



Shaping Tomorrow's  
Built Environment Today

## **ASHRAE TC 9.2 – Industrial Air Conditioning and Ventilation Committee**

### **APPROVED June 15, 2021 Meeting Minutes – Virtual Meeting**

- 1) The meeting was called to order at 1:05 pm EDT. Chair Erich Binder gave the Opening Remarks and read the ASHRAE Code of Ethics:

*In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and we shall avoid all real or perceived conflicts of interests.*

- 2) The Agenda was reviewed – no changes were made to the agenda.
- 3) There were self-introductions of all Members and Guests. Duncan Phyfe gave instruction on the use of the sign-in sheet in the Chat box.
- 4) Quorum Status Determination of Meeting Quorum – quorum was established with 5 of 9 voting members present.  
Voting members rolling off:
  - June 2022 Erich Binder – Chair (P)
  - June 2021 Bill Lampkin / John McKernan / Mike Baucom
  - June 2022 Duncan Phyfe / Joel Foster / Ravi Ganta
  - June 2023 Deep Ghosh / Matt Kampen
  - The committee needs Members to roll on starting in July. Currently, Erik Ostberg, Evan Reese and Duane Hammond have volunteered but we need 2 more to fill the positions of members rolling off. Erich asked for more volunteers; Eileen Jensen and Evan Reese volunteered for voting. The committee also needs a Secretary. Deep Ghosh volunteered Eileen for secretary; Erich added both Deep's and Eileen's names as potentials for the position.
- 5) Kevin Marple presented the draft meeting minutes from the Winter Meeting. Duncan Phyfe moved to approve and Bill Lampkin seconded. Approved unanimously, CNV.
- 6) TC Chair Breakfast Meeting Highlights
  - TAC is developing a template for meeting agendas in PowerPoint. This should be available for the Winter Meeting in Las Vegas.
  - TC Leadership training videos are available on TAC Basecamp site. There are approximately 40 hours of different videos by Victor Goldschmidt.
  - Developing an MTG to create a Method of Test Standard for "Active Filtration" (TC 2.9 heading committee) and will follow up with AHRI. There is a possibility of involvement from this committee if anyone is interested.
  - New MTG for Ventilation for Infection Control (outcome from the ETF) - Duncan Phyfe will be the representative from TC9.2, taking over from John McKernan who has been our representative to the ETF.

- New Decarbonization Task Force (Environmental Health Committee) EHC – Europe and Canada are ahead of us so ASHRAE is playing catch up. Erich is going to a conference in Greece to get more information on what has been done in Europe.
- TAC Access Options available by the Las Vegas meeting.
- Any questions for TAC – ASKTAC@Ashrae.net.
- TAC Open Mic – Request time to address TAC.

7) Status of TC 9.2 Events & Activities

- Industrial Vent 2022 Conference – Toronto, Canada – Doug Cochrane, chair. This was supposed to happen in August, 2021. Now will be held immediately prior to the Annual meeting in Toronto, June 2022. Updated schedules should be available soon. Encouraged TC9.2 as the cognizant TC, to come early to the 2022 Annual meeting and attend this one. Don Larsson asked if the papers previously submitted have been reviewed; Doug said they have and he should have heard from the committee by now. Doug will follow up to see what happened since Don hasn't heard. Mostly only abstracts have been submitted so far, not so many papers. The workshops could be marketed to students to get them interested in industrial HVAC. The website should be updated soon, if not already. Doug will send latest info to Erich, to forward to this committee.
- Industrial HVAC 101 Course Development. Erich is looking to develop a course guideline over the next couple of months, perhaps in sections. He would then ask individuals to develop a section. Possibly use for DL visits.
- Cold Climate Conference 2023 – Anchorage, Alaska – Erich Binder, chair. SCANVAC holds this every 3 years, final date to be set. Possible site visit to Fairbanks cold climate test facility.
- IEEE 1635/ASHRAE Guideline 21 – Deep Ghosh, chair. Last time this was updated was 2018. Expect this latest revision to be published in 2022.
- Epidemic Task Force Update/Industrial COVID Presentation. John McKernan said the presentations and white paper (which were all developed with ACGIH) have all been uploaded to the ETF Basecamp website. He has received some comments on the white paper but nothing extensive; no comments on the presentations. Mark Owen said that we are free to work with ACGIH to make them available, since ASHRAE isn't going to sell them. Don Larsson will give his presentation to the ETF on 6/24, which should be the last step in getting it approved for release. There is interest in giving these presentations to the TC, possibly sometime mid-July. John, Duncan Phyfe, and Don will pick a date and let Erich know. Eileen will get the white paper from John and attach to these minutes.
- Decarbonization Task Force - Duncan Phyfe is representative for this TC. There will be many opportunities for participation if members are interested. Unlike the ETF (which had a 1 year life), this will have a 4 year life. Harvey Schowe asked if this will include removing carbon dioxide from the atmosphere – Erich said he would check it out.

