

BUFFALO TALES

Newsletter of the Manitoba Chapter

The Manitoba Chapter of the American Society of Heating, Refrigerating and Air Conditioning Engineers was chartered in September 1935. It is the second oldest ASHRAE Chapter in Canada. ASHRAE Manitoba is part of ASHRAE Region XI and covers ASHRAE members in Manitoba and Northwest Ontario.



**ASHRAE Supper Meeting
Victoria Inn, 1808 Wellington Avenue**

**Thursday April 15, 2010
New Terminal Building Tour at
James Armstrong Richardson International
Airport**

Presentation/Tour 4:00pm – 5:30pm

Supper - Victoria Inn 6:00pm – 7pm

Russell Lavitt, P.Eng., LEED® AP, is a Partner & Senior Mechanical Engineer at SMS Engineering Ltd. Russell will lead a tour of the new Winnipeg Airport Terminal Building.

Tour is limited to a maximum of 30 participants.

CSA approved 6 inch ankle safety shoes, safety vests, eye protection and hard hats are required.

Pre registration is required.

To pre-register, e-mail stephen.norsworthy@snclavalin.com or visit www.ashraemanitoba.ca

Details on where and when to meet for the tour will be provided to tour registrants by email

Watch the building get constructed at <http://www.james2010.ca/blog/article/534> then go on the tour to get the inside scoop on the mechanical systems.

ASHRAE dinner meetings are open to all. Pre-registration is required. To pre-register or to get information on the cost of ASHRAE events, e-mail stephen.norsworthy@snclavalin.com or visit www.ashraemanitoba.ca.

President's Message - Daryl Friesen



It has been a fast and furious year. As my term as President of ASHRAE Manitoba chapter draws to a close, I find I have neither the words or time to expound upon the experience other than to say it has been a rush for me, I had a great time doing it, I am glad I did it but I am also glad to be turning over the gavel and Presidential duties to Jesse Sandhu.

We had a great tour of the MB Hydro Tower last month and I would like to thank the crew from MB Hydro that helped organize and lead the tour.

This month's meeting features another tour this time at the new and almost complete Airport Terminal Building. Don't miss it. Hope to see you there.

Coming Events

April 12 - Intro RETScreen Workshop at U of Manitoba. This training will introduce RETScreen Project Analysis (Version 4) with an emphasis on energy efficiency and combined heat and power (CHP). The training is for project developers, multi-lateral and government agencies, utilities, product manufacturers, engineering firms, consulting agencies, university faculty and post graduate students working in the residential and industrial sectors. For info, check out http://www.retscreen.net/ang/11_form2.php?idTraining=2935

April 13 and 14 – Better Buildings Conference at the Winnipeg Convention Center – Learn

- The newest and most up-to-date information on Sustainable/Green Buildings with a focus on Manitoba
- How to incorporate innovative design, technology, and operational best practices in your building project
- Enhanced building performance
- How being environmentally conscious can positively impact your bottom line
- Tips and tools for greening your workplace

For details go to <http://www.betterbuildings.org/contact.aspx>

April 21 1 to 4 p.m. EDT (noon to 3 PM in sunny Manitoba) – **free to all ASHRAE Webcast** “**Right From the Start – Commissioning for High Performing Buildings**” Why do you need Commissioning? Why should Commissioning start in the design phase? How can you avoid or reverse building performance decay? How does Commissioning improve ROI? Get answers to these questions and tools to commission your next building by participating on your computer via the internet. **Please share this information with everyone** you think would benefit from participation, member or not. Online registration is required – go to www.ashrae.org/Cxwebcast. Three (3) Professional Development Hours (PDHs) or three (3) AIA Learning Units (LU's) may be awarded to viewers who complete the “Participant Reaction Form” online by April 30, 2010.

May 5th to 8th - 2010 Region XI CRC – Hotel Saskatchewan Radisson Plaza in Regina, Saskatchewan. May 5 – Golf; May 6 - Technical Workshops; May 7 and 8 the business of

running ASHRAE Chapters. May 6 workshops include: Building Energy Retrofits: Process Overview, Energy Conservation Measures, and Lessons Learned; Soft skills; University of Regina campus energy reduction initiatives and related tour, and; ASHRAE Headquarters Renovation: What Happens When Leaders Try To Do It Right.

<http://regina.ashraechapters.org/html/documents/CRCProgram01-15-10.pdf>

May 19 – ASHRAE Manitoba Wind-up Social at Assiniboia Downs - Race Night Buffet \$35.00 per person including taxes and gratuities. Details will follow by email closer to the event date.

May 19 and 20 - IBPSA-Canada eSim 2010 - The International Building Performance Simulation Association (IBPSA) - Canada's biennial conference, eSim, brings together professionals, academics and students interested in building performance simulation issues and applications. The 2010 conference is hosted by Manitoba Hydro, in collaboration with the National Research Council of Canada. It will be held in Winnipeg on May 19 and 20, 2010 at Manitoba Hydro Place. Pre-conference and post-conference workshops will be held on May 18 and 21, 2010 at Red River College Princess Street Campus. To register go to www.esim.ca.

