



Upcoming Meeting

Date: May 22, 2019
Time: 6:00pm to 8:00pm
Place: Olive Grove Restaurant
Topic: Digital Mixing Valves
Speaker: E.J. Dwyer Co

Meeting Format

6-6:30 Social

6:30-6:45 Announcements and Table Tops

6:45 Dinner Served

7:00-8:00 Speaker



CHAPTER AWARD OF MERIT

Recipient **2017-2018**

In This Issue

- Presidents Report –pg2
- Stephen Hudson pg3-5
- Board of Directors -pg10
- VP Technical Report –pg13
- Treasurer Report –pg16
- Education Report - pg22-23
- Technical Article –pg25-29
- Membership Report –pg32
- Legislative Report –pg35
- Meeting Schedule –pg37

MEETING LOCATION



Olive Grove
Restaurant & Lounge

**705 North Hammonds Ferry Road
Linthicum, Maryland 21090
Phone: 410.636.1385**

WWW.BALTIMOREASPE.COM



**Jeffrey W. Edwards, CPD ,GPD
President**

President's Report

I'm happy and sad to write my last President's Report for the 2018-2019 monthly technical meeting season.

The happy part is for the next couple of months, there will be less stress for the entire board of our chapter with working at our day jobs while also having to keep the hard work going to keep our ASPE chapter functioning to the high standards all of us have committed to with our loyalty to our chapter.

The sad part is after working hard as a volunteers to plan the technical monthly meetings along with the presenters, coordinate the invites and attendees, order the great food, provide informative material in our newsletters, etc., there is still a proud feeling we get when everything goes as planned while getting satisfaction from compliments from people who do attend our monthly meetings for what we are providing to our members and guests.

This meeting season we had the usual nine technical monthly meetings as required by ASPE National. This meeting season we also provided extra events for our members such as 1) an informal Legionella prevention discussion where sixteen engineers and product representatives attended in November, 2) our AYP event in December, 3) a hands-on pipe assembly event for twenty engineers at the Local 486 Plumbers & Steamfitters union training facility in January, 4) an Engineer's Week presentation at the Engineer's Club where the Plumbing Engineering field was presented to high-school students in February, our WOA Paint night in April and last but not least our annual golf outing at end of April that was another huge success, thank you Dave Goodell for doing your fantastic job of running the outing.

Our chapter did a lot of great things this year for our members and guests but one of the best things the chapter did this year was award 10, 20, 30 and 40 year ASPE tenure awards to Baltimore ASPE members that have been members to our proud chapter. The chapter has received many compliments from the award recipients not only for us recognizing their longstanding support, but for the actual award itself. For the record, the Baltimore chapter is in Region 1 of the ASPE organization along with 15 other chapters and we are the only chapter handing out membership tenure awards this year.

Speaking of thanks, I sincerely want to thank our hardworking chapter board which consists of Chuck, Kathy, Jason, Karen, Brian, Niki, Dick, Chris, George, Andrew and Steve for all you do to help make the Baltimore ASPE chapter one of ASPE's best chapters.

In case you haven't heard, our chapters historian for past two years, Steve Hudson, past away this past April after complications from a heart procedure. There isn't enough space in our newsletter for the kind words that Steve is due from the people he worked with on our board for all his accomplishments in his long successful career in the plumbing design field while also being a class act gentleman.

When our last chapter historian retired, Charlie, I contacted Steve and asked him to become our new historian. I knew Steve was retired, living on the Eastern Shore, but with Steve's long support to our ASPE chapter while being a great plumbing engineer and person, I felt Steve had some great stories to pass on in our newsletters. When Steve informed me he would love to be our new historian, this old fat guy was so very happy. Steve said he wouldn't be able to attend meetings, but he would send me articles every month that I could include in our newsletter. One of Steve's last articles he wrote and sent to me is included in this month's newsletter. Please take the time to read the article from a wonderful man who impacted many of us in the plumbing engineering field. Rest in Peace Steve.



