

AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR CONDITIONING ENGINEERS INC.

London, Canada Chapter No.116 (www.execulink.com/~tpollard/ashrae.html)

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October 2000

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Topic: Changes To NFPA-96, 1998

Speaker: Tom Mills—Spring Air Systems

Tom graduated with a Bachelors of Mechanical Engineering from the University of Waterloo in 1979. He has been involved in the Canadian heating and ventilating industry for 18 years. He has personally listed "kitchen ventilating" equipment with both Canadian and American listing authorities. Mr. Mills is presently the General Manager and partner in Spring Air Systems Inc. Spring Air is a Canadian manufacturer of commercial kitchen ventilation equipment including Underwriters Laboratories of Canada Ltd. And Underwriters Laboratories Inc. listed ventilators



Topic: NFPA-96 1998 Edition

This month Tom Mill P.Eng from Spring Air Systems will be discussing the NFPA-96 code. The 1994 (current issue referenced in O.B.C.) and 1998 editions have made some substantial changes that will have a big impact on how the code can be interpreted and applied. Tom will cover most of the changes as well as explain the roll of companies such as "ULC" etc play in certification of equipment and systems.

He will also touch on the different types of hoods available regarding their efficiency to remove grease from the effluent air.

New Location: The Lamplighter Inn 591 Wellington Rd., S.

BUFFET

MON. OCT. 30, 2000

Roast top sirloin of beef, Portobello mushrooms, Spinach & three cheese stuffed cannelloni with tomato & basil sauce. Fresh rolls and bread, garden salad, potato salad, grilled Mediterranean vegetables, variety of cold sliced meats, domestic cheeses, oven roasted Yukon potatoes, rice pilaf, fresh vegetables. Fresh pastries, sliced fruit, tea and coffee.

Social—5:00pm

Dinner—6:00

Program—7:15 (Approx.)

Meal Cost \$30.00, Or Meal Plan

Students \$15.00

President's Message

The location of our upcoming meeting will be The Lamplighter Inn at 591 Wellington Road. The Highland Golf & Country Club has organized its members' Town Hall Meeting for 30 October and requires the entire facility. This gives us the opportunity to try another venue.

For those of you that missed the September Chapter Meeting, Bob Morris of Environment Canada provided an interesting and informative look at the past and present climatic data for Canada. Bob also provided some insight into the sort of climate changes we can expect to see in the upcoming years. If anyone is looking for climate data for a specific site, they may wish to contact Bob to see what information is available from Environment Canada (Phone 416-739-4361, FAX 416-739-4446).

Chapter Members have expressed interest in having additional technical tours throughout the year. We are looking at the possibility of organizing a lunch time tour early in 2001. The tour would be a 1 hour tour of an ASHRAE related project/installation in the City of London. More details will be available in future newsletters and at Chapter Meetings.

This month we have a full slate of activities planned for the Chapter Meeting, starting with a pre-meal technical session, table top display and after dinner speaker. Hope to see you there.

Dennis Dawe

Membership

Just a reminder that meal plan fees are required for those that wish to obtain them. A registration form was contained on page 4 of the Septembers newsletter.

Society fees and chapter dues are also required to be sent to Atlanta. This year you have a choice of receiving the yearly handbook as a CD-ROM vs a hardcopy (the CD-ROM will contain both metric and imperial units and allow searches).

If you know of a new company or person involved in the mechanical industry, please forward their name. Besides Engineers, we are looking for Building Owners, Manufacturer's, Contractors, Architects, Public Utilities. Registration forms may be obtained at the Chapter meeting, or on the Society web site at www.ashrae.org

Tom Pollard
(519)685-2570

Technical Sessions

Bill Rutherford P.Eng. from Vanderwesten & Rutherford Ltd will be doing this months Tech Session on "Sizing Ductwork To Meet NFPA 96". Bill will cover the sizing requirements of NFPA 96 and showing how to calculate the static pressure losses in the duct systems at the required higher velocities.

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Program

We have our speakers and topics 99% set for the year, however we still have a few openings for the table top presentations and the Tech Sessions before each meeting. As a reminder, the cost of the table top display is \$100 and includes one meal ticket.

The Tech Session is a 1/2 presentation before the formal meeting, this is an opportunity to transfer technical information to our members. I would like to hear from you with any ideas you would like to see covered, or if you have a presentation available to think would benefit the members we too would like to hear from you.

Please see the outline on this months Tech Session by Bill Rutherford.

Daryl Somers
Program Chairperson
652-1977



TEGA

This year, the ASHRAE Government Issues Update will periodically be included in the newsletter. This month's update is on reporting of Greenhouse Gas Emissions. (See Page 4)

Derek Vakaras

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GREEN HOUSE GAS REORTING By Jim Cox—Washington Office

World communities are initiating efforts to determine the quantities of greenhouse gases (GHGs) being emitted into the atmosphere. Broad-stroke emission estimates can be made using data on the production quantities of feed stocks (sources) which ultimately produce greenhouse gases. For example, carbon dioxide (CO₂) emissions resulting from combustion processes can be estimated using various data including the annual production of fossil fuels. However, production data would not represent the atmospheric emission rate for GHGs such as hydrofluorocarbons (HFCs) in closed-system applications (such as use as refrigerants).

