

1791 Tullie Circle NE • Atlanta, Georgia 30329-2305 •

Tel 404-636-8400 • Fax 404-321-5478 • http://[www.ashrae.org](http://www.ashrae.org)

Reply To:

John Aykroyd

Senior Engineer-Chem-Aqua, Inc.

2727 Chemsearch Blvd.

Irving, TX

Johnaykroyd@chemaqua.com

ASHRAE Chair TC 8.6

# TC 8.6 Meeting Minutes – DRAFT until approval in Toronto

**Date/Time:** ASHRAE TC 8.6 Main Meeting: Monday, January 31st, 2022, 2:30-4:30 PM EST (Zoom)

TC 8.6 H/P/R Subcommittees: hybrid meetings

STD 64: EST (Zoom & Presential))

**Room:** Caesars Palace, Octavius 3 (PS) (Las Vegas)

* Scope: Technical Committee 8.6, Cooling Towers and Evaporative Condensers
* Technical Committee TC 8.6 is concerned with open and closed circuit cooling towers, evaporative condensers, adiabatic condensers and fluid coolers, spray ponds, and other types of contact type liquid-to-air heat rejection equipment along with their application and impact on complete HVAC, Industrial, and Refrigeration systems, including the associated energy and water usage as well as water treatment requirements.

1. **Call to Order [Aykroyd]**
   1. Call to order at 2:34 PM PST
2. **Roll call and introductions [Aykroyd]**
   1. Roll call indicated 5 of 8 voting members present, attaining a quorum.
3. **APPROVAL OF MINUTES [Aykroyd]**
   1. Jeff motion, Haven second, all approve of Phoenix virtual meeting minutes, Passed 5-0-0.
4. **REVIEW OF TC chair BREAKFAST [Aykroyd]**
   1. Format different than normal, series of videos, sheets, strategic plan same as before, 2 new functional groups, TG2.RAST (Reactive Air and Surface Treatment), as well as MTG.Res (Resilience). Scope of TG RAST is concerned with the advancing the knowledge, effectiveness, and safety of Reactive Air and Surface Treatment and associated technologies for air cleaning and surface disinfection.
   2. Define parameters for devices, test work, some structure for validation, international standards taskforce, international side of ASHRAE progressing with a task force
   3. Promoting interim meetings
   4. Set of training sessions available
   5. Next meeting is in Toronto – 6/25-6/29 proposed to be face to face but we are speculating hybrid conference would occur
   6. TC master calendar available through Google
   7. Heat pump conference in Chicago in May
   8. Code of ethics reinforced
   9. Training options available for TC/TG/TRG/MTG Chairs.
   10. Touted results such as 131 active standards, 29 guidelines, 209 handbook chapters, $77M spent on research, etc.
   11. Videos presented showcased success stories within the organization.
5. **Membership [Haven]**
   1. Membership roster – 5 members rolling off of voting member status in June, need to identify members to roll on
   2. Need vice chair
   3. By February 15 and slide in in Toronto
   4. New blood needed
6. **Handbook [Boldt]**
   1. 2023 spring – submissions for our handbook chapters due spring 2023
   2. Speculating not a lot of updates needed
   3. Need an update and begin reviewing
7. **Research [J.Vadder]**
   1. $2.6 and $2.7 typical spent per year, however due to COVID currently at $1.8 which is slightly less than what is needed
   2. Not adding new projects since budget is short
   3. Next winter – likely start accepting new projects to fund.
   4. Discussed potential ideas for 8.6 but interest has been limited to move forward
8. **Programs [J.Ham]**
   1. Submitted for this program but was not selected
      1. Adiabatic cooling (Adam, Frank and Paul)
      2. We have option to resubmit
   2. Toronto tracks – submission deadline Feb 17
      1. Fundamentals & Applications
      2. HVAC Systems and Equipment
      3. Research Summit
      4. Connected Buildings, Connected Communities
      5. Cold Climate System Design, Operation and Resilience
      6. IAQ of sustainable buildings
      7. Professional development and education
      8. Buildings and the aftermath of COVID
   3. Mark proposed presenting on cold weather operation. Article previously published by Paul Lindahl repurposed into slide deck. Joe will check on possibility of presenting cold weather operation.
   4. Also discussed internet conductivity, data collection, adders or functionality to run your plant more efficiently. Expand discussion to include evaporative condensers and fluid coolers.
   5. Stephen to resubmit the adiabatic cooling program for Toronto conference pending speaker commitments. Motion set and passed 5-0-0.
9. **Standard 64 [Vadder]** 
   1. Published recently, next time to resubmit changes is years out so no action needed
10. **TC 9.6 [Anderson]**
    1. John Aykroyd attended meeting.
    2. Discussed alternative UV sterilization and techniques used.
    3. Tyler Anderson discussed Grey water research project – returned with comments – just responded to comments, vote pending.
    4. Waiting for board to vote
    5. Also commented on research projects – 2 years’ worth of research projects in the hopper so it may be 2 years before this project is funded
    6. Health and services research projects heavy
    7. 8.6 is interested in but not necessarily needing to co-sponsor
11. **MTG RAC Plant Sustainability Guide [Harbison]**
    1. Haven alternate – in lieu of in person meeting they opted Feb 17 virtual meeting. Publication pending, chapters developed for ASHRAE review, will know more at Feb meeting

