



1791 TULLIE CIRCLE, N.E./ATLANTA, GA 30329  
**404-636-8400**

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. 3.6 DATE: June 28, 2022

TC/TG/MTG/TRG TITLE Water Treatment

DATE OF MEETING June 28, 2022 LOCATION Toronto, ON

MEMBERS PRESENT	Status	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Alain Trahan - Chair	Voting	Helen Cerra	William Dohls – Section Head
Joshua Ince – Vice Chair	Voting	Harrison (Ruffin) Tyler	John Aykroyd
Jeff Boldt	Voting	Claressa Lucas	Chee Ow – Sec 3 Research Liaison
Henry Becker	Voting	Paul Lindahl	Tania Ullah
Jeff Ramey	Voting	Tyler Anderson - Research	Greg Holmes
Ken Mortensen	Voting	Joe Ham - Programs	Weuhang Xue
Janet Stout	Voting	Erica Eskins - Research	Bob Silva
Clive Ling	Voting	Ron George	Michael Camron
Jon Cohen	Voting	Michael Patton	Bob Silva
Frank Morrison	Voting		
William (Bill) Pearson	Voting		
	11		
<b>Members Absent</b>	<b>Status</b>		
Scott Shaffer	Voting		
Richard Miller	Voting		
Clive Broadbent	Voting		
	3		
	14	Roster Total	75

TAC Section Head:	SH3.6@ashrae.net
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALL, etc.)	See ASHRAE email alias list for needed addresses.
Mike Vaughn, Manager Of 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 at the next meeting.

## Main TC 3.6 Meeting Agenda

### 1. CALL TO ORDER

*Meeting called to order at 1:03 PM PST by Alain, powerpoint of the meeting will be on Basecamp, along with these minutes*

### 2. ROLL CALL & INTRODUCTIONS

*Quorum – 11/14 voting members, 1/1 Voting member non-quorum.*

### 3. ASHRAE CODE OF ETHICS COMMITMENT

*Alain read ASHRAE's code of ethics and reminded everyone that we have to abide by these.*

In summary: In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

### 4. REVIEW OF AGENDA

### 5. APPROVAL OF MINUTES (2022 Winter Conference, VIRTUAL, June 22)

*Jeff Ramey, seconded by Frank Morrison – Approved unanimously*

### 6. REVIEW OF SECTION 3 BREAKFAST MEETING – Alain

#### *Breakfast Session Program*

- TAC Chair Larry Smith
- Tara Thomas—Distribute FG certificates
- Video: Chapter Technology Transfer Committee (CT)<sup>2</sup>, Distinguished Lecturers, Tech Hour Speakers  
<https://public.3.basecamp.com/p/M92dfo3SG5B9qNxBW1Hk5UWL>
- CEC presentation: Vikrant Aute
- Kevin Marple—ASHRAE Ventilation 2022 Conference and ongoing involvement
- FG Leadership Training—Jamie Bennett & Kevin Mercer
- Questions

#### 1. TC/TG/TRG/MTG now separated into FG MOP and MTG MOP

- [www.ashrae.org/tac](http://www.ashrae.org/tac)

#### 2. Changes to FG MOP

- A. Requires balance for voting membership and known financial interests in other entities. This was incorporated in June 2021. "...shall maintain a balance of Members in these stakeholder interest categories. No single stakeholder interest category shall constitute a majority..."
- B. Requires that the Chair, Vice-Chair, and all voting members are also members of ASHRAE
- C. Both balance and ASHRAE membership can be waived with your section heads approval
- D. Recommendation to conduct virtual meetings between the Annual and Winter A meetings

#### *Functional Group Leadership Training*

- Revised FG and MTG Manual of Procedures (MOP)
- Strategic planning [www.ashrae.org/about/strategic-plan](http://www.ashrae.org/about/strategic-plan)
- Think like a Leader presentations [www.ashrae.org/tac](http://www.ashrae.org/tac)
- Ask your Section Head or [AskTAC@ashrae.net](mailto:AskTAC@ashrae.net)

