



1791 Tullie Circle, N.E. / Atlanta, GA 30329
404-636-8400

TC/TG/TRG MEETING MINUTES

TC/TG/TRG NO. (TITLE): TC 5.9 Enclosed Vehicular Facilities

DATE/TIME OF MEETINGS: February 11, 2025 3:30 - 6:30 PM

LOCATION: Orlando, FL
Hybrid Conference

- ❖ Presentations
 - +
- ❖ The Chair, Dimitry Kogan, called the meeting to order at 4:45 pm.
- ❖ There were 6 of 7 voting members present, which met requirements for a quorum.
See attendee list attached to minutes.
- ❖ Chairman's Remarks – Dimitry Kogan
 - ❖ Provided a reminder of the ASHRAE Code of Ethics.
 - ❖ In 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 shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all.
- ❖ Welcome to all new attendees
- ❖ Presentation highlights from Chair meeting on Sunday February 9, 2025 morning.
 - ❖ AI Policy: ASHRAE prohibits the entry of content from any ASHRAE publication or related ASHRAE intellectual property (IP) into any AI tool, including but not limited to ChatGPT. Additionally, creating derivative works of ASHRAE IP using AI is also prohibited without express written permission from ASHRAE.
 - ❖ TAC Update: 2025-2028 ASHRAE Strategic Plan/Strategic Initiatives:
 - ❖ Healthy, Sustainable and Resilient Communities
 - ❖ Empowered (skilled, competent & solution-oriented) Workforce
 - ❖ Organizational Agility
 - ❖ Emergent Technologies
 - ❖ Center for Excellence for Building Decarbonization (CEBD) Update
 - ❖ Streamlined Flexible Codes
 - ❖ US White House (A3 Refrigerants)
 - ❖ Eunice Foote Decarbonization Award
 - ❖ Decarbonization Challenge Fund for Young Engineers
 - ❖ New Certified Decarbonization Professional
 - ❖ Special Projects
- ❖ Liaison Reports
 - ❖ Section 5 Head (Esteban Baccini)
 - ❖ *Roster updates are possible before June 30th.*

- ❖ *TAC strategic plan has been approved.*
- ❖ *Electronic Communications Committee (ECC) -- online platform for all TC forms; completed by end of calendar year.*
- ❖ *Activity Form is due tonight.*

- ❖ Approval of minutes from 2024 Indianapolis Annual Meeting – *approved.*

- ❖ Membership/Roster
(All voting members and/or subcommittee chairs)

Name	Role	Voting		Name	Role	Voting
Dmitry Kogan	Chair	Yes		David Newman	Membership	
Sean Cassady	Vice Chair	Yes		Michael Feuser	Member	Yes
David Hahm	Secretary	Yes		Elias Papadopoulos	Member	Yes
David Hahm	Research Chair	-		TJ Lyle	Member	Yes
Yuan Li	Standards Chair	Yes				
Andrew Louie	Handbook Chair					
Yoon Ko	Program Chair					
Fraser Campbell	Webmaster					

- ❖ Subcommittee Reports

- ❖ Programs Subcommittee (Yoon Ko)
 - ❖ No programs sponsored by TC5.9
 - ❖ See attached Program Sub-Committee Report
- ❖ Research Subcommittee (David Hahm)
 - ❖ Stephen Bartha update: Phase 1 FHWA report was approved
 - ❖ 2 Contracts – HGR (tunnel ventilation components inspections) and MM (movable bridge inspections) are respective leads and will peer review each other – 3 year contracts
 - ❖ Review of 2 contracts; what ventilation can do in tunnel ventilation, especially older tunnels – no project
 - ❖ NAHI course potential
 - ❖ Working groups
 - ❖ Individual manufacturers may contribute some feedback to FHWA
 - ❖ Emergency ventilation for vehicular tunnels (Norris Harvey champion)
 - ❖ Matt Davy uploaded on Basecamp
 - ❖ High Pressure transients (David Newman champion)
 - ❖ Train tunnel ventilation (David Newman)
 - ❖ Scott Shi: thermal comfort and critical velocity working groups updates
 - ❖ Douglas Scott (Research liaison)
 - ❖ No RTAR/PTAR – any topics to share with David
 - ❖ ASHRAE research
 - ❖ Potential AI in Tunnel Ventilation – RTAR?
- ❖ Standards Subcommittee (Yuan Li)
 - ❖ *Standard 217*
 - ❖ *2020 edition*
 - ❖ *2022 revisions*

