

ASPEnewsletter

Southwestern Ohio Chapter

Nov 2010 Volume 28 Issue 6

Chapters are not authorized to speak for the Society

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The *ASPEnewsletter* is published by the Southwestern Ohio Chapter of the American Society of Plumbing Engineers (a non-profit organization). Opinions expressed herein are those of the authors and do not necessarily reflect the views of the Southwestern Ohio Chapter, American Society of Plumbing Engineers or the Editor.

ASPE January Meeting

Date: TUESDAY, January 19th

Location: Location: RAMADA INN, 6147 W St Rte 122, Middletown, Ohio. 513-424-1201. From I-75, take the Middletown Exit and go east to the Ramada Inn.

Schedule: 11:30-12:00 PM Lunch
12:00-12:45 PM Program

Speaker: "Seismic Bracing" presented by Chris Jacobs of ISAT Inc. and Pat Murphy of Midwest Spec.

Cost: \$20 at the door Engineers/Designer/Contractor/Code Official
\$140/Year Meal Assessment. \$25 at the door Mfg. Rep./Vendor
or \$160/Year Meal Assessment

Reservations: Contact Bob McCain of BSE at (e-mail) rlmccain@bseltd.biz, (phone) 937.312.0217 or (fax) 937.438.0195 before **MONDAY January 18th** so that a head count can be established. As always, guests are welcome. Bring a friend.

FUTURE MEETING SCHEDULE

Jan 19, 2010 "Seismic Bracing" presented by Chris Jacobs of ISAT Inc. and Pat Murphy of Midwest Spec.

Feb 16, 2010 "Specialized Fixed Fire Control Systems & The Adding of F-500" presented by Thomas Price of Hazard Control Technologies

Mar 16, 2010 "Comparisons of Hot Water Boiler/Storage Tank VS Tank Type Heater for Commercial Applications" presented by Denny Lammers of Campbell Equipment Company.

June 1, 2010 Dayton Dragons

June 2010 Region II Presidents Meeting

**All meetings held in Middletown unless noted otherwise
All meeting topics subject to change without notice**

January/February 2010						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
10	11	12	13	14 Start the new year RIGHT; make your reservation	15	
17	18 MLK Day	19 SW Ohio Chapter meeting	20	21	22	23
24	25	26	27	28	29	30
31	1	2 Groundhog Day	3	4	5	6

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Announcing...

Greening the Heartland 2011

A Regional Conference of the US Green Building Council

June 20 - 22, 2011

Cincinnati

The Cincinnati Regional Chapter of the USGBC is proud to announce that Cincinnati has been selected as host city of the 8th annual Greening the Heartland Conference.

This event will bring together architects, engineers, landscape designers, planners, developers, builders, contractors, product vendors, city and state officials, elected officials, real estate professionals, environmental advocates, and scholars.

It will feature lectures, seminars, training sessions, exhibits, tours, and other networking opportunities that will focus on promoting the design, construction, and operation of green buildings and communities.

More than 1,200 are expected to attend from the 12 Midwest states and beyond. More than 90 exhibitors are expected to present.

Technical jargon...

- In recent years, design professionals have been adding fire pumps where necessary to meet the requirement to provide 100 psig at the top of a standpipe per NFPA 14. However, there is an exception **in the appendix of NFPA 14 that allows us to disregard the pressure requirement.**

Specifically:

A.5.4 *The committee's intent is to permit the omission of a fire pump as part of the standpipe system in non-high-rise buildings when the automatic sprinkler system can be designed and installed with the available water supply and the flow and pressure demands of the standpipe system can be provided by the fire department apparatus through the fire department connection.*

This makes sense since the fire department will have the building's fire suppression system pressurized with their pumper before they use the hose valves.

Note that if you are going to take this exception, make sure that you notify the Authority Having Jurisdiction that issues the approval and send a copy of the approval to the Client/Architect so they can coordinate with the Plans Examiner. Also note that there may be instances where you cannot take this exception.

- Lochinvar Corporation is pleased to announce the availability of **twenty-six 3D Revit computer models**. The models are available for free download on www.lochinvar.com. Go to "Products / Product Documentation" and look towards the bottom of "Support Documentation" for "Revit" models.