3. MTG MOP re-imagines the MTG FG to be responsive to emerging problems
  - A. Advancement of the arts and sciences of HVAC&R for the benefit of humanity
  - B. ASHRAE Strategic Plan
  - C. Proposed timeline for completion
  - D. Along with a short list of expectations, the MTG organizational structure is left to the MTG leadership to suit the purpose for its formation.
  - E. Effective 7/1/2022
  - F. Section Head will reach out to existing MTGs to transition to the new MOP
  - G. New MTG & FG MOP at [www.ashrae.org/tac](http://www.ashrae.org/tac)

## 2022-23 TFBD Objectives

- Develop the [Society budget](#) for decarbonization projects
- [Expedite the delivery of technical resources](#) that help design engineers deliver and operate low-carbon buildings
- Facilitate and oversee the work of Task Force subcommittees to [ensure decarbonization goals are accomplished within the established timeframe](#)
- Provide a comprehensive [plan for integrating building decarbonization activities into the ASHRAE structure \(the objective is for these activities to not require the TFBD\)](#)
- [Coordinate Task Force work with ASHRAE councils, committees and task forces to align goals and eliminate bottlenecks –seek TC liaisons on all operations](#)

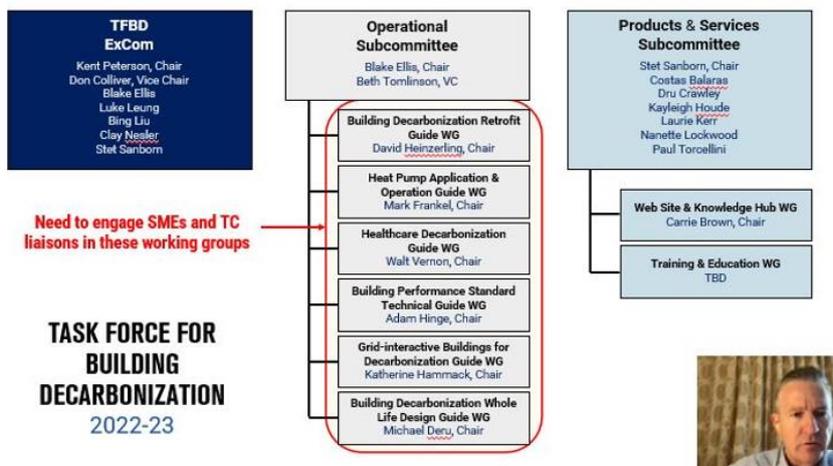
## TC Chair Breakfast Meeting Takeaways

### 2022-23 TFBD Objectives

- Below are major decarbonization resource projects for Board approval this afternoon

Resource Development	Duration	Start
Building Decarbonization Retrofit Guide	18 months	Jul-22
Heat Pump Application and Operation Guide	9 months	Jul-22
Healthcare Decarbonization Design Guide	12 months	Jul-22
Building Performance Standard Resource Technical Guide	6 months	Jul-22
Guide for Designing and Operating Grid-interactive Buildings for Decarbonization	12 months	Jun-22
Building Decarbonization Whole Life Design Guide	12 months	Jul-22

## TC Chair Breakfast Meeting Takeaways



### 7. SECTION 3 CHAIR REVIEW – Stuart Dohls

*Stuart gave us an update from TAC.*

### 8. MEMBERSHIP REPORT – Bill Pearson

## 8.1. Voting Membership

### Membership report – Bill Pearson

- Roster of 14 voting members including 1 Int'l NQ
- 65 members on our June. 30 Official Roster
- Voting Members rolling off after summer meeting
  - Alain Trahan
  - Henry Becker
  - Ken Mortensen
  - Jeff Ramey
  - Scott Schaffer (Resignation letter)
  - Janet Stout
- Ensured balance committee in updating roster.