Stephen Hudson 1948-2019

Stephen Joseph Hudson, 70, of Solomons, formerly of Carroll County Maryland, passed away on April 17th, 2019 at Washington Hospital Center. Born on October 5th, 1948, in Baltimore Maryland, he was the son of Charles Hudson and Josephine Hudson (nee Hodak). Stephen was a devoted husband to Jo Anne (nee Bloom) and a loving father to their son, Brian Hudson. He is also survived by his sister Ceal Rascovar (Barry). In 1966, Stephen joined the consulting engineering firm of James Posey Associates as a draftsman. Over a career spanning 48 years, he rose to become its fourth president in 2005. Retiring in 2013, Stephen continued to serve the industry, in a volunteer capacity and was honored by Calvert County public schools as their 2018 volunteer of the year. Visitation will be on May 2 at 10 am followed by a funeral mass at 11 am at Our Lady Star of the Sea, 225 Alexander Street, Solomons, MD 20688, reception to follow from noon-2pm at Asbury-Solomons, 11100 Asbury Circle, Solomons, MD 20688. Interment on May 4 at 11 am, Meadow Ridge Memorial Park, 7520 Washington Boulevard, Elkridge, MD 21075, reception to follow. In lieu of flowers, donations to the Asbury Benevolence Fund, 11100 Asbury Circle, Solomons, MD 20688, and/or Our Lady of the Star of the Sea Catholic School, P.O. Box 560, Solomons, MD 20688 would be appreciated. Condolences to the family may be made at www.rauschfuneralhomes.com.

Published in Baltimore Sun from Apr. 25 to Apr. 28, 2019



Stephen Hudson, PE, CPD - Chapter Historian

MEMORABLE THINGS FROM PAST ASPE BALTIMORE CHAPTER EVENTS

The Baltimore chapter of ASPE received its charter in 1974 from National. In our 45 year history many memorable things occurred. Remembering dates and exact persons involved from the early years is difficult, but some of the unforgettable things that happened we will remember for life. The following are a few events that comes to mind.

The first year things went fairly well considering that most consulting engineering firms in town did not have separate plumbing engineering departments and Baltimore ASHRAE was very strong. Thanks to Ed Dwyer, president of E.J. Dwyer, Inc. for getting people to join ASPE and attend the meetings, along with Bill Hammett of Henry Adams Consulting Engineers providing interesting topics and speakers. Meetings were held at various restaurants around Baltimore to determine which one would work best for our chapter. Even though we signed in as the American Society of Plumbing Engineers, most of the restaurants would direct our attendees to the room where the “Plumber’s” were meeting. They were always surprised to see plumbers wearing coats and ties.

Meetings back then were basically the same as today’s meetings with chapter news after dinner and a guest speaker for the evening. The one meeting I don’t think anyone who was present will forget was at a restaurant on York Road near the State Fair Grounds. The guest speaker was giving a demonstration on the freeze plugging method for water piping repairs. Our meeting was in a separate small room off the main restaurant. As the liquid nitrogen was being injected into the jacket around the pipe, there was a slight leak of the cold nitrogen gas that drifted into the main restaurant. Thinking the building was on fire, people were evacuated and the fire department arrived. Everything was clarified quickly and people were allowed back in with a few minutes, but the Baltimore Chapter of ASPE was not welcomed back in the future.

After a few years we held a local plumbing product show for the Baltimore engineers. Though the product show did well and helped our chapter treasury, we could not compete with the local ASHRAE product show so we worked at a deal with ASHRAE to combine both shows into one and split the profits based on the proportions of HVAC vs Plumbing manufacturers/representatives displaying. This help improved ASPE’s local engineering present.

The most successful meetings were when we would invite several chief plumbing inspectors from various county or city agencies to discuss differences in the plumbing codes they used and why. Back in the late 1970’s and early 1980’s there were 20 different plumbing codes used in Maryland. Several cities and counties in the state had their own plumbing code developed by their plumbing department. When we held a panel discussion at the chapter ASPE meeting with plumbing inspectors we always had a good turnout to see how they each would defend their code. The good thing that came out of the meeting was the chiefs understanding there is more engineering to plumbing systems then they realized. Several plumbing inspectors took our plumbing engineering courses we started in the early 1980’s.