Currently, Lochinvar has completed 3D models for the following products:

- Armor 150-800 water heaters
- Knight 080-285 residential floor mount boilers
- Knight XL 399-800 commercial boilers
- Shield 150-500 water heaters
- SYNC 1000-1500 boilers

Lochinvar is working on Knight 050-210 residential wall-mount boilers and a host of other Lochinvar products. The models are compatible with the Revit 2010 edition and are not compatible with Revit 2009 or MEP drafting software.

If you have any questions, please contact David George, Product Manager, via e-mail at dgeorge@lochinvar.com or telephone at 615.889.8900, X2342.

- For those contractors that work in Indiana, effective January 7th, **Indiana 811 will start using additional servers to send out your service locate requests.** To ensure ticket delivery please white list the following IP addresses:

- 207.250.79.88/29
- 74.203.158.184/29

- 66.162.116.250/29
- 66.192.66.99/29

If you have any questions, please contact Marsha Cuvelier at mcuvelier@indiana811.org.

-Casper the Friendly Ghostwriter

Legislatively speaking...

- The **2010 edition of NFPA 13** has been formally released. Some of the more significant changes include:

All wet-pipe sprinkler systems will be required to have a minimum ½ inch relief valve to relieve any system pressures exceeding the maximum working pressure. The use of heat collectors (or, if you prefer, heat traps or heat shields), rather than locating the sprinkler properly in relationship to the ceiling, will no longer be allowed.

Sprinklers **MUST** be located at the top and bottom of elevator shafts that use polyurethane-coated steel belts or other similar belt materials.

Where flexible sprinkler hose fittings are used in suspended ceilings, a warning label concerning relocating the sprinkler must be provided. Sample wording is provided in an annex.

There are several changes in regard to storage of commodities found in NFPA 13. These include: All roof vents must be manually operated or automatically activated by an operating mechanism with temperature rates higher than those of the sprinklers below. ESFR sprinklers cannot be used in buildings with automatic vents unless the vent operating mechanism uses a high temperature standard response rating. Draft curtains may not be used within ESFR system boundaries but can be used at boundaries separating ESFR and other systems.

There are expanded and clarified rules concerning large spaces between the top of storage and ceilings.

The term 'large drop sprinkler' has been eliminated. These sprinklers are now considered a form of Control Mode Specific Application (CMSA) sprinklers; all large drop requirements have been consolidated into the CMSA requirements.

In Chapter 20, three new sections have been added to address special storage criteria regarding records and files. These cover protection above and below catwalks in carton record storage, compact storage of print documents and protection of high bay records storage.

There will be a new requirement that when a water flow test is used for system design, it must be performed within 12 months of plan submittal.

The standard's scope statement makes it clear that the intent of the sprinkler system is to protect against a single fire only and not multiple fires within the same fire zone.

CPVC pipe fittings will be exempt from restrictions on the use of bushings.

The water delivery time for a dry-pipe system protecting dwelling units will be 15 seconds. A requirement that residential sprinklers be listed for use in dry-pipe systems will be included to keep NFPA 13 consistent with 13D and 13R.

The minimum 6 foot distance between sidewall sprinklers has been clarified in that it does not apply to sprinklers protecting soffited areas beneath sidewall sprinklers.

When inactive sprinkler systems are abandoned-in-place, all sprinklers, hose valves, alarm devices and operating mechanisms from control valves shall be removed. Also, piping and valves must be identified as abandoned or inactive.

Note that while a new NFPA 13 has been released, this does **not** imply that the Authorities Having Jurisdiction will automatically adopt any or all of its provisions. Be sure you do your homework up front before applying any of the new standards to your designs.

- On December 29, the Ohio Supreme Court handed down a unanimous ruling that upheld a state regulatory decision **giving natural gas utilities exclusive authority to repair or replace defective customer-owned service lines** that run from the street main to the customer's gas meter set. This is considered a pro-consumer ruling as it assigns service responsibility to the purveyor rather than burden the property owner with the repair obligation and expense. It is believed that the cost to customers for having the utility companies to perform this work is considerably less than if a private contractor was hired. Ohio regulations allow the utility companies to assess a small monthly fee to cover this work. The Ohio Chapter of the Plumbing-Heating-Cooling Contractors Association (PHCC) proved unsuccessful in their attempts to have this regulation struck down. The PHCC's next step in this matter remains to be seen.

