

Lehigh Valley Insights

JOURNAL OF THE LEHIGH VALLEY CHAPTER OF THE ASHRAE, INC.

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January 2010

2009-2010 LEADERS

MEETING NOTICE

OFFICERS

President: Stuart Heisey
(610) 336-0432

Vice-President Elect: Donovan
Denlinger (610) 567-5042

Vice-President (Golf Outing)
Mike Schultz (484) 223-1730

Secretary: Stephen Phillips
(610) 641-0096

Treasurer: Gabe Badesso
(484) 223-1730

BOARD OF GOVERNORS

Don Chase (215) 491-1700
Ray Forsthoefel (484) 223-1730
Bryan Sandt (610) 253-9677
Ethan Fick (610) 694-8020

COMMITTEE CHAIRPEOPLE

Membership Promotion: Matt
Matsinko (610) 530-2600 ext. 126

Student Activities: Paul Kuhn
(610) 715-5364

CTTC: Tom Serwatka
(215) 654-8040

Research Promotion:

Frank Paretto, Jr. (610)-421-8512

Historian:

William Trach (610) 395-3617

Newsletter Editor: Ray Forsthoefel
(484) 223-1730

c/o Trane of Northeastern PA
5925 Tilghman St. Suite 70
Allentown, PA 18104
E-mail : rjforsthoefel@trane.com

Webmaster: Stuart Heisey

Homepage Editor: Frank Paretto, Jr.

WWW.LVASHRAE.ORG

Wednesday, February 24, 2010

Climate Change – OK now What?

at

Mango's Coastal Cuisine

**3750 Hamilton Blvd., Allentown, PA 18103
(Route 222 North)**

- 4:30 – 5:30 p.m. **Board of Governors Meeting**
(Chapter members are welcome to attend)
- 5:30 – 6:15 p.m. **Pre-Dinner Talk**
Topic: Climate: Science, International Politics
Speaker: Tom Wekema
Program Chair: Gabe Badesso
- 6:15 – 6:45 p.m. **Social Half Hour** (Cash Bar)
- 6:45 – 7:45 p.m. **Dinner**
- 7:45 – 8:45 p.m. **Dinner Program**
Topic: Ozone: HFC Amendment & Process
Speaker: Tom Werkema
Program Chair: Gabe Badesso

Reservations: Call Tom Serwatka, Jr. at 215-654-8040 or
Email: thomas.serwatka@siemens.com
Students \$15.00
Members & Guests \$30.00

Please make your reservations by Noon on Monday, February 22nd with our choices of beef, fish or chicken.

President's Message

Ladies and Gentlemen:

With the February blizzards behind us, the heat of summer will be at our doorstep in a wink. Soooo, this month's presentation should be seasonally inappropriate, but applicable to our industry and the direction things are going legislatively and by popular demand.

But before more on that, I would like to thank last month's presenter, Mr. Richard Lord for his presentation on **ASHRAE Standard 90.1** and **ANSI/ASHRAE/USGBC/IES Standard 189.1, Standard for the Design of High –Performance Green Buildings Except Low-Rise Residential Buildings**. Those of you who attended received a brain full of information about upcoming changes to 90.1 and the new player in the Code Intended energy standards, 189.1. Be sure to keep an eye on these two important documents over the next few years, and beyond.

Our presenter this month is no less engaging and informed than last month's presenter. The meeting topic will focus on the ever changing landscape of commercial refrigerants, including the legislative landscape that invariably impacts much of what we do now and will do in the future. Please see the write-up later in the newsletter for a more detailed summary of the Mr. Werkema's presentation.

We look forward to seeing many of you at the meeting on February 24th. Stay warm and get involved!!!

Stuart J. Heisey, PE
President
Lehigh Valley Chapter – ASHRAE

February 24th Meeting

Pre-Dinner Topic:

Climate: Science, International politics, Washington, D.C. EPA, State Regional and other Countries

Post Dinner Topic:

Ozone: HFC Amendment & Process, US EPA, Ozone hole update.