#### Roster Voting members

- Alain Trahan 2022
- Josh Ince 2024
- Bill Pearson 2024
- Henry Becker 2022
- Jeff Boldt 2024
- Richard Miller 2024
- Clive Broadbent (Int'l NQ) 2025
- Frank Morrison 2024
- Jon Cohen 2025
- Ken Mortensen 2022
- Clive Ling 2025
- Jeff Ramey 2022
- Scott Schaffer 2023
- Janet Stout 2022



Position	Rolling off(*) & Voting to 220701	Rolling on(*) & Voting after 220701
Chair	Alain Trahan*	Josh Ince
Vice-Chair	Josh Ince	Jeff Ramey
Secretary	Jl	Tania Ullah*
Research	Erica Eskins	Erica Eskins
Research	Tyler Anderson	Tyler Anseron*
Handbook	Brandon Gross	Alain Trahan
Webmaster	Jl	
Member	Bill Pearson	Bill Pearson
	Henry Becker*	Claressa Lucas*
	Jeff Ramey*	Helen Cerra*
	Jon Cohen	Jon Cohen
	Jeff Boldt	Jeff Boldt
	Clive Ling	Clive Ling
	Janet Stout*	Harrison Tyler*
	Richard Miller	Richard Miller
	Frank Morrison	Frank Morrison
	Scott Shaffer	Scott Shaffer
	Ken Mortensen	
	Clive Broadbent	Clive Broadbent

## 9. LIAISON REPORTS – ASHRAE / AWT / CTI / OTHERS

### 9.1. Research Liaison – Chee Ow

*No Report*

### 9.2. Relevant Codes and Standards Reports

#### 9.2.1. ASHRAE Guideline 12 and Standard 188

*Lindahl reported*

ASHRAE Standard 188-2021 and Guideline 12-2020 (for which SSPC188 is responsible) are in place. We intend to help SSPC 90.1 balance the often-conflicting needs for public safety and energy efficiency in Building Water Systems. Both documents are in continuous maintenance. An Addendum developed for SSPC90.1 with the Service Water Heating WG is in the 2022 edition.

## CTI Guideline 159

*Helen Cerra updated us the committee will be meeting on July 12, no updates.*

### 9.2.2. ASHRAE Standard 189.1P

*Frank Morrison reported that there was no update*

### 9.2.3. ASHRAE Standard 191P

*Michael Patton reported that they are working through public comments*

### 9.2.4. ASHRAE Standard 90.1

*No update*

### 9.2.5. ASHRAE Standard 514

*Lindahl reported*

As mentioned earlier, Standard 514P is actively under development. 514P will cover hazards other than Legionella in building water systems, including biological as well as chemical *and physical hazards such as scalding risk*. Standard 514P completed an advisory public review and is now in its first public review, which closes May 30, 2022. This new standard may affect energy efficiency decisions and has a target date for publication of late 2022. SPC514P utilizes a parallel structure to Standard 188, and the requirements are complementary.

*Mortensen reported on the public review from March, and the next 514 meeting is in Sept 2022*

### 9.2.6. Climate Chapter – TC2.5 Handbook

*Alain Trahan – no follow up at this meeting*

### 9.2.7. ASSE 12080

*Stout reported the next training is July 25 and there are now 3 approved trainings and there is still a lot of participation.*

## 10. HANDBOOK – Trahan

### 10.1. Handbook Subcommittee Update

*Alain Trahan has volunteered to take over the Handbook chair role after Gross's departure from ASRHAE. Alain will finish Brandon's work and get the online edit voted on in the next 2 weeks and submitted to Handbook. Then he will look at a task force to restructure the handbook to be more readable and modern*

## 11. RESEARCH – Erica Eskins and Tyler Anderson

### 11.1. Research projects update

- **PTAR**
- Reference Guide for State by State Codes on Public Water supply as applicable to building consecutive water treatment systems
- **RTAR**
- Investigation into sensible temperatures for potable hot water temperatures to maximize public safety, water and energy conservation.
- Discussion on oxidizers corrosion research proposal, To be discussed further?