Realizing that the chapter needed to offer a plumbing design course in 1980/1981 we started a two (2) semester, fourteen (14) weeks per semester course that met once a week for two (2) hours classes. The first semester was all the basic systems in the typical plumbing code you would encounter on a project. The classes were arranged in the same order as you would design a typical project. The first class started with some plumbing history then went into finding your utilities on site and their restrictions. The final classes dealt with sizing of water piping, specifications, and acquiring approval for construction. The second semester dealt with specialty plumbing systems such as swimming pools, medical gases, water treatment, sprinkler systems basic, septic systems (which were in many Maryland plumbing codes), etc. Classes were held at the Engineering Society of Baltimore and we averaged 40 people for each semester. Over a twelve (12) year period, the course was given five (5) or six (6) times. The classes were attended by all types of plumbing industry personnel. It included local engineers and designers, engineers from various Government agencies in Washington, plumbing inspectors, plumbing sales representatives, and project managers from local contracting firms. We sent a copy of our instructor manuals to ASPE National, but assumed they felt the classes were too geared for Maryland, which was our goal. By the way we used the Maryland State Plumbing Code, which was very similar to the National Standard Plumbing Code and at each class we would explain any special differences in the other eighteen (18) to twenty (20) codes used in Maryland, based on the subject for the night.

Listed as the education chairman for the Baltimore chapter for over twenty (20) years, I would receive several calls a year from out-of-state engineers with questions about information they could not find when designing a project in Maryland. The one question asked the most back then was what plumbing code they were to design around. The city of Annapolis had a different plumbing code than Anne Arundel County, which is where they are located. Frederick City and Frederick County were using different codes. There were several other cities that had different codes other than the counties they were located. This information was not on websites like it is today. Another question asked many times was about natural gas boosters. Some of the gas mains in Baltimore City operate at 3" to 4" WC gas pressure which is too low for most commercial equipment. Eclipse is one manufacturer of gas boosters, but the important information is how to pipe them into the system. Since the booster added heat to the gas, there was a piece of finned tube radiation to relieve heat build-up. You also had to be careful you did not pull too much gas out of the main and short change other customers on their gas supply main. We also received many questions about codes and information for overseas countries. The plumbing code used by many of the countries is the Plumbing Code of England (UK). One of the toughest questions asked was what was the rain fall intensity charts for South Africa. Not something you use every day. Researching these items was fun and very helpful for me when I did two projects overseas.





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Chuck Swope, PE, CPD, LEED AP BD+C
Vice President—Technical

Technical Report

I can't believe that it is already the last meeting of the 2018-19 season! It seems that it was just yesterday that Jeff and I were sworn in as new officers of the Chapter. I am very proud to be a part of this organization. We've had so many successful meetings this season that introduced new concepts like Rainwater to Potable Water Systems, informative sessions like WSSC Code Updates (Thanks Chris!), and educational sessions on Legionella and Fire Pump Controllers, to name a few. Our average attendance over for each meeting is over 40 people, with about half of them being full chapter members. We've also expanded our chapter events beyond the regular meetings and put together events like our Pipe Fitting Event with the Plumbers and Steamfitters UA Local 486, the Women of ASPE and ASPE Young Professional events, and our chapter's first ever Engineer's Week program. Thanks again to all our presenters and attendees, we owe you our gratitude for taking an evening with us and making it a memorable experience.

For our last meeting topic of the season, Kathy Dwyer and Ned Dwyer from E.J. Dwyer will present on Thermostatic Mixing Valves. In which, they will discuss the importance of thermostatic mixing valves in a domestic hot water system. Kathy and Ned are owners of the E.J. Dwyer, a manufacturer's representative company for over four decades. Recently PME Magazine named E.J. Dwyer the 2018 Rep of the Year 2018, which was the June 2018 cover story. Ned was the DC Chapter Treasurer for seven years and Kathy is our current ASPE Baltimore Chapter Treasurer. Kathy is also on the board of directors and the Senior Vice President of the Association of Independent Manufacturers'/Representatives.



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Consulting Engineers **LEED AP BD+C**
Mechanical Project Engineer

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 Mechanical Project Engineer

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 kschulte@muellerassoc.com



Mechanical/Electrical Engineering



Brian Crisp, CPD

Johnson, Mirmiran & Thompson, Inc.
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Kathy Dwyer
Treasurer

Treasury Report

Here we are at our last meeting before summer break! We had a fun and successful golf outing. The most amazing part of the gold outing was the fact that the majority of the bad rain waited for us to finish our round. Prefect! Please invite folks associates from your offices and try to get some more engineers out for the CEU as well as joining the community of engineering knowledge that they can tap into. I want to thank everyone who signed up to participate as speakers, meeting sponsors and table top displays.