About the Speaker:

Tom Werkema is a Chemical Engineer graduate from the University of Michigan, with an MBA from Grand Valley State University. Tom has been a Distinguished Lecturer since 2001, specializing in Ozone and Climate issues. He has attended the international meetings on both issues for the past 17 years and is an internationally known expert, having been acknowledged by the Nobel Peace Prize in 2007. Tom was elected Director at large in 2009 and now participates with the Board at numerous meetings throughout the year.

**Board of Governors Meeting
January 20, 2010**

Officers Present:

Stuart Heisey
Stephen Phillips
Donovan Denlinger
Gabe Badesso

Board of Governors Present:

Ethan Fick

Committee Chairs Present:

Matt Matsinko
William Trach
Frank Paretti

Old Business:

October meeting minutes approved.

New Business:

2010 Remaining Programs discussed

March ATC Interoperability – Tom Serwatka
Tom to send outline of meeting plans.
May be roundtable, etc.

April Sands Casino Round Table – Stephen Phillips

April 21 Afternoon ASHRAE Webcast –
Commissioning – Tom Serwatka

May Sands Casino Tour – Stephen Phillips

June Golf Outing – Mike Schultz
Mike Schultz Frank Paretti and Stuart Heisey to
meet in February to start the ball rolling.

Officers' Reports:

Treasurer – Gabe Badesso reported that paypal/
Credit card payments are now accepted for
Chapter meetings via the website. Gabe will report the
full status of finances at the next meeting.

Chair Reports:

Membership Promotion:

Matt Matsinko distributed various reports and member
delinquency was reviewed.

Research Promotion:

Fund raising even was considered for winter 2009 but
tabled until 2010 due to planning constraints.

**ASHRAE Standard 189.1
Press Release**

**Standard 189.1 to Provide a Strong Foundation for
High-Performance Green Buildings**

ATLANTA—A new standard for the design of high-performance green buildings is set to revolutionize the building industry. Published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), in conjunction with the Illuminating Engineering Society of North America (IES) and the U.S. Green Building Council (USGBC), Standard 189.1, *Standard for the Design of High-Performance, Green Buildings Except Low-Rise Residential Buildings*, is the first code-intended commercial green building standard in the United States.

The standard, published Friday, provides a long-needed green building foundation for those who strive to design, build and operate green buildings. From site location to energy use to recycling, this standard will set the foundation for green buildings through its adoption into local codes. It covers key topic areas similar to green building rating systems: site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources. For complete information on the standard, including a readable copy, visit www.ashrae.org/greenstandard.

The energy efficiency goal of Standard 189.1 is to provide significant energy reduction over that in ANSI/ASHRAE/IESNA Standard 90.1-2007. It offers a broader scope than Standard 90.1 and is intended to provide minimum requirements for the siting, design and construction of high performance, green buildings.

"The far-reaching influence of the built environment necessitates action to reduce its impact," Gordon Holness, ASHRAE president, said. "Provisions in the standard can reduce negative environmental impacts through high-performance building design, construction and operations practices. Ultimately, the aim is not just energy efficiency but a balance of environmental responsibility, resource efficiency, occupant comfort and well being and community sensitivity, all while supporting the goal of sustainable development."

"IES is pleased to be a cosponsor of this standard that will have a significant impact on requirements for high-performance green buildings and the building industry as a whole," Rita Harrold, director of technology for IES, said. "We congratulate the Project Committee for the tremendous effort and dedication of its members in the fast track development of a consensus standard. We look forward to continuing the partnership with ASHRAE

ASHRAE Press Release

BACnet

and USGBC as the standard continues to evolve through future continuous maintenance proposals."

"Greening the building code is fundamental to the U.S. Green Building Council's goal of market transformation and is also a critical factor in how the building industry is working to mitigate climate change," said Brendan Owens, VP, Technical Development, U.S. Green Building Council. "We're extremely excited to see our collective efforts over the past three years come to fruition in the form of this important standard."

Standard 189.1 has been written by experts representing all areas of the building industry, including engineers, lighting designers, sustainability experts, building owners, designers, architects, code and compliance officials, utilities, materials experts and equipment manufacturers. The technical requirements in the standard were also supported by input from the building industry during the public review process.

