

# Delaware Air Currents CRC EDITION

The Journal for the Delaware Chapter of the American Society of Heating Refrigeration and Air Conditioning Engineers

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ASHRAE Technology for a Better Environment

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## Chapters Regional Conference

Contents	
Chapters Regional Conference	1
Governor Markell	1
Technical Sessions	2
Future of Refrigerants	3
PS DuPont Middle School	3
Advanced Energy Design Guide	4
Variable Chilled Water/Refrigerants	4
Welcome Reception	5
Companion Tour	5
Calendar of Events	7

Dates: **Thursday August 12<sup>th</sup> through Saturday August 14<sup>th</sup>**

Location: **Christiana Hilton**

The Delaware Chapter of ASHRAE is pleased to announce that it will host the 2010 Chapters Regional Conference (CRC).

Once a year delegates from ASHRAE Chapters Region III meet to discuss the national agenda and to nominate and

vote for the Region III officers. The officers from the Region III Chapters will meet to discuss how the Chapters can be more effective servicing the needs of the members and local HVACR Community. The following is a list of activities planned:

- Technical Sessions**
- Welcome Reception**
- Companion Tours**
- Open Session with Prominent Delaware State Official**



The CRC is a perfect opportunity to network with HVACR professionals from the Mid Atlantic Region

For more info click on this link: <http://region3.ashraeregions.org/>

## A Prominent Delaware Official to Speak at CRC

On Thursday August 12<sup>th</sup> A Prominent Delaware Official will host on open session at 12:00pm.

A Prominent Delaware Official will speak on the Delaware Green Initiative Program.

The Delaware Green Initiative is a program that will reshape the Delaware economy so that the State can compete in the 21<sup>st</sup> century economy.

A Prominent Delaware Official will present on how we can transform the Delaware Business

environment and state infrastructure to nurture and support green businesses.

A Prominent Delaware Official will also discuss the importance of developing green industries and by developing green industry we can attract the fast growing firms that will provide jobs and drive the state's economic growth.

A Prominent Delaware Official session will be open to the public. No fees will be applied for this session.

Delaware ASHRAE invites all chapter members and members of the HVACR community to attend this

session.



A Prominent Delaware Official to speak on Delaware's Green Initiative



Come Hear About Initiatives for Delaware's Green Economy

## 2010 CRC to Host Technical Sessions

Technical Sessions are an inexpensive way to keep current and earn PDH's/EDU's



The CRC's Technical Sessions are an ideal way to earn PDH's while keeping up on the current trends in Architecture and Engineering.

The Technical Sessions will be held on Thursday August 12<sup>th</sup> at the Christiana Hilton.

Technical Sessions will be conducted in both the morning and afternoon. Attendees can purchase half day or full day technical sessions.

- ½ day technical sessions are worth 3.0 PDH's and cost \$80.00/\$15.00 student
- Full day technical sessions are worth 6.0 PDH's and cost \$150.00/\$50.00 student
- Registration for the early ½ day/full day session will be at 8:00pm
- Registration for the late ½ day session will be at 1:00pm

The following is the schedule for technical sessions:

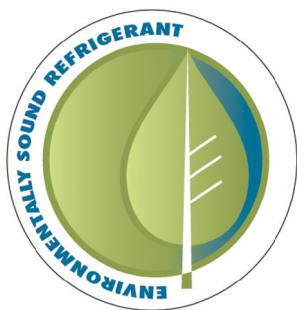
- Session 1 Track 1: 8:30 am – 11:30 am; 3 PDH's/EDU's; The Future of Refrigerants; Conducted by Barbara Minor (Fellow @ E.I. DuPont de Nemours & Company)
- Session 1 Track 2: 8:30 am – 11:30 am; 3 PDH's/EDU's; LEED by accident; The Case Study on P.S. DuPont Middle School path toward LEED Certification; Conducted by John Read (Head of Facilities Planning and Construction for the Brandywine School District)
- Session 2 Track 1: 1:30 pm – 4:30 pm; 3 PDH's/EDU's; Advanced Engineering Design Guides and the Path to Net Zero Buildings; Conducted by Terry E. Townsend, P.E., (President Townsend Engineering, ASHRAE Fellow; Former ASHRAE National President 2006-2007)
- Session 2 Track 2: 1:30 pm – 3:30 pm; 1.5 PDH's/EDU's; Variable Primary Flow Chilled Water Systems; Conducted by William P. Bahnfleth, PHD, PE ( Pennsylvania State University)
- Session 2 Track 2: 1:30 pm – 3:30 pm; 1.5 PDH's/EDU's; Variable Refrigerant Flow Systems; Conducted by Julian R. deBulleet ( McQuay International)

We Look Forward to Seeing Everyone at the 2010 Region III CRC



Earn up to 6 PDH's at the CRC's Technical Sessions

## The Future of Refrigerants



Barbara Minor – Fellow DuPont will speak on the Future of Refrigerants

The effects of refrigerants on global warming and ozone depletion are becoming more defined.

