

**AMERICAN SOCIETY OF HEATING, REGRIGERATING AND AIR-CONDITIONING  
ENGINEERS, INC.  
1791 Tullie Circle, N.E./Atlanta, GA 30329  
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**TC/TG/TRG MINUTES COVER SHEET**

TC/TG/TRG NO TC9.2 DATE June 26, 2012

TC/TG/TRG TITLE Industrial Air Conditioning

DATE OF MEETING June 26, 2012 LOCATION San Antonio, TX

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Walter Clements	2012	Matt Hargan	2009	Paula Hernandez, HBC Liaison
Vin Gupta	2012	Jon Fretthold	2010	Eileen Jensen, CM
Charlie Shieh	2010	Wayne Lawton	2010	Tom Axley, CM
Mike Connor	2011	Al Woody	2008	Douglass Abramson, CM
Deep Ghosh	2010	Richard Evans M – NQ	2011	Tom Lawrence, TAC
Norm Maxwell	2008	Vladimir Fedkiw M – NQ	2009	William Kumpf, CM
				Hank Bagheri, CM
				John Hipchen, Guest
				Leon Shapiro, Webmaster
				Ravi Ganta, Subcommittee Chair
				Abdel Darwich, Secretary
				Mike Baucom, Vice Chair

M – NQ – Member Non-Quorum  
CM – Corresponding Member

HBC – Handbook Committee

**DISTRIBUTION**

<i>All Members of TC/TG/TRG plus the following:</i>	
<b>TAC Section Head:</b>	
<b>TAC Chair:</b>	
<b>All Committee Liaison As Shown on TC/TG/MTG/TRG Rosters:</b>	
<b>Manager of Standards Manager of Research &amp; Technical Services</b>	<b>Stephanie Reiniche Mike Vaughn</b>

**TC 9.2 Industrial Air Conditioning  
Meeting Minutes – San Antonio, TX  
June 26, 2012**

**Note:**

**These draft minutes have not been approved. They are not the official approved record until approved by the committee.**

**Meeting Location:**

**San Antonio, TX at the Henry B. Gonzales Convention Center**

**Call to Order, Introductions & Acceptance of Previous Meeting Minutes:**

Meeting was called to order by Chairman Deep Ghosh at 1:00 PM  
The Chairman gave opening remarks and called for Introductions  
The Sign-In sheet was distributed and returned to the acting Secretary.

Quorum was established with 6 voting members present out of 10.

Tom Lawrence, TAC of Section 9, had a conversation with Don Colliver regards to the development of an AEDG for Industrial HVAC. He shared with Don that this TC thought it was a good idea but they weren't ready to take it on. He further explained that we supported the concept and would even help with some of the work but could not be a sponsor. Don agreed this was appropriate and that it was ultimately up to Society to decide if this would move forward by forming a committee, similar to how they've developed other AEDGs. Ghosh said that this committee would start to discuss how we could do this at this meeting. Tom suggested that we send an e-mail to him and Don to let him know what we come up with after this meeting. V. Gupta asked how the process works; Tom said that once it gets approved by Society, it becomes pretty intense for 6 – 12 months to develop the guide, before publication. Tom also mentioned that the TAC will soon release a canned presentation that TC members can present at chapter meetings.

Chairman called for acceptance of minutes for Chicago; N. Maxwell noted that the attendee list was not included. V. Gupta moved to accept the minutes with the list to be included and T. Axley seconded the motion to approve the minutes as amended. Vote: 6-0-0-0 CV

**Chair Report:**

D. Ghosh said that beginning next meeting, speakers will be charged \$95 to attend, instead of attending for free.

T. Axley asked if subcommittee chairs could attend the committee chair training; D. Ghosh said that they could. That training occurs Tuesday afternoons; those interested in attending should check for the time.

ASHRAE is requesting that subcommittee meetings be done via conference call; D. Ghosh felt that the Nuclear subcommittee still needs to be done on-site with follow-up conference calls.

D. Ghosh asked if anyone has visited the TC9.2 website lately; only one person has. It was noted that most people do not have the password to get into site. D. Ghosh said he would follow up with M. Baucom and forward this on to the committee.