June 26 to 30 - ASHRAE Annual/Summer Meeting in Albuquerque, NM –includes a track *Energy Conservation vs. New Generation/* In the United States, buildings consume over 40% of energy produced and contribute over a third of CO2 emissions. Current projections anticipate US energy demands will increase by more than one-third by 2030, with electricity demand rising by more than 40 percent. As we continue to see a trend toward “net-zero” energy buildings, the debate continues as to what is the most effective method to curtail CO2 emissions and global climate change. While some experts have stated that improving energy efficiency in our buildings is one of the most constructive, cost-effective ways to address the challenges of high energy prices, energy security and independence, and global climate change, others experts predict that implementing new generations technologies such as solar and wind, in conjunction with smart grid technology, will reduce our dependence on fossil fuels, thus reducing CO2 emissions, and improving energy security. The series of sessions in this track illustrate the benefits of improved efficiency technologies verses new generation technologies and how the technologies promote net-zero energy buildings and contribute to lower CO2 emissions.

Does ASHRAE Need a New Method of Test for General Ventilation Air-Cleaning Devices for Ultrafine Particles?

ASHRAE TC 2.4 TC 2.4 is concerned with the nature of particulate contaminants, both solid and liquid; the measurement of their properties; their effects on living things and materials; both solid and liquid; the means of removing unwanted particulate contaminants from gases; and the evaluation of the effectiveness, energy usage, and the economy of such purification equipment. For both ordinary and extraordinary situations including hostile acts the TC is concerned with the effects of particulate contaminants on the quality of air supplied to and exhausted from enclosed spaces, and with the sources of particulate contaminant pollution within such spaces. The scope of TC 2.4 does not include purely physiological or toxicological aspects of particulate pollution

TC2.4 is considering developing a new Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size for Ultrafine Particles. The proposed title purpose and scope are shown below. If you or a colleague are interested in participating in a

committee to develop such a standard, please contact Kathleen Owen at mko@rti.org. This is not an official call for member of an SPC, but rather an attempt to gauge the interest before TC 2.4 decides what course of action to pursue.

Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size for Ultrafine Particles

PURPOSE - *This standard establishes a test procedure for evaluating the performance of air-cleaning devices as a function of particle size for ultrafine particles.*

SCOPE- *This standard describes a method of laboratory testing to measure the performance of general ventilation air-cleaning devices.*

The method of testing measures the performance of air-cleaning devices in removing particles of specific diameters as the devices become loaded by standardized loading dust fed at intervals to simulate accumulation of particles during service life. The standard defines procedures for generating the aerosols required for conducting the test. The standard also provides a method for counting airborne particles of 30 to 300 nm in diameter upstream and downstream of the air-cleaning device in order to calculate removal efficiency by particle size.

This standard also establishes performance specifications for the equipment required to conduct the tests, defines methods of calculating and reporting the results obtained from the test data, and establishes a minimum efficiency reporting system that can be applied to air-cleaning devices covered by this standard.

Report Cards for Commercial Building Owners?

A new building energy rating system prototype introduced by ASHRAE at its annual meeting in June may eventually make its way to Canada, giving commercial building owners another reason to make energy efficiency a top priority. You can read an article on this topic at http://sheetmetaljournal.com/magazine/article/Report_Cards_Coming_for_Commercial_Building_Owners.html

ASHRAE 189.1 – Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings

Standard 189.1 provides a “total building sustainability package” for those who strive to design, build and operate green buildings. From site location to energy use to recycling, this standard sets the foundation for green buildings by addressing site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building’s impact on the atmosphere, materials and resources. Standard 189.1 serves as a jurisdictional compliance option to the Public Version 1.0 of the International Green Construction Code (IgCC) published by the International Code Council. The IgCC regulates construction of new and remodeled commercial buildings. For more information on ASHRAE Standard 189.1 or to order a copy, go to <http://www.ashrae.org/publications/page/927>

ASHRAE Learning Institute Spring 2010 Online Course Series

ALI is offering several on line courses this spring including

Complying with Standard 90.1-2007: HVAC/Mechanical Monday, April 12

(<http://www.ashrae.org/education/page/552#sccwa>)

Understanding Standard 189.1 for High-Performance, Green Buildings Tuesday, April 13

(<http://www.ashrae.org/education/page/552#189>)

Energy Management in New & Existing Buildings: A Sustainable Activity Wednesday, April 14

(<http://www.ashrae.org/education/page/552#scemi>)

Complying with Standard 90.1-2007: Envelope/Lighting Monday, April 19

(<http://www.ashrae.org/education/page/552#sccwaai>)

Using Standard 90.1 to Meet LEED Requirements Monday, April 26

(<http://www.ashrae.org/education/page/552#u901sc>)