As I am sure you are aware, we need to call in a head count a couple of days before the meeting and then confirm the day before the meeting. Please you need to sign up for the meetings. I also want to remind you that you receive extra raffle tickets by stopping by the tabletops that are presenting.

We are financially sound but couldn't be that way without your support and participation. Thanks again.

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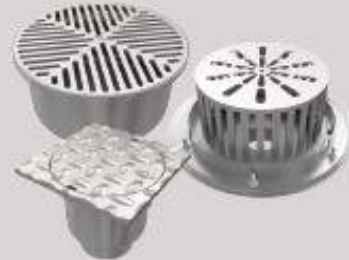
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Commissioners' Engineering Scholarship Program

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complete an application and have it received by the WSSC Corporate Secretary by **Monday, June 3, 2019**.

2019 Application Process

Students are required to submit a written essay (see topic below), along with the following application materials:

Video Introduction/Infomercial. *Tell us, who you are; why you're the best candidate for the scholarship; and, why tap is better than bottled. Video should be no longer than five minutes;*

Official Transcript;

Proof of Permanent Residency in WSSC Service District. *Acceptable forms of documentation: Copy of driver's license, voter registration card or other government-issued ID, reflecting your permanent residency in either Prince George's or Montgomery County, Maryland; and,*

Two Reference Letters.

2019 Essay Topic:

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Submission Deadline: Monday, June 3, 2019.

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ASSE Hot Water Temperature Control Devices

Anti-scalding and control of Legionella growth take center stage.

November 3, 2018

Author [Ron George](#)



Scalding hot water from fixture faucets and fittings accounts for more than 25 percent of all scald burns in children. The elderly and the physically impaired also are at increased risk of scald burns because they have thinner skin and slower reactions. They often cannot recognize a hazard and get out of harm's way before a serious burn can occur.

Control of scalding and Legionella bacteria

I have always said, "Scald burns and Legionella bacteria growth in hot water systems, which can lead to Legionnaires' disease, are 100 percent preventable."

Scalding and Legionella bacteria can be controlled when domestic hot water systems are designed, installed and maintained to keep hot water storage and distribution temperatures above the maximum Legionella growth temperature of 122 F.

Appropriate temperature controls must be used at or near fixtures to reduce the maximum hot water delivery temperature from fixtures to 120 F or below.

Single-handle shower controls to control scalding and thermal shock

The attempt to prevent scalding and thermal shock injuries which often lead to slip and fall injuries was the driving force that brought about the invention of temperature control devices. In 1924, a plumbing manufacturer developed the first shower valve with a pressure-compensating element to address thermal shock common in two-handled shower valves.

Shower faucets before then typically had two-handled faucets that allowed the water from the hot and cold-water system to be mixed in a mixing chamber. A two-handled faucet or shower valve would have sudden changes in temperature as other fixtures were used in the plumbing system, which caused pressure disturbances that, in turn, caused sudden changes in temperature — either hot or cold.

The two-handled design provided the opportunity for a bather to receive serious scald injuries if someone accidentally turned off the cold water first while bathing or showering, which would leave only the hot water flowing to the shower. The original design had a pressure-balancing piston to adjust for thermal shock.

Adjustable limit-stops on shower valves

A couple of decades after the introduction of the pressure-balancing shower valve, newer designs of the valves entered the market. Other manufacturers developed additional safety components for shower valves, which included a maximum temperature limit-stop adjustment.

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ASSE Hot Water Temperature Control Devices

The limit stop adjustment allowed a single-handle valve to be manufactured and installed with a field-adjustable maximum temperature setting to a temperature at or below 120 F. The single-handle opened to the cold-water flow first and, as the handle was rotated farther, the valve added more hot water.

Hot water is often stored at or around 140 F, which was, and still is, the basis for water heater storage temperatures in many manufacturers' equipment sizing calculations.

Thermal layering

In uncirculated hot water tanks, the stored hot water temperatures could rise significantly above 140 F due to thermal layering (heat rising to the top of an uncirculated water heater).