*The work statements were discussed by Tyler and Erica for both projects.*

*WS1930 for sensible temperatures project*

*WS1889 for graywater use investigation in healthcare with TC9.6*

## 12. PROGRAM – Joe Ham

### 12.1. Programs at this meeting:

#### Seminar 43

##### What's in Your Water? Microbial Risks after COVID-19 Shutdowns

Presenting Author: Janet Stout, Ph.D., Special Pathogens Laboratory, a Pace Laboratory, Pittsburgh, PA, USA

##### Can Flushing, Superheating and Shock Chlorination Control Legionella after Extended Stagnation?

Presenting Author: Marianne Grimard-Conea, Polytechnique Montreal, Montreal, QC, Canada

Author: Michele Provost, Ph.D., Polytechnique Montreal, Montreal, QC, Canada

### 12.2. Programs next meeting (Atlanta):

*Motion: TC will 3.6 support the 2 sessions as outlined below for the Atlanta winter meeting, by the program subcommittee with unanimous support for both*

#### Using advanced digital and connected technologies in Water Treatment.

##### Track: Maintenance and Operation

- **Abstract:** Water treatment is advancing faster in the digital world through advanced digital technologies and connected equipment. In a post Covid world, monitoring operation remotely will also be more important. Integrating these technologies into other building automation, how these advancements benefit practitioners, and how these impact efficiency in water and energy use will be discussed.
- **Chair:** Helen Cerra
- **Presenter 1:** Jon Cohen
  - Technologies in Boilers and Cooling Towers
- **Presenter 2:** Janet Stout
  - Technologies impacting water safety and risk mitigation in respect to water pathogens
- **Presenter 3:** Commissioning Agent

#### Part III Closed Loops: The Forgotten Water Systems

##### Track: Fundamental and Operations

- **Abstract:**
- **Chair:** Jon Cohen
- **Presenter 1:** Josh Ince
- **Presenter 2:** Jeff Boldt

*A third potential topic was discussed as presented by Ron George at the subcommittee meeting, however after great discussion it was discovered that the scope of this presentation aligns/overlaps with the first seminar, so it was suggested that we recommend that Ron*

*George, an established ASHRAE speaker and long time member and SME be added to the first seminar as a fourth speaker to add additional context and perspective to the seminar. Seminar chair Tania Ullah will review.*

**1. WEBSITE UPDATE – *Joshua Ince***

*Josh confirms that the site is updated. Alain Trahan volunteered to take over the webmaster role for the upcoming TC3.6 cycle after the summer meeting*

**13. SOCIAL NIGHT REPORT – *An ad hoc social dinner was organized Sunday due to the variable nature of those who could attend and those who could not. A great time was had by all.***

**13.1. Appointment of Social Night Chair for Atlanta Meeting – *Claressa Lucas for a potential Sunday night outing. Helen will send the “social night guidelines” for guidance***

**14. OLD BUSINESS – *No old business.***

**15. NEW BUSINESS –**

*The topic of water treatment’s role in decarbonization related to heat pump systems and inconsistent designs that currently lead to poor decarbonization performance*

*Ullah asked about the push for future presentations and speakers to be predominantly “in person” speakers as opposed to a hybrid/virtual combination. Good discussion had, however it will be up to the ASHRAE conference committees to sort out the challenges with this topic.*

*Moved by Jon Cohen and seconded by Janet Stout that Jeff Boldt be appointed TC3.6’s liaison to the Task Force for Building Decarbonization. Approved*

**16. DATE AND LOCATION FOR NEXT MEETING**

*Winter Conference – Atlanta – February 4<sup>th</sup> to 8<sup>th</sup>, 2023*

*Our meetings will thus be:*

*Sunday Feb 4<sup>th</sup>: 3h00pm to 5h00pm ET*

*Tuesday Feb 7<sup>th</sup>: 1h00pm to 3h30pm ET*

**17. ADJOURNMENT**

*Meeting adjourned by Alain at 2:56pm ET*