This will result in increased regulatory pressure and the eventual phase out of the current refrigerants.

Barbara Minor, Research Scientists in Refrigerants and Engineering Fellow at E.I. DuPont de Nemours & Co. will conduct a technical

session on current and future trends in the refrigerant industry.

This will include:

Regulations effecting HFC refrigerants

Replacements for R-123, R-134A, R-410A & R-407C

Development Activity on low GWP & ODP refrigerants

Barbara has twenty years experience developing refrigerants and holds over 100 US Patents for Refrigerants.

Barbara is a past chair of ASHRAE Committee TC3.1 – Refrigerants and Secondary Coolants and is on the AHRI Steering Committee and Research and Technology Committee.

## PS DuPont Middle School – LEED Without Trying



PS DuPont is a recently renovated Historic Building that is eligible for LEED Certification

PS DuPont Middle School is an 80+ year old school listed on the National Registry of Historic Buildings.

When renovations were planned for P.S. DuPont LEED was not considered.

By combining an energy efficient Architectural and Engineering Design, Good Construction Practices and Elements Unique to the School P.S. DuPont achieved LEED with minimal effort.

John Read – Head of Facilities Planning and Construction will present on the design and construction process including lessons learned from the process.

John will also discuss the Brandywine School District strategy for future LEED renovations and how it will impact the decision making process.

Please join us to learn more on how to achieve a LEED rating by combining the unique an existing building with sound engineering and architectural practices.



Join us at the CRC to learn how PS DuPont became eligible for LEED Certification

## Getting From AEDG's to Net Zero Energy Buildings



Terry Townsend to Speak at CRC on Net Zero Buildings

Building account for nearly 40% of U.S. Energy use.

ASHRAE, IESNA, USGBC, AIA and the DOE have collaborated on a series of Advanced Energy Design Guides (AEDGs) for at least 30% energy savings

Use of AEDG's are an accepted method for obtaining LEED NC certification in lieu of Building Simulation.

Join Terry Townsend; President Townsend Engineering, ASHRAE Fellow; Former ASHRAE Society President 2006-2007 for a presentation on how to apply the AEDGs to gain LEED points and maximize energy efficiency.

The presentation provides a an overview of the AEDG process as well as examples of packages and case studies from each guide.

Terry will inform us on the growing trend of net zero buildings. He will provide examples of today's Zero-Energy Buildings.

Terry will also talk on activities that will aggressively move buildings to substantial energy savings over the next few years.

## Variable Chilled Water/Variable Refrigerant Systems



Tech Sessions will Cover Green Technologies Variable Chilled Water and Variable Refrigerant Systems

Variable primary flow is being adopted in chilled water design with increasing frequency as a lower cost more efficient alternative to primary/secondary design.

William Bahnfleth, PHD, PE, Professor and Director of Indoor Environment Center in the Department of Architecture Engineering at Pennsylvania State University will speak on this

topic at this year's CRC

Variable Refrigeration Volume (VRV) Systems have been used in Asia and Europe for more than twenty years.

VRV systems have evolved from simple ductless systems to ducted a water cooled systems.

Julian deBullet, Director of Industry Relations for McQuay International will

Introduce us to the concepts of VRV systems. Julian will also compare VRV hybrid applications to traditional chilled water applications and discuss energy savings of VRV's when compared to more conventional systems.

Learn more about the CRC Tech Sessions by Clicking on the Following Link: <http://region3.ashraeregions.org/>

## Join us at the CRC Welcome Session



Join ASHRAE for the CRC Welcome Session at a Blue Rocks game

The Welcome Session for this year's Chapter's Regional Conference will be held at Frawley Stadium in Wilmington Delaware.

Come joins us for a Family Friendly Night of Baseball The Welcome Session will be held in one of the Stadiums Café/Sky Box.

We will start the evening with a Buffett Dinner with Stadium Food available

throughout the game.

Rocky Bluewinkle will visit to obtain both the young and the young at heart

We will conclude the evening with fireworks framed by the Wilmington Skyline.

The Welcome Session will be held on Friday August 13<sup>th</sup> from 6:30pm to 9:30pm

Price for the Welcome Session is \$40.00/person



The Welcome Session is a Perfect Opportunity to Network with other Mid-Atlantic Professionals

Register for the CRC Welcome Sessions by Clicking on the Following Link: <http://region3.ashraeregions.org/>

## Companion Tour at Nemours Mansion & Gardens



CRC Companion Tour will be at the Nemours Mansion and Gardens with Lunch at the DuPont Country Club

The Nemours Mansion and Gardens Built in 1908 by Alfred I DuPont has recently been restored and opened to the public.

The 2010 CRC Companion Tour will include a tour of the mansion and gardens with Lunch at the Dupont Country Club.