Stacking

Another phenomenon that causes the hot water temperatures to rise significantly above the water heater thermostat set-point is stacking. It occurs when there are multiple, intermittent, short draws of hot water from a water heater, causing cold water to enter the bottom of the hot water tank. The thermostatic element senses the cold water and turns on the burner, even when the water at the top of the water heater is well above the thermostat setting.

ASSE Temperature Control Device Standards

Each device covered by an ASSE product performance standard has specific applications as to where it is intended to be used. The authority having jurisdiction (AHJ) has the final approval of all installations but one must be aware of the code requirements and the application must allow the device for that application.

In addition, the installation must comply with the scope listed in the product standard. The installation also should comply with the manufacturer's installation requirements, which may be more restrictive than the code adopted by the local jurisdiction.

The ASSE Product Performance Standards for these devices are: ASSE 1016/ASME A112.1016-2011/CSA B125.16-11, Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations; ASSE 1017, Performance Requirements for Temperature Actuated Mixing Valves for Hot Water Distribution Systems; ASSE 1062, Performance Requirements for Temperature Actuated Flow Reduction (TAFR) Valves for Individual Fixture Fittings; ASSE 1066, Performance Requirements for Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings; ASSE 1069, Performance Requirements for Automatic Temperature Control Mixing Valves; ASSE 1070/ASME A112.1070-2015/CSA B125.70-15, Performance Requirements for Water Temperature Limiting Devices; ASSE 1071, Performance Requirements for Temperature Actuated Mixing Valves for Plumbed Emergency Equipment; ASSE 1082, Water Heaters with Integral Temperature Controls for Distribution Systems. (Currently finalized, awaiting board approval as of this writing.); ASSE 1084, Water Heaters with Integral Temperature Controls for Point-of-Use Applications. (Currently finalized, awaiting board approval as of this writing.); ASSE 1085, Water Heaters with Integral Temperature Controls for Use with Emergency Fixtures. (Currently under development as of this writing.)

ASSE recommends that design professionals, plumbers, owners, installers, maintenance personnel, specifiers, inspectors, engineers, educators, trainers and code officials use caution when determining which device is correct for a particular application or installation.

In some applications, installing the wrong device or installing the device in the wrong location can lead to potentially serious scalding situations, thus exposing the end user to potentially scalding hot water temperatures. Furthermore, installing the wrong device can lead to a false sense of security by the

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ASSE Hot Water Temperature Control Devices

ultimate user. Therefore, it is extremely important to make sure installation of the proper device is in the proper location. It must be maintained in accordance with the manufacturer's installation and maintenance instructions.

Description of Temperature Control Valve Applications

Shower and Tub/Shower Combination Valves (ASSE 1016). Shower valves that comply with ASSE 1016 are automatic temperature and/or pressure-compensating valves intended to be installed at an individual shower or tub/shower combination fixture.

The model plumbing codes require all shower and tub/shower fixtures to have temperature controls that comply with ASSE 1016-2011/ASME A112.1016-2011/CSA B125.16-11, Performance Requirements for Automatic Compensating Valves for Individual Showers and Tub/Shower Combinations.

The user has access to the ASSE 1016 flow and final temperature controls. No further mixing should occur downstream of the ASSE 1016 device.

These devices are intended to control the water temperature to wall-mounted or ceiling-mounted hand-held showers; showerheads; body sprays, either in the individual shower or tub/shower combination fittings; and tub spouts, when part of tub/shower combination fittings.

There are three different types of shower valves meeting this standard: pressure-balancing, thermostatic (mechanical and electronic) and combination pressure balancing and thermostatic.

The showerhead flow rate must not be less than the manufacturer's published minimum flow rate for the valve (device). The temperature limit stop must be set at the time of installation and may need to be periodically adjusted for variations in water temperatures. These devices provide both scald and thermal shock protection.

Hot Water Distribution Systems (ASSE 1017)

Temperature-actuated mixing valves for hot water distribution systems are used for controlling in-line water temperatures in domestic hot water systems to a relatively uniform temperature.

These valves should comply with ASSE 1017, Performance Requirements for Temperature Actuated Mixing Valves for Hot Water Distribution Systems or a comparable CSA standard listed in the code. When used, installation of these devices should be at or near the outlet of the hot water source only.

