



TC/TG/TRG MINUTES COVER SHEET

(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/TRG NO **TC 3.6** DATE **May 6, 2014**

TC/TG/TRG TITLE **Water Treatment**

DATE OF MEETING **January 21, 2014**

LOCATION **New York, New York**

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Frank Morrison (Chair)	2013	Ron Wood	2011	Scott Mayes – CM (Program Chair)
Sarah Ferrari (Vice Chair)	2013	Tim Keane	2012	Jeremy Stokes – CM (Webmaster)
Dan Weimar (Handbook Chair)	2012	Claressa Lucas	2012	Todd Cornwell -PM
Bill Pearson (Membership Chair)	2010	Michael Trulear	2013	Kaye Flamm - CM
Michael Patton (Research Chair)	2012			Bill McCoy -CM
Henry Becker	2013			Leon Shapiro -CM
Helen Cerra	2013			Michael McDonald -CM
Allyn Troisi	2013			Scott Shaffer – CM
Paul Lindahl	2013			Alain Trahan -CM
Dick Miller	2010			Clive Ling
Alan Spence	2013			Mark Pfeifer
Janet Stout	2013			Patrick Racine
				Joe Hannigan
				Nora Rothschild
				Amelia Brower
				Tom Watson

DISTRIBUTION

All Members of TC/TG/TRG plus the following:

TAC Section Head:	William E. Murphy
TAC Chair:	Walter T. Grondzik
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	Stephen Piccolo, Mark Spatz,
Manager Of Standards	Hugh McMillan
Manager Of Research & Technical Services	Malcolm D. Knight
	Mike Vaughn

Reply To: Frank T. Morrison
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Chair TC 3.6

Or

Sarah Ferrari
sferrari@evapco.com
Vice Chair TC3.6

TC 3.6 MEETING Minutes

Date/Time: ASHRAE TC 3.6 Meeting, Tuesday January 21 1:00 p.m. – 3:30 p.m.

Room: Madison 2 (S5)

Note: *TC3.6 Handbook / Program / Research Subcommittees*

Date/Time: Sunday, January 19 3:00 p.m. – 5:00 p.m.

Room: Concourse F (Hilton Concourse Level)

Scope:

Technical Committee 3.6 is concerned with water treatment for building water systems including scale, corrosion and microbiological control (except sewage drainage systems) and the impacts of water treatment on building operations, maintenance, sustainability, energy efficiency, human health, and water resource conservation.

Agenda:

1. CALL TO ORDER

At 1:02 PM by the Chair.

2. ROLL CALL & INTRODUCTIONS

Members and guests introduced themselves and their affiliations, signing in on the sign-in sheets provided.

3. REVIEW OF AGENDA

Chair informed the committee of the new ASHRAE code of ethics. No other additions were proposed for the Agenda.

4. APPROVAL OF MINUTES (*Summer Meeting, Denver CO*)

Corrections made to the minutes – Section 10, Research. Stout is not working on the RTAR on particulates and drift rates. Remove “with Stout”.

Motion by Patton to approve minutes as corrected; seconded by Troisi; 10-0-0 CNV.



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5. REVIEW OF SECTION 3 BREAKFAST – FRANK MORRISON

Morrison summarized the highlights from the Section 3 breakfast including the 2013-2014 Hightower Award recipient, the new Outstanding TC award, the YEA/TC hospitality event which is a good opportunity to recruit new members, and an invitation to review technical papers for ASHRAE. A TC master calendar is available on Google and an employment discipline category was added to members' bio pages. The Hot Climate Design Guide is under development. Check the ASHRAE website for this and other groups. Morrison listed the technical tracks for Seattle and Chicago meetings. These will be posted on the TC website. Morrison extended thanks from the TC to Stokes for consistently keeping our TC site up to date, and extended a welcome to guests who are encouraged to join. Morrison welcomed Tom Watson, the SPC 188P chair, and reminded the committee that TC 3.6 is co-cognisant of SPC188.

6. MEMBERSHIP REPORT – BILL PEARSON

As of July 1 2013, until next July 1 2014 the TC has 16 VM. TC 3.6 has 28 CM.

Rolling off after June Seattle meeting are:

Bill Pearson
Sarah Ferrari
Dick Miller

Rolling on after the June Seattle meeting are:

Scott Mayes
Bill McCoy

Others interested in joining the committee should speak to Bill Pearson, TC3.6 Membership Chair, regarding being added as members.

7. LIAISON REPORTS – ASHRAE / AWT / CTI / OTHERS

CTI – Lindahl reported that STD-159 related to Legionnaires Disease is in final stages of peer review. Some open items which will be discussed in Houston include how validation will be done and recommendations from large industrial tower users on certain language. With luck, the standard could go to Board of Directors for approval in July, 2014.

ASHRAE Standard 188P – Patton extended an invitation to meetings to any interested guests. The committee is expanding content to include design and there is some other rework in process. This afternoon's SPC 188P meeting moved to Gramercy East 2nd floor Hilton.

ASHRAE Standard 189 – Lindahl reported that the cooling tower tables were updated at the last meeting to bring them in line with Standard 90.1.

ASHRAE Standard 191P – Troisi reported that of the 278 public review comments only 35 remain to be addressed. Once complete there will be a conference call vote to approve the comment responses followed by a new Public Review Draft.

ASHRAE Standard 90.1 - Lindahl reported that the TC8.6 working group and the Mechanical Subcommittee of SSPC 90.1 have accomplished improvements to the efficiency model and some necessary language changes. The committee thanks TC 3.6 for providing water data now incorporated into the WC/AC chiller study. The committee is working through the issue of how an evaluation of SYSTEM (as opposed to equipment) efficiencies might be accomplished.