8) ASHRAE Handbook – Evan Reese & Steven Still, co-chairs. Steven said the new chapters are progressing well. Evan said that anyone that is having a problem getting into the Author Portal, to please let him know. Erich showed the current list of HB chapter chairs. Deep suggested putting some brief information on battery ventilation into the Industrial

- Ventilation Chapter, and point to the IEEE 1635/ASHRAE Guideline 21 document. Erich said that the Hazardous Spaces document is due to publish the end of this year so we should also point to that once it is available. Erik Ostberg said that the toxic shelter information could initially be incorporated into the proposed Oil & Gas chapter – he has spoken with Tony Sarrack and he has information he can provide. ETF information – should try to get something into one of these chapters, or possibly a new/short chapter.
- 9) Research Projects - Alois Malik, chair (not present). No research going on with this committee currently. Alois is actually the chair for another TC so someone is needed to replace him. No volunteers stepped forward at this time.
  - 10) Standards - Deep Ghosh, chair.
    - IEEE 1635/ASHRAE Guideline 21 is the only active document being worked on by the TC at this time. There is a discussion to make this into a standard because NFPA will not reference a guideline, but they will reference a standard. Because IEEE is the lead, they will start the process and ASHRAE will follow.
  - 11) Program Sub Committee – Joel Foster (not present). Don Larsson is putting together two program submittals for Las Vegas: Engineering considerations for hybrid industrial H&V, and Building pressurization with low discharge heating temperature. Erich asked if anyone is putting together anything for hazardous spaces – Erik Ostberg is interested and Erich will follow up with Mike Baucom to see if he has anything. Program submissions for Las Vegas are due 8/2/21. These could also be done later at the 2022 Industrial Ventilation conference. Deep suggested putting together a couple of these as workshops, for more interactive sessions. If the IEEE/ASHRAE battery guideline is published early in 2022, it could be one of the workshops. For more information on conferences and program submission deadlines, see the CEC website: [2022 ASHRAE Winter Conference | ashrae.org](https://www.ashrae.org/2022-winter-conference). Another possibility for future programs is a presentation on any new Handbook chapters and major updates to the Industrial Air Conditioning chapter.
  - 12) Webmaster – Mike Baucom (not present). Erich noted that the website is up to date. Some comments were received from TC9 Section Head Brad Cochran.
  - 13) Nuclear Subcommittee – Scott MacMurray, chair. The Nuclear subcommittee did not meet in January. DOE is trying to develop and update their standards internally. Deep said that there is a new nuclear plant being built with the goal of bringing it online next year. This will be the first new nuclear plant of this century. Deep is responsible for the revising the Nuclear handbook chapter and Scott said there are some minor edits that need to be added. This chapter was heavily edited the last time so they are not expecting a lot more to change. Erich asked about small modular reactors (SMRs) – Scott said that there are no approved designs yet so it is probably premature to address these in the chapter. Scott plans on holding a subcommittee meeting next January.
  - 14) Journal/Insights Liaison – Norm Maxwell (not present). Erich said that they are looking at a special publication from the upcoming Industrial Ventilation conference.
  - 15) TC 9 Report Section Head – Brad Cochran (not present). Information previously covered in the TC chair breakfast.
  - 16) Liaisons
    - CTTC –DL Speakers - Erich Binder
    - MTG.OBB – Doug Abramson (not present). No report.

- MTG- ACR - Erich Binder, rep. Kishor Khankari is the lead and has held many meetings. Erich would like to invite members from this TC to some of these so that people can hear about the rules of thumb that have been used for air change rates, and get their feedback.
- MTG-RAC – Erich Binder/Duncan Phyfe, reps. This is through UNEP and deals with refrigeration in developing economies. They are putting together a guide for people who may have minimal training, on how to service these systems. It is mostly a compilation of checklists. Erich will forward to the TC when he gets a draft.
- CCBDG – Erich Binder, rep. The Cold Climate Building Design Guide should be ready for publication by the Las Vegas meeting.
- STD 62.1 Liaison No liaison. Erich asked for volunteers – no one stepped forward.
- STD 90.1 Liaison – Mike Baucom, not present, no report.
- TG 2 HVAC Liaison – now TC 2.10. No liaison.
- Others

#### 12) Membership / Honors & Awards

- Kevin Marple reported that the current roster shows 9 voting members, 73 corresponding members, and 23 provisional corresponding members. He will begin the process of determining provisional to corresponding member status and updating the roster. He will also confirm corresponding membership status and clean up the Roster for our upcoming 2021-2022 Society Year. He will contact every PCM and CM to determine their ongoing commitment
- Voting Member Status. Will need three more volunteers next year so recruiting is starting now.
- Provisional Member Status. Looking to promote provisional corresponding members, to corresponding member status.
- Honors and Awards - Eileen Jensen. Contact Eileen and Erich if you're interested.
  - i. ASHRAE Fellows
  - ii. High Tower Award
  - iii. Nominations for Tech Committees / ASHRAE BOD
  - iv. Bill Kumpf said he's been in Society since 1965 but his membership status didn't change until 1972. He is looking to become a 50 year member. Would like to be considered for DSA. Eileen said she would follow up with Bill.

15) Basecamp Training – Training is available. Duncan Phyfe said he is in the process of establishing a Basecamp site for the TC. He explained that the TC website has meeting information and minutes available to everyone, while the Basecamp site is more for document sharing and message sharing amongst the members and is non-public.

16) Next Meeting – January – Winter Meeting – Las Vegas, Nevada

17) Duncan Phyfe made the motion to adjourn. The meeting ended at 2:57 pm EDT.

Attachments:

Sign-in sheet **Need to get this from Duncan**

**Final meeting minutes from January?**

**TC Chair Breakfast Handout?**

ETF White Paper **Need to get this from John McKernan**