These valves are designed to provide a relatively uniform water temperature to the hot water distribution system, which makes setting maximum temperature limit stops in the system more reliable than a system without a mixing valve where uncirculated water heater discharge temperatures can vary by more than 30 F greater, or 15 degrees less, than the water heater thermostat set-point.

ASSE temperature-actuated mixing valves allow the water to be stored and distributed at higher, more stable temperatures, extending the amount of hot water available and also reducing the chance of Legionella bacteria growth in the tank and distribution piping. (See ASHRAE 188 and ASHRAE Guideline 12.)

These valves are not intended for point-of-use applications because of the large temperature variation. Valves must be sized to match the flow requirements of the system and not sized based on the pipe size (see Table 1). Further mixing downstream is allowed to provide final temperature control to protect

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ASSE Hot Water Temperature Control Devices

against scalding. These devices used alone do not provide thermal shock protection or adequate scald protection.

To prohibit the cross-flow of hot or cold water through the valve, supplementary check valves should be installed for devices that do not include integral check valves by the manufacturer.

Individual Supply Fittings — TAFR Valves (ASSE 1062)

Temperature-actuated, flow reduction (TAFR) valves, when used, should be installed on the discharge outlet of the fixture fitting or integrated into fixture fittings.

These valves must comply with ASSE 1062-2006, Performance Requirements for Temperature Actuated Flow Reduction (TAFR) Valves for Individual Fixture Fittings.

They are intended for use in-line with, or integrated into, individual plumbing supply fittings such as showerheads, bathtubs, whirlpool bathtubs, utility sink faucets, kitchen sinks and lavatory faucets.

They are designed to automatically reduce flow down to a trickle within five seconds of outlet temperatures greater than a preset actuation temperature not to exceed 120 F (48.9 C). During the five-second response period, the bather may be exposed to temperatures more than the setpoint of the device.

After actuation, the device is required to have a trickle flow, which allows the temperature controls on the faucet to be adjusted to a lower temperature to reset and open the device automatically at a predetermined lower temperature, or with the use of a manual reset mechanism.

These devices can be used on existing fixtures such as the showerhead associated with an older-style two-handle, nonpressure or temperature-compensating shower valve to provide scald protection. Typically, a TAFR device is used in an existing installation where no other form of scald protection is provided.

TAFR valves are not intended to be installed in place of devices complying with ASSE 1016, ASSE 1017, ASSE 1066, ASSE 1069 or ASSE 1070. These devices provide an additional level of scald protection only and do not provide thermal shock protection.

Caution: These valves automatically reduce discharge flow to a trickle if water temperature exceeds a preset limit. This trickle can be as much as 0.25 gallons per minute (0.95 L/m). When this device is installed on a bathtub spout and the outlet temperature exceeds the preset limit, and if the bathtub drain is closed, the bathtub could fill with extremely hot water from this allowable trickle.

Caution: Some ultra-low-flow showerheads may still have a full spray pattern when the flow through this TAFR device is reduced.

In-Line Pressure-Balancing Devices for Individual Fixtures (ASSE 1066)

Automatic pressure-balancing in-line valves are used to equalize incoming hot and cold-water line pressures. This minimizes mixed water temperature variations due to pressure fluctuations when used in conjunction with a mixing valve or two-handle valve set.

These valves must comply with ASSE 1066, Performance Requirements for Individual Pressure Balancing In-Line Valves for Individual Fixture Fittings. They are not designed to limit the maximum outlet temperature at the point-of-use. These devices provide thermal shock protection for pressure

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ASSE Hot Water Temperature Control Devices

disturbances only and do not provide scald protection if the incoming hot or cold-water temperature changes.

Thermostatic Temperature-Limiting Devices with Downstream Mixing Permitted (ASSE 1070)

Water temperature-limiting devices are intended to limit the hot or tempered water temperature supplied to fittings for fixtures such as sinks, lavatories, bidets or bathtubs to reduce the risk of scalding.

These devices must comply with ASSE 1070-2015/ASME A112.1070-2015/CSA B125.70-15, Performance Requirements for Water Temperature Limiting Devices. They are intended to supply hot or tempered water to plumbing fixture fittings or be integral with plumbing fixture fittings supplying hot or tempered water.