- From the Ohio State Architect's Office (SAO): The Statement of Qualifications (SAO-F110-330) form was updated in October and again in December. Minor changes were made to the instructions with regard to construction manager submittals and the definition of contracting authority. On Part II of the form, the professional services revenue index numbers were changed. The changes made to the form are highlighted in yellow. To download a new copy of the Statement of Qualifications, go to the SAO Web site at <http://ohio.gov/sao> and click on Forms.

For the past few months, the SAO has been working closely with the Ohio Attorney General's Office and DAS legal counsel to develop a number of **significant updates to their agreements, contracts, and conditions**. At the end of November, six professional services agreements and associated supporting documents were released. The release includes four Architect/Engineer (A/E) Agreements

and two Construction Management (CM) Agreements that incorporate industry best practices, including sustainable design using the Leadership in Energy and Environmental Design (LEED) rating system, coordination with an independent commissioning agent, and provisions to allow use of building information modeling tools with collaborative sharing of electronic files. The SAO has also included identification of OAKS Capital Improvements business processes in appropriate locations throughout the documents.

The first agreement in the A/E family is C110-01 - Architect/Engineer Agreement (Stipulated Sum Project). This version of the A/E agreement should be used with the Stipulated Sum (Multiple-Prime) or Stipulated Sum (Single-Prime) versions of the Standard Requirements.

The second document is C110-01L - Architect/Engineer Agreement (Stipulated Sum LEED Project). This version of the A/E agreement may be used with the Stipulated Sum (Multiple-Prime) or Stipulated Sum (Single-Prime) versions of the Standard Requirements, when the Owner has established a LEED certification goal for the Project.

The third document is C110-04 - Architect/Engineer Agreement (CM Project). This version of the A/E agreement should be used with the Construction Manager (Multiple-Prime Contract) version of the Standard Requirements.

The final document in the A/E family is C110-04L - Architect/Engineer Agreement (CM LEED Project). This version of the A/E agreement may be used with the Construction Manager (Multiple-Prime Contract) version of the Standard Requirements, when the Owner has established a LEED certification goal for the Project.

These A/E agreements must be used in conjunction with Exhibit #1 - Scope of Architect/Engineer Agreement, which consists of two components. The first is an Excel spreadsheet (F110-03-AE_Exhibit_1.xls), including a breakdown of the fee, completed by the prospective A/E. The second is a Word document (F110-03-AE_Exhibit_1-Part2+.doc), including a description of the project, names and addresses of each consultant proposed for the agreement, and any modifications to the agreement. Part 2 is completed by the contracting authority at the time the agreement is prepared. Together, these three components form a complete A/E Agreement.

- The Society of Fire Protection Engineers (SFPE) is forming a task group to develop a guide on the unique **fire safety considerations associated with very tall buildings**. The guide would provide information on topics that affect high-rises and their occupants during a fire, using performance-based fire protection engineering concepts. For a draft document of the scope, check the SFPE's website at www.sfpe.org.

- The Oregon Department of Environmental Quality recently named a Graywater Advisory Committee to write **rules for capturing drain and laundry water**

and reusing it outdoors. Currently, those wanting to reuse graywater for irrigation must obtain a \$6000 permit and build an on-site treatment plant. Using graywater indoors, such as to flush water closets, is regulated by the state's plumbing code.

-Ronald K Bartley, PE, CPD, CPI

Through the pipes...

- ASPE has suffered a great drop in membership from its average of 6950. If there are any members that would like to maintain their membership but aren't in a position to do so at this time, consider **ASPE's "compassion waiver," program**, which allows a member to maintain their membership over a three month period and at the end of the third month you can renew at a discounted renewal rate.

If you are unfamiliar with this program, please contact Society Director of Membership Stacey Kidd directly and she will forward you the information.

As always, if you have any questions or concerns, please feel free to contact Stacey.

Stacey A Kidd

ASPE Director of Membership

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skidd@aspe.org

- It's time once again for our annual "howling-in-the-wilderness" question: have you given a thought to giving yourself a warm-and-fuzzy feeling and assisting MATHCOUNTS?

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The local MATHCOUNTS competitions are held in mid-February. Each student participates as an individual and as part of a team. Approximately 250 students from the local competitions will advance to the statewide competition in March. The top four individuals at the state/territorial level will progress to

the National MATHCOUNTS Competition where they will compete against the top contestants from each state/territory.

This year's Dayton-area competition will take place on Saturday, February 20th at the University of Dayton.