D. Ghosh shared information he received from the Conferences and Expositions Committee – see attached.

In Denver, there will be a research mini-conference. Contributions on research technical papers, conference papers, seminars, and forums on research will be given special preference. TCs and researchers are encouraged to apply. In the future, 15% of the slots will be reserved for research.

**Membership Report, D Ghosh:**

Members Rolling off: Hargan, Lawton, Woody, Maxwell

Members Rolling on: Baucom, Ganta, Axley, Jensen, Kumpf

Voting members for 2012 – 2013: Clements, Fretthold, Gupta, Sheih, Connor, Baucom, Axley, Jensen, Kumpf, Ghosh

D. Ghosh said that Matt Hargin is rolling off the committee so we need a volunteer for the Program chair position; V. Gupta volunteered to take on this position. It was also noted that A. Darwich had to step aside and that E. Jensen had agreed to take on the secretary position. W. Clements was asked to continue as the Research chair and he agreed to do this. Ravi Ganta will remain as the nuclear subcommittee chair. D. Ghosh noted that although he was originally scheduled to roll off as the TC chair, he will be staying on one more year for the sake of continuity.

V. Gupta and W. Clements were asked to attend the Program chair and Research chair committee meetings respectively, next meeting.

**Handbook Subcom Report, by M Connor:**

M Connor identified the leads on each Chapter and a road map to the Chapter revisions.

<b>Chapter</b>	<b>Number</b>	<b>Lead</b>	<b>Target Date</b>
Industrial Air Conditioning	14	Charlie Sheih	1/14
Engine Test Facilities	17	Al Woody	1/14
Printing Plants	20	Norm Maxwell	6/14
Textile Processing Plants	21	Mike Connor	1/14
Photographic Material Facilities	22	<i>Vote to Sunset</i>	
Air Conditioning of Wood and And Paper Facilities	26	Vernon Peppers	6/14
Power Plants	27	Eileen Jensen	1/14
Nuclear Facilities	28	Deep Ghosh	1/14
Mine AC and Ventilation	29	Erich Binder	6/14
Industrial Drying Systems	30	Doug Abramson	6/14

**Key Dates:**

1. Final Identification of Leads 1/12 – Done
2. Scope of Revisions Defined 6/12
3. Start Revision of Chapters 6/12

4. Discuss Chapter revisions (1 hr subcommittee mtg.) 1/13
5. Discuss Chapter revisions (3 hr subcommittee mtg.) 6/13
6. Send Chapter for TC for review 6/13
7. Discuss Chapter revisions – Target Date #1 (3 hr subcommittee mtg.) 1/14
8. Vote on completed chapters 1/14
9. Discuss Chapter revision – Target Date #2 (3 hr subcommittee mtg.) 6/14
10. Vote on remaining chapters 6/14
11. Proofs sent to Handbook Committee liaison 7/14
12. Galleys sent to TC Handbook chair 3/15
13. Handbook sent to Printer 4/15
14. Handbook mailed 5/15

When chapter leads have revisions for the chapter ready, they should be sent to M. Connor. He will send out, as noted on the schedule. The lead gets a team together; they are not doing this alone. Team names need to be forwarded to M. Connor so that they can be recognized. This also sets up the ability to use ‘GoToMeeting’ for many of the chapter review committees.

D. Ghosh noted that whenever we change formulae in a Handbook chapter, to be aware the impact this may have on the its previous usage of the formulae. ~~affect the previous handbook chapters that reference it.~~ So if the formulae is changed I nay chapter, the TC is responsible to point these things out before moving forward with the change. If an error is found in the handbook after production, that information should be sent to Mark Owen of the Hankbook committee and an errata sheet will be produced.

The Photographic Material Facilities chapter has been proposed to be sunsetted since Kodak is effectively out of business and they were the main authors of this chapter. N. Maxwell moved we sunset the doc and Mike C. seconded. Vote: 5-0-1-0 CV

**Nuclear Subcommittee (T. Axley and R. Ganta):**

See attached report from T. Axley.

Matt Hargan was the official representative to AG1; since he is rolling off of the subcommittee, W. Kumpf suggested that D. Ghosh request that his name replace Matt’s since he is on AG1 already as his company’s representative. D. Ghosh said that he would follow up on this.

