are needed for larger systems.
5. **UPDATE ON CLIMATE CHANGE POSITION DOCUMENT(PD)**
Joel Hall has taken the lead on this and has a committee assembled. They will need to convert to the new PD format. Bill McQuade and Wayne Reedy will clarify if the PD committee needs to notify the Director of Technology and/or the Director of Advocacy, Mark Ames. The old document expires in February, so the goal is to complete the new one by Orlando in order for the TC to vote on it then. (**Action item #2**)
6. **LIAISON REPORTS**
- 6.1. Section Head Tom Sobieski presented out-going Chair Bill McQuade with a Certificate of Appreciation for his service on TC 2.5.
 - 6.2. RAC Liaison Harvey Sachs reported that Section 2 will have a new Liaison on RAC. He informed the TC that RAC is developing new milestones which will be required by researchers in order to receive phased payments for work completed. He also reminded the TC that there is research chair training.
 - 6.3. Wayne Reedy from Tech Council reported that he is rolling off and the committee will have a new liaison with Tech Council regarding the Climate Change Position Document.
7. **SUBCOMMITTEE REPORTS**
- 7.1. Program – Eric Sturm, Program Subcommittee Chair attended the program chair training. Starting in St. Louis there will be a fee waiver for invited-speakers. To qualify for the waiver the speaker must be a subject matter expert, not a member of ASHRAE, and be providing information useful to ASHRAE. There is a maximum of 5 waivers per conference. The ASHRAE Conference chair will determine who can receive the waiver. Eric also reported on feedback he received in the spring about our Chicago program “What the F-gas is going on in Europe?” There were over 150 badge scans, showing strong interests in topics from our TC. There were also favorable written comments and all speakers received good ratings.
 - 7.1.1. Possible future programs for:
 - 7.1.1.1. Orlando, January 23-27, 2016 – A program will be proposed for Orlando on HFC rules and regulations in various regions of the world. Matt Ritter, Bill McQuade and Julian de Bullet will be presenters. Osami Kataoka may be a fourth. Deadline for seminar submission is August 10th. Sturm reminded the speakers that their slides will need to be submitted to ASHRAE one month ahead of the conference. (**Action item #3**). Sturm noted that the USNIIR will request to sponsor a session on highlights of the IIR meeting.
 - 7.1.1.2. St. Louis, MO, June 25-29, 2016 – There are several tracks in which the TC might propose: refrigeration, renewable, and net-zero buildings. Program proposals for this meeting will be discussed in Orlando.
 - 7.2. Handbook – Van Baxter Handbook Subcommittee Chair reported that we must move quickly if we want to submit a separate chapter on Climate Change (see item 7.3). For it to make the 2017 Fundamentals Handbook, the TC must review and approve by vote the new chapter by July 2016.
 - 7.2.1. 2013 Handbook of Fundamentals, Chapter 29 Refrigerants – Baxter reported that he has updated the two ODP and GWP tables, presently residing in Chapter 29, to agree with the IPCC's AR5 report. These tables, along

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with other parts of the Global Environmental Properties section of this chapter may move to the new chapter if it is completed in time.

7.2.2. Chapter 34 Energy Resources - TC 2.8 is cognizant on this chapter.

- 7.3. Climate Change Chapter for Handbook – Brian Smith has taken over as Chair on this effort. Authors have volunteered for many of the Chapter sections, but there are still some sections needing help. Julian de Bullet agreed to contribute where needed. **(Action item #4)**
- 7.4. Web Site – Don Brundage reported that the website is up to date.
- 7.5. Research – The TC has no research projects at this time.
- 7.6. Standards – Bill Walter Standard Subcommittee chair reported that there are some issues with ANSI. Presently there are two sets of rules influencing standards development procedures: PASA (Procedures for ASHRAE Standards and Actions) and the Standards Project Committee MOP (Method of Procedures). ASHRAE’s Standards Committee is working on ways to coordinate the committee operations so they do not conflict with PASA. Walter reported that Standard 15 Committee has been developing amendments for using 2L refrigerants. The draft may include a report on work done on ventilation. There is hope to get the standard out to public review by Oct. There is some international work within Working Group 9 which is being drawn into ASHRAE 15. Standard 187 is looking how to get new refrigerants into ASHRAE 34.
- 7.7. Low GWP MTG Update – Our liaison John Karakash was not in attendance, and no report was provided. Since it has been a while since he has attended our TC to gather our input for this MTG, our in-coming Chair Matt Ritter agreed to follow-up on this issue. **(Action item #5)**

7. OTHER BUSINESS

- 7.1. Janice Means, Chair of TC 6.7 Solar Energy Utilization, asked how their TC might help us.
- 7.2. A representative of TC 6.8 Geothermal Heat Pump and Energy Recovery Applications also asked how they might help us. This TC is proposing an MTG on methodologies for calculating benefits of waste heat recovery and renewables in the context of how the benefits relate to avoidance of power generation by fossil fuels. By quantifying the benefits, this may help advance the use of renewables and waste heat. Previously TC 6.8 submitted an RTAR on this topic, but it was returned by RAC. Among other activities, the MTG would manage research in this area. The TC 6.8 representative requested TC2.5 to participate with a liaison and alternate. Don Brundage agreed to represent TC 2.5 on this MTG.

8. ADJOURN

The meeting adjourned at 3:15.

**Action Items
Atlanta Meeting**

Item	Responsible Party	Action
1.	Bill McQuade	Convey to Tech Council a request for ASHRAE to speak out against the sale of dry equipment for use in existing R-22 systems which is adversely extended the life of R-22 equipment.
2.	Joel Hall	Complete Climate Change Position Document for vote in Orlando.
3.	Matt Ritter Bill McQuade Julian de Bullet	Submit seminar slides to ASHRAE by December 22, 2015.
4.	Brian Smith	Begin assembling the Climate Change Chapter and provide the draft to TC members for review.
5.	Matt Ritter	Find out if John Karakash is representing us on MTG LowGWP and request a report for presentation and discussion by the TC.

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