- ❖ *ASHRAE requested to reinitiate the standard*
- ❖ *New SPC 217 committee (approved by ASHRAE – 5 voting members plus non-voting members)*
 - *New members are welcome*
 - *Maintenance – 2 online meetings in 2024 discussing suggestions from Bill Lampkin for changes (driven by industry); include reference to Standard 241*
 - *2 meetings to be scheduled before Phoenix meeting*
- ❖ *Enrollment form for Standard 217 members? <https://www.ashrae.org/technical-resources/standards-and-guidelines/apply-to-a-project-committee>*
- ❖ Handbook Subcommittee (Salvatore Marsico for Andrew Louie)
 - ❖ *Handbook subcommittee meetings (led by Scott Shi) -- still in review*
- ❖ Webmaster (Fraser Campbell)
 - ❖ *Indy meetings were posted – up to date*
- ❖ Membership Chair (David Newman)
 - ❖ *No update*
- ❖ New Business and Comments
 - ▮ *Progress meetings*
 - ▮ *Presentation topics – part of TC 5.9 meetings if rejected by ASHRAE*
 - ▮ *Michael Feuser will take over Research*
 - ▮ *Awards (9): Distinguished, high tower, fellow, hall of fame*
- ❖ *Update profile*
- ❖ *Next Meeting scheduled for Phoenix, AZ – Tuesday June 24, 2025*
- ❖ *Adjournment at 5:52 pm.*
- ❖ *Submitted by Dimitry Kogan, Chair – TC 5.9*

TC5.9 PROGRAM SUB-COMMITTEE REPORT

Prepared by Yoon Ko

Orlando Winter 2025

1. Programs for the current meeting Programs: No program sponsored by TC 5.9

But within main meeting we have the following presentations:

AI Debate Presentations (3:30 pm EST – 4:30 PM EST)

- Control of the Tunnel Ventilation System of a Road Tunnel Using Artificial Intelligence (Dr. Gencer Koc, Senior Associate Fire Safety and Tunnel Ventilation Engineer, WSP Australia)
- The Practical Application of Machine Learning Techniques in Fire Safety of Road Tunnels (Dr. George Hadjisophocleous and Dr. Imad Obadi, Department of Civil and Environmental Engineering, Carleton University, Canada)

2. Future conferences

	Conference paper abstract due	Seminar, Forum proposal due	Extended Abstract Paper Due
Phoenix, June 21-25, 2025	closed	February 26, 2025	March 5, 2025
Las Vegas, NV, Jan. 31-Feb. 4, 2026			
Austin, TX, June 27-July 1, 2026			

Debate - 1 moderator, 60-90 min, 3-4 panelist, in individual presentations

Forum - 1 moderator, 60 minutes, no presentations

Panel - 1 moderator, 60-90 minutes, 3-6 participants, no individual presentations

Seminar - 2-3 speakers for 60 min or 3-5 speakers for 90 min

Workshop - One chair and two presenters (maximum), 60 min long including 30 min presentation and 30 min discussion

2025 ASHRAE Annual Conference (June 21 - 25, 2025 | Phoenix, AZ, USA)

[Call for Programs \(confex.com\)](https://confex.com)

Track 1: Fundamentals and Applications

Track 2: HVAC&R Systems and Equipment

Track 3: Research Summit

Track 4: Workforce Development

Track 5: Industrial Ventilation, Refrigeration, Air-Conditioning and Energy Utilization

Track 6: Heat Pumps, Refrigerants and Decarbonization

Track 7: Onsite Energy Storage

3. TC 5.9 Program topics

☐ NEW TOPICS!

☐ Underground Parking Garage issues + EV hazards [Cheng]

Yoon reached out to Cheng for assistance

☐ AI application to tunnel safety systems [Igor]

A proposal submitted, but not accepted.

☐ Hydrogen vehicle safety issues

☒ Electric bus facilities (added through 20240912 meeting) [Yoon]

[Yoon] can prepare a proposal to discuss codes/standard gap analyses for BEB EVF fire safety

☒ Thermal comfort- subway stations (Scott Shi for summer conference)

FYI, on-line submission link for Phoenix meeting: [Call for Programs \(confex.com\)](https://confex.com)