Motion by Patton to appoint Lindahl as liaison from TC3.6 to SSPC 90.1. Second by Pearson. 10-0-0 CNV. Note that Lindahl is already TC8.6 liaison to SSPC 90.1.

CA Title 24 – Lindahl reported that the evaporative condenser efficiency standards to take effect July 2014 are extremely difficult and that attempts by AHRI to resolve this with CEC were unsuccessful. The 2016 code generation cycle is beginning. See Paul for details on how to sign up as a stakeholder and participate.

AWT – Pearson is the liaison with AWT; AWT membership is growing and each successive convention has higher attendance. Technical training events continue to draw attendance from both members and non-members.

8. SECTION 3 CHAIR REVIEW – DR. WILLIAM MURPHY PE PhD

Dr. William Murphy, the Section 3 Chair, thanked TC members for all the hard work they do for the Committee and for ASHRAE. Dr. Murphy offered to assist with working through the TC committee on any needs TC3.6 might have.

9. HANDBOOK - DAN WEIMAR

All additions have been incorporated into the working draft which resides on Google docs and is available to TC members with Gmail accounts for editing until Feb 21. Volunteers are welcome. The final proposed draft will then be available to the full committee for review and comment on content. Note that wordsmithing will not be allowed at the review stage. Anticipate a letter ballot vote by March 15. The Society deadline is April 14.

10. RESEARCH - MICHAEL PATTON

TC 3.6 is in need of a new Research Subcommittee Chair. Patton, the current Research Chair, is willing to assist with research idea development and procedural matters. Patton noted that RTAR request forms have been simplified and it is not difficult to get a project going.

ASHRAE has 62 active projects for a total of \$10.8M. Multiple projects are being funded, completed, and moving forward in the pipeline. ASHRAE is trying to keep the funding level more consistent. AWT has allocated funds for joint research with ASHRAE. Topics of interest to both societies have high likelihood of funding.

Patton invited all who are interested in getting in on the details of TC research to come to the Sunday subcommittee meeting.

11. PROGRAM - SCOTT MAYES

The TC 3.6 sponsored workshop "Increasing Role of Advanced Equipment of Control and Monitoring in the Water Treatment Industry" was held Sunday morning with Pearson, Cornwell, and Weimar participating and approximately 24 non-TC3.6 attendees (the 8 am time slot is a challenge for attendance, especially given that the AHR Expo does not start until Tuesday due to the Martin Luther King Holiday..

Shapiro provided highlights from the Programs breakfast (for Mayes) and some CEC (Conference and Expositions Committee) insider information: What does it take to get a



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program accepted when there are twice as many program submissions as slots? Technical papers (16 page, double blind review) get priority and are almost always accepted. Conference papers (8 page) are less rigorous and should be our focus. A smaller portion of seminars are accepted. Write compelling abstracts for seminars and relate them to tracks. Individual abstracts must also be compelling. Shapiro recommends that the Program and TC Chairs review these prior to submission. The new workshop format includes 30 minute presentations followed by 30 minute discussions and has essentially replaced forums.

The deadline for Seattle seminars and workshops is Feb 13. For Chicago, conference paper abstracts are due March 24 and papers are due in late June.

Mayes led discussion on potential Programs.

TC 8.6 will sponsor a workshop in Seattle titled "Pros and cons of recycled water in cooling water systems: Practical considerations of what SHOULD be a good idea." Pearson moved to co-sponsor; Second by Patton; 12-0-0 CNV. Shapiro, Weimar, and Spence volunteered to support the session.

The many definitions of 'recycled' and the need to classify water using measureable criteria were discussed. Patton will lead a group to plan where to take this, whether a program or an RTAR.

Workshop proposed on "Variable condenser water flow – Variable consequences". Motion for approval as Seattle workshop by Patton; Second by Pearson; Approved 13-0-0. Pearson to moderate. Morrison to present case for energy savings. Patton to present case for maintenance and water treatment issues.

Mayes solicited conference paper topics for Chicago. Cornwell offered a paper on water treatment for data centers/mission critical facilities. Keane will present on the impact of hot water system balancing on creature comfort and LB. A third paper is still needed.

Note that Track 7 for Chicago is *Design of Energy and Water Efficient Systems*. The complete list of Tracks for Seattle and Chicago will be posted on the TC website.

12. WEBSITE UPDATE – JEREMY STOKES

Stokes reported that the TC website is current and reminded the committee that the website has much useful information including the roster, event schedules, archived meeting minutes, and social night photos. See for yourself at <http://tc36.ashraetcs.org/>. Pearson to send membership list to Stokes for updating the website along with photos from the TC Social Night.

13. OLD BUSINESS

None

14. NEW BUSINESS

The Environmental Health Committee is tasked to update the ASHRAE position document on Legionella. Dick Miller will chair. Miller reported timeline goals as membership approval by March and completed Draft by the Summer meeting. Membership must be balanced and will use same categories as SPC188P.

The Committee thanked Mike Patton for the great job as Social Night Chair which was well attended at Basso56. Pearson volunteered as Social Night Chair for the Seattle meeting.

15. DATE AND LOCATION FOR NEXT MEETING

Conference Call to discuss Handbook in advance of vote to be scheduled by Weimar, Handbook Chair.

Summer Conference – Seattle, WA – June 28 to July 2 2014
Conference Headquarters hotel is the Seattle Sheraton.

16. ADJOURNMENT

A motion for adjournment was made by Weimar and seconded by Cerra. 12-0-0 CNV.