\$60 mil - \$125 mil per plant for modifications in response to Fukushima.

**Research Report (W. Clemments):**

D. Ghosh said that the research information from RP1104 and RP1395 (heat gain from electrical equipment), is being captured and turned into a design guide. The draft is done and PubEd is reviewing for approval.

**Standard Subcom Report (D. Ghosh):**

Rich Evans will no longer be able to participate; we need a new chair. Currently the only standard this TC is responsible for is Std. 128. N. Maxwell agreed to take on this role.

D. Ghosh updated the group on the IEEE/ASHRAE Guideline 21; it is finally done (balloted at least 5 times) with only a few editorial changes remaining. It has been forwarded to the ASHRAE standards

committee and needs Board approval before moving forward to IEEE for their approval. Estimated publication date is 6 months out.

T. Axley asked if we have a comprehensive list of what standards are we responsible for? There were two in the past but one got moved to another TC. Std. 128 has been reviewed within that last year or so, so it is current.

**Standard 62.1 Liaison (W. Clemments):**

Two addenda 62.1k and 62.1l addenda are soon to go out for public review.

**Programs Subcommittee (D. Ghosh):**

No programs this meeting. For Dallas, there are two programs proposed:

1. Advanced Energy Performance for Industrial Facilities
  - Energy recovery in pharmaceutical process
  - Energy reuse and environmental compliance in chemical processing
2. What Industrial Committees do in ASHRAE
  - TC5.4
  - TC5.8
  - TC9.2

D. Ghosh said that there needs to be a phone call in early July, to coordinate what is needed to meet the August 13<sup>th</sup> deadline for submissions for Dallas.

For Denver, D. Ghosh is looking doing the battery ventilation guideline as training or a seminar. V. Gupta asked if we could do a forum on asking for suggestions on an AEDG for Industrial applications; the general consensus was that it may be more timely to try to do this in Dallas. L. Shapiro volunteered to chair the forum; the proposed title is: “Does ASHRAE Need a Std. 90.4 for Industrial Spaces?”

**Webmaster (D. Ghosh):**

Nothing to report.

**Journal/Insights/ALI report (N. Maxwell):**

Nothing to report.

**Standard 90.1 Liaison (L. Shapiro):**

90.1 is the minimum standard and 189.1 is the high performance standard. The concern for industrial facilities and trying to apply 90.1 to them may create problems because some processes that are performed in industrial spaces might not be able to work with 90.1. The latest version of standard 90.1 allowed that standards committee to include industrial processes if they so chose. This happened to the data centers and created a lot of problems. Now the data center folks are proposing a standard 90.3 for data centers, to try and improve the situation.

Drake Erbe is a vice chair of 90.1 and has asked L. Shapiro to participate in a working group that will begin looking at this.

D. Ghosh suggested that we expand our Sunday evening subcommittee session to run from 4 – 7; from 5:30 – 7 will be an ad hoc with representatives from all three TCs to begin brainstorming on what we can do. This first meeting will be open to all. L. Shapiro was asked by D. Ghosh to facilitate this first meeting. Prior to that, the TC needs to have some conference calls to get things organized prior to meeting with anyone from 90.1.

L. Shapiro will meet with Drake tomorrow to get more specifics of what he is expecting. L. Shapiro will share this with D. Ghosh and develop an outline from there.

**New Business - High Performance Energy Guide (M. Connor):**

A draft outline to the TC in February; this was developed by A. Woody. Not everyone received so D. Ghosh will resend.

The biggest problem is the diversity of industrial facilities; the process conditions are all over the psych chart. It gets more complicated when existing buildings are considered.

D. Ghosh will pick 2 or 3 dates for the TC to choose from for a conference call; likely in August or September.

It was also noted that the membership of all three industrial TCs is inadequate to support all of the breadth of facilities covered by such a guide. We will have to go out and solicit additional support outside of the committees.

**The Chair then called for a Motion to Adjourn – Motion by V. Gupta, Second by M. Connor.**

**Meeting Adjourned at 3:27 PM**

**Sincerely,**

***E. Jensen***  
***TC 9.2 Acting Secretary***