The Companion Tour will be held on Friday August 13<sup>th</sup>

from 9:30am to 3:00pm

The Companion Tour will cost \$40.00 per person

Come join ASHRAE on a visit to this one a kind Mansion and Gardens.

The Gardens contain sweeping vistas and breathtaking views at the turn of each corner.

The Mansion is a classic example of Late 18<sup>th</sup> Century French Architecture and contains then "latest" technology from the turn of the 20<sup>th</sup> century.

Register for the Companion Tour by Clicking on the Following Link: <http://region3.ashraeregions.org/>

## Got Something to Say?



Delaware ASHRAE wants to hear from you

Have you recently completed a LEED or Energy Star certified project?

Has an employee or your firm reached a significant milestone?

Was your firm awarded a significant project?

Is your firm looking to hire and would like to target HVAC professionals in the area?

Are you launching a marketing program for a new product?

Do you have expertise or an experience that you wish to share with the HVAC community?

Delaware Air Currents is an excellent opportunity to reach professionals and decision makers in the Delaware Market Place.

Material can include letters to the editor, classified ads, Member news, upcoming events, Comments on chapter programs or issues, etc. Feel free to send content to John Davis at

[John.Davis3@kbr.com](mailto:John.Davis3@kbr.com) or call at 302-668-6378

### Content Publication

Any Member who wishes to submit content in Delaware Air Currents can submit it to:

Newsletter Editor:  
John Davis  
E-mail:  
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(C) 302-668-6378

Any Member who wishes to submit web content can submit to

Website Editor:  
Doug Edwards  
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(O) 302-395-0200  
(C) 302-668-4441

We're on the Web!  
<http://delaware.ashraechapters.org/>

### Delaware ASHRAE Board:

President:  
**John Davis**  
BEK Engineering

President Elect:  
**Toby Pierce**  
Delaware Engineering & Design

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Secretary:  
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Coward Environmental  
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TBD

### Board of Governors:

**George Wells**  
Comverge

**George Sestak**  
AstraZeneca Pharmaceuticals

**Bob Shunke** R.D.  
Bitzer

### Delaware ASHRAE Chairs:

Research Promotion: TBD

Chapter Technology Transfer:  
**Toby Pierce** Delaware  
Engineering & Design  
[tobypdeashrae@dedceng.com](mailto:tobypdeashrae@dedceng.com)

Membership Promotion: **Greg**  
**Munters** Coward  
Environmental  
[greg@cowardenvironmental.com](mailto:greg@cowardenvironmental.com)

### Delaware ASHRAE Chairs Cont'd:

YEA & Student Activities:  
TBD

### Chapter Historian:

**George Wells**  
Comverge

Golf Outing:  
**Bob Schunke**  
**Frank McFadden**

ASHRAE Directory:  
TBD

CRC Co-Chairs:  
**Judy & Larry Hughes**  
Alpha Engineering

## 2010/2011 Calendar of Events



ASHRAE Technology for  
a Better Environment

Keep your calendars open for the following upcoming Delaware ASHRAE events:

Event:	Date:	Time	Location:
Board Meeting	Sept 1	12:00pm	KBR Engineering
Monthly Meeting	Sept 8	5:30pm	PS DuPont Middle School
Topic: Tour of LEED Certified Historic Building			
Board Meeting	Oct 6	12:00pm	KBR Engineering
Monthly Meeting	Oct 13	5:30pm	Christiana Hilton
Topic: Integrated Project Delivery			
Board Meeting	Nov 3	12:00pm	KBR Engineering
Monthly Meeting	Nov 10	5:30pm	Christiana Hilton
Topic: Building Information Modeling			
Board Meeting	Dec 1	12:00pm	KBR Engineering
Monthly Meeting	Dec 8	5:30pm	Christiana Hilton
Topic: Building Forensics – Investigative Engineering			
Board Meeting	Jan 5	12:00pm	KBR Engineering
Monthly Meeting	Jan 12	5:30pm	Christiana Hilton
Topic: PJM Demand Response			
Board Meeting	Feb 2	12:00pm	KBR Engineering
Monthly Meeting	Feb 9	5:30pm	Christiana Hilton
Topic: The Ethics and Economics of Energy Conservation			
Board Meeting	Mar 2	12:00pm	KBR Engineering
Monthly Meeting	Mar 9	5:30pm	Christiana Hilton
Topic: Determining Your Carbon Footprint			
Board Meeting	Apr 7	12:00pm	KBR Engineering
Monthly Meeting	Apr 14	5:30pm	Christiana Hilton
Topic: Commissioning Round Table			
Golf Outing	TBD	TBD	Dupont Country Club
Board Meeting	May 5	12:00pm	KBR Engineering
ASHRAE 189.1 Seminar	May 20	12:00pm	TBD

We're on the Web!

For more, see  
<http://delaware.ashraechapters.org/>