To order, contact ASHRAE Customer Service at 1-800-527-4723 (United States and Canada) or 404-636-8400 (worldwide), fax 404-321-5478, or visit www.ashrae.org/bookstore.

The cost of Standard 189.1 is \$119 (\$99, ASHRAE members)

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Editors Note: Interviews with representatives from ASHRAE, USGBC and IES can be scheduled upon request.

BACnet Adds Language Options for Both Computers and Humans

ATLANTA – At ASHRAE's 2010 Winter Conference held recently in Orlando, the BACnet committee celebrated the approval for final publication of eight addenda to the ANSI/ASHRAE Standard 135, *A Data Communication Protocol for Building Automation and Control Networks*.

The addenda are expected to be available on ASHRAE.org by the end of February.

The addenda include a specification for a standard way of representing data in XML that will give BACnet new capabilities for communications between a wide range of applications. The Extensible Markup Language (XML) is a popular technology in the data processing and communications worlds due to its capability to model complex data and its flexibility to be transformed and extended.

"With this new IT-friendly way of representing building data, BACnet will open up new ways to communicate. XML can be used for exchanging files between systems, communicating with the Smart Grid, and expanding enterprise integration with richer Web services," said Dave Robin, chair of the BACnet committee.

The XML syntax is intended to be the core data representation for a variety of uses:

- Powerful new Web services that are capable of efficient exchange of complex structured data.
- An electronic version of a BACnet PICS document, consumable by workstations and other tools, to describe the capabilities of a device.
- An "as built" description of a deployed device, distributed either as a separate file or as a BACnet File object resident in the device itself.
- Descriptions of proprietary objects, properties and data types, which may be simple, for basic data sharing purposes, or extremely rich, providing complete descriptions of the meaning and usage of the data in multiple human languages.
- An export/import format for tools and workstations publish their knowledge of a complete system of devices and networks.
- An XML version of an EPICS, including the complete test database and other test-oriented data.

In addition to the new "computer language" of XML, another addendum has added an important new capability for human languages as well. When the Unicode character set was created many years ago, it was constructed to be universal set of characters to support most of the world's languages together in one stream. However, its original 2-byte encoding caused trouble with a lot of existing systems that were

designed to process only the 1-byte characters common in western languages. The "UTF-8" encoding was created to solve this problem and quickly became a very popular method of conveying international text on the World Wide Web. BACnet has also embraced this standard and uses it in a way that fully takes advantage of its compatibility with the existing and ubiquitous ANSI/ASCII character set.

BACnet has also added support for more data types as well. A set of new "Value" objects rounds out BACnet's ability to represent different data types in a uniform and standard way. Added to the original Analog, Binary and Multi State Value objects, are new Value objects for every primitive datatype that BACnet supports, including support for character strings and large numerics.

ASHRAE, founded in 1894, is an international organization of some 50,000 persons. ASHRAE fulfills its mission of advancing heating, ventilation, air conditioning and refrigeration to serve humanity and promote a sustainable world through research, standards writing, publishing and continuing education.

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**LEHIGH VALLEY CHAPTER OF ASHRAE
2009-2010 MEETING SCHEDULE**

MONTH	TECHNICAL/DINNER PROGRAM	Event	PROGRAM CHAIR
Sept 23 rd	Noise & Vibration Control – Kris Kollevoll		Ray Forsthoefel
Oct. 21 st	Electrical Deregulation	Membership Promotion #1	Paul Kuhn
Nov. 18 th	Future Cities	Student Activity #1 (Future Cities)	Tracy Hansen & Paul Kuhn Stuart Heisey
Dec.	No Meeting		
Jan. 20 th	ASHRAE 90.1 – 2010 - Richard Lord		Donovan Denlinger
Feb 24 th	Global Warming / Refrigerants / Ozone – Tom Werkema	Student Activity #2	Gabe Badesso
Mar 24 th	Interoperability of ATC protocols	Membership Promotion #2	Tom Serwatka, Jr.
Apr. 28 th	Sands Casino Project Team Roundtable Discussion	Research Promotion #2	TBA
May 26 th	Tour – Sands Casino		Stephen Phillips
June 4 th	Golf Outing / Green Pond		Michael Schultz