**Kevin Mercer section 8 head –** breakfast held, hybrid meeting the way of the future, see this growing into the conference.

Emphasize theme of breakfast – aligning with #3 strategic plan, recently updated 4 initiatives – the TAC group falls into #3 initiative to streamline the organization as best we can, cut waste and streamline processes, see where our area of expertise for us to contribute, drive focus in our organization.

Need activity form due as soon as we can after meeting.

Regarding membership voting member 3-4 years, chair membership, 2 year appointment but can go on forever, most are guidelines, some TCs want more micromanagement. Section head is to help us for roadblocks, TAC owns voting durations (encourage new folks but pandemics happen).

1. **SPC 205 [Xu]**
   1. No report given
2. **TC 3.6 Water Treatment [Cohen]**
   1. Alain reported (as chair) – had subcommittee meeting yesterday, research RTAR and PTAR going out. 3.6 is in good shape, may need help with 8.6 on digital in water treatment. Main meeting will be held tomorrow.
3. **TC 2.8 Building Environmental Impacts and Sustainability [TBD]**
   1. No report
4. **STD 189.1 [Buckley]**
   1. Scott is not attending nor active in ASHRAE so may need new liaison. Queried audience for interest. If interested please contact John.
5. **STD 90.1 [Lindahl/Morrison]**
   1. Paul is now liaisons for 3.6, 8.6, 188 and 514 (parallel standard building water hazards). Liaison role important as a number of things those groups do that impact us (e.g. cold water in bldgs. Making folks sick)
   2. Continuing relationship with CTI – test code for dry coolers and certification rating standard published which will go into 90.1 for minimum efficiency requirements
   3. Also working toward adiabatic fluid cooler and condenser
   4. 188 and guideline 12 are both continuous maintenance standards
   5. CTI sponsoring 5 education sessions at the AHR Expo at Las Vegas
      1. Fundamentals of Cooling Towers
      2. Fundamentals of Water Treatment
      3. Product Certification and Sustainability
      4. Modular Cooling Tower Start-up and
      5. Building and Drinking Water Safety.
   6. Still working on practical water temperatures
6. **Title 24 [Morrison]**
   1. Starting up next code cycle for 2025 edition – they are soliciting ideas for what they can update to save energy or decarbonize. Starting to track where they are going. They made major change 2 cycles ago on cooling tower efficiencies when used on water cooled. Went from 42.1 to 60 gpm/hp. We will see what they may change in this next code cycle. There will be plenty of opportunity to provide stakeholder comments.
7. **STD 191 Building Water Efficiency [Cohen]** 
   1. Mike - Summary from that group indicates nothing new – likely another public review.

###### Epidemic Task Force [Vadder]

###### Continuing – no new updates per Haven

###### Website [Kline]

* 1. Up to date

###### Old Business

* 1. No old business

### New Business

###### No new business

###### Adjourn

* 1. Meeting adjourned 3:46 PST Jeff Ramey, Alain second Passed 5-0-0.