If you would care to answer the call, join other Chapter members and assist as a proctor, scorer or runner of competition materials at this month's competition, please contact:

Carol Manda, PE

Dayton Chapter MATHCOUNTS Coordinator

Kettering, OH 45429

Tel: 937.299.8531

crmanda@woh.rr.com

Don't worry about your mathematic skills being somewhat lacking...the kids are the ones sweating it out! You'll receive a competition t-shirt, mid-morning snack, lunch and find that working the competition is truly an enjoyable and rewarding experience as you lend an assist to the next generation of engineers/designers!

Other voices...

What does the following have in common with the field of plumbing engineering? Actually, not much at all. But it does touch upon a subject in the building industry that hits close to home in many ways. Read on...

CINCINNATI — Years after a wave of construction brought publicly financed stadiums costing billions of dollars to cities across the country, taxpayers are once again being asked to reach into their pockets



Tom Uhlman for The New York Times

In 1996, voters approved a sales tax increase to build Paul Brown Stadium as part of a redevelopment project and to keep the Bengals in Cincinnati.

From New Jersey to Ohio to Arizona, the stadiums were sold as a key to redevelopment and as the only way to retain sports franchises. But the deals that were used to persuade taxpayers to finance their construction have in many cases backfired, the result of overly optimistic revenue assumptions and the recession.



Tom Uhlman for The New York Times

Dusty Rhodes, the Hamilton County auditor, said the sales tax plan to build the stadiums in Cincinnati was a “big mistake.”

Nowhere is the problem more acute than in Cincinnati. In 1996, voters in Hamilton County approved an increase of half of one percent in the sales tax that promised to build and maintain stadiums for the Bengals and the Reds, pay Cincinnati’s public schools and give homeowners an annual property tax rebate. The stadiums were supposed to spur development of the city’s dilapidated riverfront.

But sales tax receipts have fallen so fast in the last year that the county is now scrambling to bridge a \$14 million deficit in its sales tax fund. The public schools, which deferred taking their share for years, want their money.

The teams have not volunteered to rewrite their leases. So in the coming weeks, the county plans to cut basic services, lower its legal bills and drain a bond reserve fund with no plan for paying it back.

“Anyone looking at this objectively knows it’s a train wreck,” said Dusty Rhodes, the county auditor. “I told them they were making a big mistake, but they didn’t want to hear me.”

Cincinnati is hardly alone. Columbus, OH, is considering using public money to keep the Blue Jackets in town.

Mark Rosentraub, the author of the book “Major League Losers,” said that many of the stadium deals included “revenue bombs,” with financial traps like balloon payments on debt in later years and

sweeteners like the Hamilton County property tax rebate to win public support.

In many cases, the architects of the deals are long gone by the time the bill comes due.

“This is one of the effects of the economic tsunami sweeping through,” Rosentraub said of the deficits.

The 1996 proposal to build stadiums for the Bengals and the Reds had plenty of proponents. The economy was growing, Riverfront Stadium was outdated and the Bengals were hinting that they would move, as the Cleveland Browns had done.

The plan went awry almost from the start. The football stadium exceeded its budget by \$50 million, forcing the county to issue more bonds. Forecasts for growth in the sales tax turned out to be too rosy. The teams received sweetheart leases. In 2000, voters threw out the county commissioners who cut the deal.

That year the sales tax grew 1.8 percent, the first of many years below the 3 percent forecast. Both stadiums were originally expected to cost \$500 million combined. Yet Paul Brown Stadium alone cost \$455 million and the Great American Ballpark, the Reds’ home a few hundred yards down the Ohio River, cost \$337 million by the time it opened in 2003.

The generous deal for the Bengals has been a sore spot. The team had to pay rent only through 2009 on its 26-year lease, and has to cover the cost of running the stadium only for game days. Starting in 2017, the county will reimburse the team for these costs, too. The county will pay \$8.5 million this year to keep the stadium going.

The Bengals keep revenue from naming rights, advertising, tickets, suites and most parking. If the county wants to recoup money by taxing tickets, concessions or parking, it needs the team’s approval. Compared with the lucrative deals for teams in Baltimore, St. Louis and elsewhere, the Bengals won a particularly lopsided lease.

Bob Bedinghaus, the commissioner who spearheaded the stadium project, said as much in 2000.

“They’re an organization that’s run by lawyers, and they look for every penny around every corner,” he told The Cincinnati Enquirer. “It’s going to be a difficult relationship going forward for the next 30 years.”