Mechanisms to collect emission data have been evolving for several years. Industrial nations, including Canada and the U.S., have initiated voluntary reporting programs for GHG emissions. In the Energy Policy Act of 1992 (EPACT), the U.S. Congress authorized the Voluntary Reporting of Greenhouse Gases Program, which is open to corporations, government agencies, organizations and even households. A report of emissions of GHG, as well as actions taken to reduce or avoid emissions, can be reported to the Energy Information Administration (EIA) which is part of the U.S. Department of Energy (DOE).

Alternative Fluorocarbon Environmental Acceptability Studies (AFEAS) collects and publishes world-wide data (www.afeas.org).

1998 U.S. data

A compilation based on the data submissions for the year 1998 is available on the internet at <http://www.eia.doe.gov/oiia/1605/frntvrgg.html>. The EIA reports that the participation of electric utilities remains strong while the number of reports from non-utilities increased sharply. The largest number of reports and the largest emission reductions (almost 76% of the total reductions reported) were by the electric power industry, which includes generation, transmission, distribution and cogeneration. Alternative energy accounted for more than 17% followed by the industry sector at less than 5%. The industry sector is comprised of automotive, chemical, petroleum refining, metals, coal mining and electronic equipment. Agriculture and forestry accounted for 1% with the remaining one percent in other smaller categories.

The federal government has a number of government-sponsored voluntary programs to encourage specific projects that reduce GHG emissions. "Government sponsored" does not imply government funding for the project, but rather the government provides the tools, support and visibility. Most reporters participate in one or more such projects (which include the Climate Change Challenge, the Landfill Methane Outreach Program, the Energy Star Building program, the EPA Green Lights Program, the Natural Gas STAR Program, etc.).

The projects are widely distributed geographically within the U.S. A limited number are located abroad where U.S. companies are involved in projects outside the boundaries of the country. All six targeted greenhouse gases are part of the reporting process along with progress in carbon sequestration. Halogenated substances include HFCs, perfluorocarbons (PFCs) and sulfur hexafluorine (SF₆), but the reported reductions were almost entirely in PFCs.

The U.S. General Accounting Office (GAO) has been evaluating the Voluntary Reporting of Greenhouse Gases Program for the Congress. The GAO acknowledged the Department of Energy™s (DOE) efforts to help insure the quality of the data reported. DOE has developed guidelines, established a review and assistance process to check arithmetic accuracy and internal consistency of information reported and requiring certification. A second GAO assessment is under way which focuses on the processes and methodologies employed to develop emission reduction estimates.

Experience is being gained in the overall gathering and processing of GHG information. The voluntary reports can be made on electronic software either downloaded or available on CD-ROM. When processed, a Public Use Database is made available.

The data submissions for the year 1999 were to be submitted to DOE by June 2000. New software had been developed for this sixth reporting cycle.

Canada™s reporting program

Other nations have programs underway in an effort to establish a public record of GHG emissions and reductions. Canada established its Voluntary Challenge Registry in 1994 as a key component of its National Action Program on Climate Change. The program encourages public and private sector organizations to limit or reduce GHG emissions. Reporters are

asked to submit a letter of intent outlining commitments to reducing GHG emissions. Identifying activities and establishing broad goals. Also requested are action plans and progress reports.

The Canadian program has been privatized with industry assuming two-thirds of the funding responsibility and the federal and provincial governments assuming the remaining third. Those who report have the opportunity to gain practical experience in emissions trading through the newly established Greenhouse Gas Emission Reduction Trading (GERT) pilot program. This is a test market for industry, governments and other organizations for buying and selling emissions reductions.

Australia program

Australia initiated the Greenhouse Challenge program in 1995 as part of its National Greenhouse Response Strategy. This flexible program allows participants to devise their own emission reduction schemes while government provides technical and promotional support. A newly created Australian Greenhouse Office administers the program. Companies and other entities joining the Challenge are expected to negotiate cooperative agreements with commitments to prepare emission inventories, to develop action plans reducing emissions and to estimate expected emissions reductions. Australia™s goal is to sign 500 cooperative agreements by the turn of the century and 1000 agreements by the year 2005.

ASHRAE LONDON CHAPTER PROGRAM 2000 / 2001

DATE	TOPIC	SPEAKER	ORGANIZATION	TECH SESION	TABLE TOP
Mon. Sept. 25 2000	Changes To Weather Data	Bob Morris	Environment Canada	-	-
Mon. Oct. 30 2000	Changes To NFPA-96, 1998	Tom Mills	Spring Air Systems	Kitchen Exhaust Duct Sizing Bill Rutherford, P. Eng	Spring Air Systems
Mon. Nov. 27 2000	Balancing Of Hydronic Systems	Phil Searle	ITT B&G	Balancing	-
Dec.—No Meeting	-	-	-	-	-
Mon. Jan. 29 2001	Venting of Fuel Appliances	Darryl Mathews	Union Gas	Vent Sizing	-
Mon. Feb. 26 2001	Ultraviolet Technology in HVAC	Derald Welles	Sterl-Aire	Filtration	E.H. Price - U.V. Products
Mon. Mar. 26 2001	Presentation of ASHRAE 90.1	Derek Vakaras	Chorley & Bisset	-	-
Mon Apr. 28 2001	Gas Monitoring Technology	Louis Biondo	MSA Canada	-	MSA Canada
Mon. May 28 2001	Tour	-	-	-	-
June, 2000	Golf Tournament / Membership Promotion				