Introduction to Cleanroom Design Wednesday, April 28

(<http://www.ashrae.org/education/page/552#clean>)

The Commissioning Process & Guideline 0 Thursday, April 29

(<http://www.ashrae.org/education/page/552#cpag0>)

District Cooling & Heating Systems: Central Plants Monday, May 3

(<http://www.ashrae.org/education/page/552#discool>)

Complying with Requirements of ASHRAE Standard 62.1-2007 Wednesday, May 5

(<http://www.ashrae.org/education/page/552#sccwr>)

Understanding & Designing Dedicated Outside Air Systems (DOAS) Monday, May 10

(<http://www.ashrae.org/education/page/552#scuad>)

For details on the courses, instructors or to register, go to

<http://www.ashrae.org/education/page/1623>

Note: You may register up to 24 hours prior to an online seminar.

ASHRAE Manitoba Chapter Officers

President	Daryl Friesen	Midwest Engineering	989-3636	daryl@midwesteng.mb.ca
President-Elect	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
Vice-President				
Secretary	Stirling Walkes	SMS Engineering	775-0291	swalkes@smseng.com
Treasurer	Corey Nation	E.H. Price Ltd.	982-2222	coreyn@price-hvac.com
Governor	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Governor	Robert Bisson	Public School Finance Board	945-8452	rbisson@gov.mb.ca

Committee Chairs

Chapter History

CTT	Russell Lavitt	SMS Engineering	775-0291	rlavitt@smseng.com
Honours & Awards	Dieter Bartel	Manitoba Hydro	477-7717	dbartel@hydro.mb.ca
Membership	Stephen Norsworthy	SNC-Lavalin	786-8080	stephen.norsworthy@snclavalin.com
Programs	Johann Baetsen	Epp Siepman Engineering	453-1080	jbaetsen@eppsiepman.com
Refrigeration	Farzad Hashemina	Cimco Refrigeration	783-1178	FHasherminia@toromont.com
Research & Promo	Sergio Almeida	Trane	632-1543	salmeida@trane.com
Student Activities	Peter Gryc	SMS Engineering	775-0291	pgryc@smseng.com

Other

Accommodations	Jesse Sandhu	SMS Engineering	775-0291	jsandhu@smseng.com
Homepage Editor	Devin Evenson	Manitoba Hydro	474-3971	devenson@hydro.mb.ca
Newsletter Editor	Bert Phillips	UNIES Ltd.	633-6363	phillips@unies.mb.ca
Roster	David Stones	Wardrop Engineering	272-1331	dstones@shaw.ca
Special Events	Gary Bailley	Manitoba Hydro	360-5156	gbailley@hydro.mb.ca

ASHRAE Region XI Officers

Director & Regional Chair	Erich Binder	Erich Binder Consulting Calgary AB		erich.binder@worleyparsons.com
Assistant Regional Chair	Traci Hanegan	Coffman Engineers, Spokane WA		hanegan@coffman.com
Technology Transfer	Eileen Jensen	Bonneville Power Portland, OR		nejensen@bpa.gov
Membership Promotion	Russell Lavitt	SMS Engineering, Winnipeg MB		rlavitt@smseng.com
Student Activities	Doug LeCren	Colt Engineering, Anchorage AK		douglas.lecren@nanworleyparsons.com
Resource Promotion	Ray Sieber	Saskatchewan Research Council, Regina SK		sieber@src.sk.ca
Nominating Committee	Norm Grusnick	ECCO Manufacturing, Langley BC		ngrsnick@ecomfg.com
Nominating Committee	Kevin Marple	Benz Air Engineering Portland OR		kmarple@benzco.com
Regional Historian	Tim McGinn	Cohos Evamy Calgary AB		mcginnt@cohos-evamy.com
Treasurer	Rob Craddock	Inland Metal Manufacturing, Regina		rob@inlandmetal.ca
Web Page Editor	Kathy Habke	SAC ASHRAE Calgary, AB		chapter.administrator@sac-ashrae.com
CRC Chair, 2010	Jerry Belanger	J-Clan Services Ltd. Regina, SK		jclan@sasktel.net

ASHRAE, founded in 1894, is an international organization of 50,000 persons. Its sole objective is to advance through research, standards writing, publishing and continuing education the arts and sciences of heating, ventilation, air conditioning and refrigeration to serve the evolving needs of the public.

ASHRAE needs you, but more importantly you need ASHRAE. ASHRAE always has room for more professionals, just like you. For information regarding ASHRAE membership, contact Manitoba Membership Chair, Stephen Norsworthy, stephen.norsworthy@snclavalin.com or visit ASHRAE Manitoba at www.ashraemanitoba.ca

Visit ASHRAE Manitoba at www.ashraemanitoba.ca.

Visit ASHRAE at www.ashrae.org.

Statements in this publication are not expressions of the Society or of the Chapter.
Articles may be reproduced without permission. Please credit the source.