Bedinghaus lost his re-election bid soon after. He now works as the Bengals’ director of stadium development. Through a team spokesman, Bedinghaus declined to be interviewed. The Bengals also declined to comment. Several telephone and e-

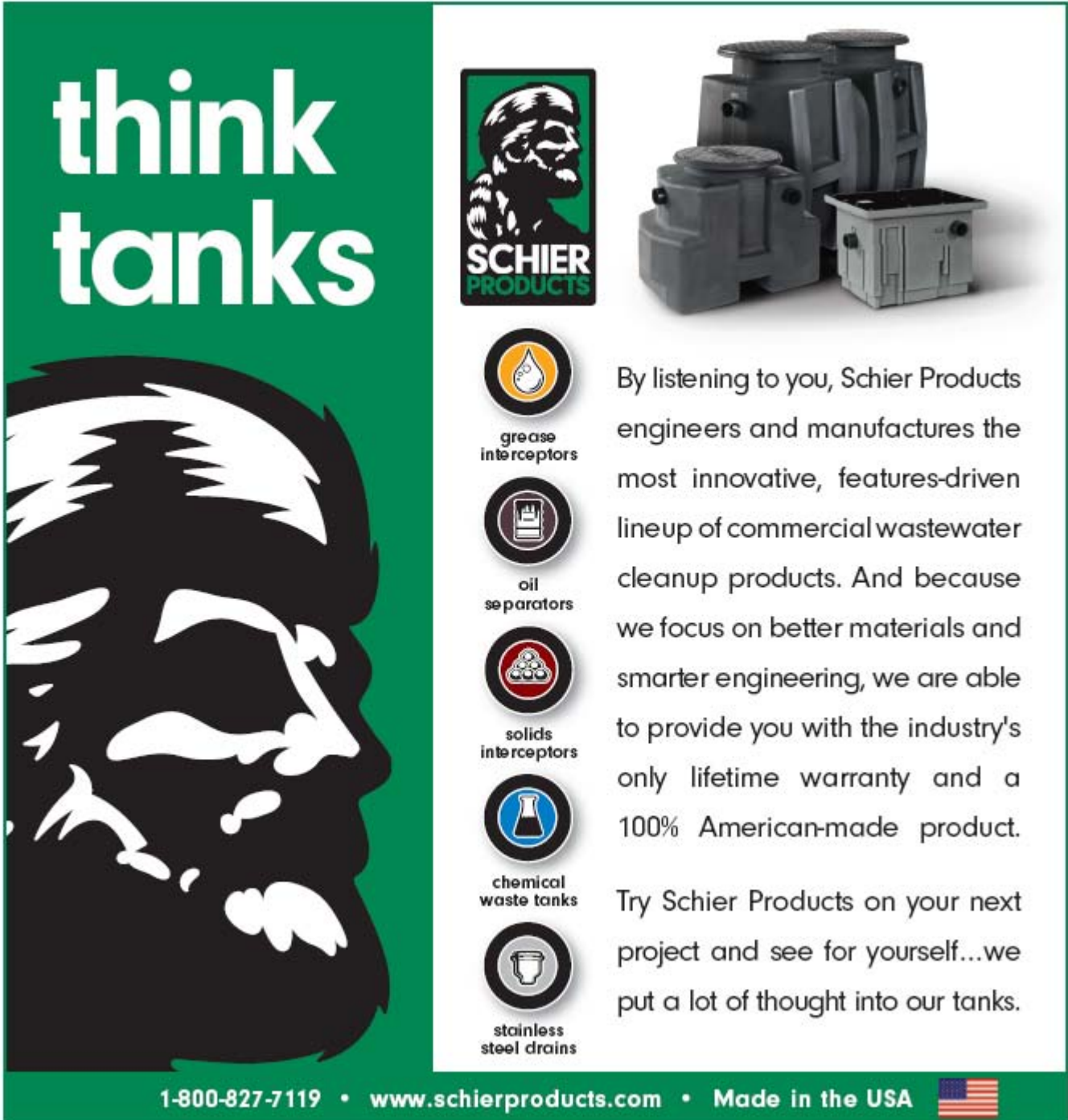
mail attempts to reach the Reds' management were unsuccessful.

**-Ken Belson
New York Times**



If you want your dreams to come true, you must not oversleep.






-Anonymous

Parting thought...



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