☐ Other topics, please contact Yoon Ko <yoon.ko@nrc-cnrc.gc.ca>

Id	Start time	Completion time	Email	Name	Name1	Affiliation	E-mail	Member (Voting, Corre	YEA	Member? (Yes/No)	Attendance (In-Person/V
1	2/11/2025 15:33	2/11/2025 15:34	anonymous		Matt Davy	Arup	matt.davy@arup.com	Corresponding	No		In-Person
2	2/11/2025 16:38	2/11/2025 16:39	anonymous		Sean Cassidy	HNTB Corp	Scassady@hntb.com	Voting	No		Virtual
3	2/11/2025 16:39	2/11/2025 16:40	anonymous		James Carlin	Pottorff	Jcarlin@pottorff.com	Corresponding	No		In person
4	2/11/2025 16:38	2/11/2025 16:40	anonymous		Yinan Shi	Mott MacDonald	yinan.shi@mottmac.com	Corresponding	No		Virtual
5	2/11/2025 16:39	2/11/2025 16:41	anonymous		Duncan Phye	Verdantas	Dphyfe@verdantas.com	CM	No		In-person
6	2/11/2025 16:41	2/11/2025 16:41	anonymous		Andrew louie	Wsp	Andrew.louie@wsp.com	Corresponding	No		Virtual
7	2/11/2025 16:40	2/11/2025 16:42	anonymous		David Hahm	Mott MacDonald	david.hahm@mottmac.com	Voting	No		In-Person
8	2/11/2025 16:40	2/11/2025 16:42	anonymous		David Peth	Howden	david.peth@chartindust	Corresponding	No		Virtual
9	2/11/2025 16:41	2/11/2025 16:43	anonymous		Vincent Tang	RWDI	vincent.tang@rwdi.com	Provisional Corresponding	No		Virtual
10	2/11/2025 16:43	2/11/2025 16:43	anonymous		Fraser Campbell	Halton	Fraser.Campbell@halton	Provisional Corresponding	No		In person
11	2/11/2025 16:43	2/11/2025 16:44	anonymous		Sal Marsico	Member	Salvatore.marsico@wsp	Corresponding	No		In-person
12	2/11/2025 16:43	2/11/2025 16:44	anonymous		Jenny Wang	Metrolinx	Jenny.wang@metrolinx.	Corresponding	No		Virtual
13	2/11/2025 16:43	2/11/2025 16:44	anonymous		Shuresh Maran	Halton	Shuresh.maran@halton	Guest	No		In person
14	2/11/2025 16:44	2/11/2025 16:45	anonymous		Eric Li	RWDI	eric.li@rwdi.com	Corresponding	No		Virtual
15	2/11/2025 16:44	2/11/2025 16:46	anonymous		Igor Maeviski	Jacobs	Igor.maeviski@jacobs.co	Corresponding	No		In-person
16	2/11/2025 16:48	2/11/2025 16:52	anonymous		Sharanya Nair	Jacobs	sharanya.nair@jacobs.co	Guest	No		Virtual
17	2/11/2025 16:56	2/11/2025 16:57	anonymous		Jackie Chen	Jacobs Engineering	jackie.chen@jacobs.com	Guest	No		Virtual
18	2/11/2025 16:56	2/11/2025 16:57	anonymous		Kyle Lopez	Mott MacDonald	kyle.lopez@mottmac.co	Guest	No		Virtual
19	2/11/2025 16:57	2/11/2025 16:58	anonymous		Praveen kumar	Mott MacDonald	Praveen.kumar3@mottm	Guest	No		Virtual
20	2/11/2025 16:57	2/11/2025 16:58	anonymous		Jeffrey Bott	Jacobs Engineering	Jeffrey.bott@jacobs.com	Guest	No		Virtual
21	2/11/2025 16:57	2/11/2025 16:58	anonymous		Yuan Li	Jacobs Engineering	yuan.li@jacobs.com	Voting	No		Virtual
22	2/11/2025 16:57	2/11/2025 16:59	anonymous		Somesh Bhatia	Mott MacDonald	somesh.bhatia@mottmac	Corresponding Member	No		Virtual
23	2/11/2025 16:58	2/11/2025 16:59	anonymous		Yoon ko	NRC	Yoon.ko@nrc-cnrc.gc.ca	Corresponding	No		In person
24	2/11/2025 17:05	2/11/2025 17:05	anonymous		Bill Lampkin	Greenheck Fan - Industrial Damper	bill.lampkin@greenheck	corresponding	no		virtual
25	2/11/2025 17:04	2/11/2025 17:06	anonymous		Sai Doddi	Jacobs	Sai.doddi@jacobs.com	Guest	No		Virtual
26	2/11/2025 17:07	2/11/2025 17:09	anonymous		Jenny Wang	Metrolinx	jwangzheng0318@gmail	Guest	No		Virtual
27	2/11/2025 17:16	2/11/2025 17:16	anonymous		Ryan Danks	RWDI	ryan.danks@rwdi.com	Provisional corresponding	No		In person
28	2/11/2025 17:34	2/11/2025 17:36	anonymous		Norris Harvey	Mott MacDonald	Norris.harvey@mottmac	Guest	No		Virtual
29	2/11/2025 17:44	2/11/2025 17:46	anonymous		David Newman	Mott MacDonald	david.newman@mottmac	Subcommittee Chair - M	No		Virtual
30	2/11/2025 17:53	2/11/2025 17:57	anonymous		Dimitry Kogan	Port Authority of NY & NJ	dkogan@panynj.gov	Voting	No		In-Person
31	2/11/2025 17:55	2/11/2025 17:59	anonymous		Jacob Carr	American Warming & Ventilating	jcarr@awv.com	Provisional	?		In Person
32	2/11/2025 18:14	2/11/2025 18:15	anonymous		Jane Miller	Clarage	Jmiller@clarage.com	Corresponding	No		In person
33	2/11/2025 18:20	2/11/2025 18:21	anonymous		Clint Russell	American Warming & Ventilating	crussell@awv.com	Guest	No		In Person