These devices shall have fixed (nonadjustable) temperature setting; or temperature setting that can be adjusted and locked in position; or adjusted with the use of a tool to protect against adjustment by the user; or further mixing downstream is allowed.

These devices have an integral water temperature-limiting capability. The user control allows the outlet temperature to be adjusted up to a maximum temperature of 120 F (49 C). They provide scald protection only and do not provide thermal shock protection.

Mixing Valves for Plumbed Emergency Equipment (ASSE 1071)

Temperature-actuated mixing valves are intended to be used as a component to provide tepid water for emergency eye wash, eye wash/shower, drench showers and combination units that comply with the requirements of ANSI Z358.1.

These valves must comply with ASSE 1071-2012, Performance Requirements for Temperature Actuated Mixing Valves for Plumbed Emergency Equipment. These valves, by themselves, do not meet the requirements of ANSI Z358.1.

They consist of a hot water inlet, a cold-water inlet, a mixed water outlet, a temperature controlling element and a means for adjusting the mixed water outlet temperature while in service. These valves also have the means to limit the maximum outlet temperature under normal operating conditions.

Provisions shall be made so that the temperature cannot be inadvertently adjusted. These valves shall include a means of preventing cross-flow. Ideally, these devices are intended to be installed as close as possible to the plumbed emergency equipment. These valves provide scald protection only and do not provide thermal shock protection. They provide cold water bypass flow in the event of hot water failure.

Note: ASSE 1071 devices should be installed at individual fixtures. Emergency plumbed equipment must be flushed frequently, per industry standards, or per the water management or water safety plan to minimize stagnant water.



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Andrew Cahill — Membership

Membership Report

What a day for the golf outing! After forecasts to the contrary, the heavy rain held off just long enough for 18 holes. It was great that the turnout and experience was not impacted by mother nature. This leaves us approaching our final meeting for the chapter year before we break and plan for the fall season. I will be trying my best to make it and see everyone before the summer break.

We had one addition to the chapter since the last newsletter:

Stephen Taylor – SE Taylor Associates

Stephen is joining us from his previous affiliation with the Washington, DC chapter. We welcome him aboard and hope to see him at future meetings.

Please let me know if I can be of assistance to anyone interested in joining ASPE. You can direct them to <https://www.aspe.org/join> or email me at andrew.cahill@uponor.com.

Did you know that engineering firms may offer reimbursement to employees for affiliation with professional organizations such as ASPE? In fact, participation with local chapters is often encouraged and provides significant benefits. In addition to the ability to attain CEUs from monthly educational seminars and networking opportunities with other industry professionals, members are provided with a volume of the Plumbing Engineering Design Handbook for each year of participation – a key resource in completing CPD testing. Have a conversation with your firm's principal about your options for joining ASPE.

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J. Richard Wagner, PE
ASPE Baltimore, V.P. Legislative

Legislative Report

An Explanation and Solution to Water Hammer

If you need an explanation and solution to water hammer in piping, check the ASPE Open Forum Digest for Monday May 6, 2019. Under Water Hammer Arrester Placement, it is Item 6 by James Wardell. The attachment is the 48-page Engineer Report for Water Hammer Control by Sioux Chief Mfg. The Report includes sizing and placement of residential, commercial, and industrial water hammer arresters.

J. Richard Wagner, PE
ASPE Baltimore, V.P. Legislative

J. Richard Wagner, PE, LLC
—◆—
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207 Locknell Road
Timonium, Maryland 21093-3323
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2018-2019 ASPE Baltimore Chapter Meeting Schedule

Date: **September 26, 2018**
Speaker: Craig Boyce - Kemper
Topic: Legionella, ASHRAE 188, and Minimizing Risk

Date: **October 24, 2018**
Speaker: Chris Imhof - WSSC
Topic: WSSC 2016 Code Update

Date: **November 28, 2018**
Speaker: Jesse Rodriguez -Aqua Treatment Services
Topic: Rainwater Harvesting for Potable Reuse

Date: **December 12, 2018**
Event: Holiday Party
Location: [Mustang Alley's](#)

Date: **January 23, 2019**
Speaker: STH
Topic: Fire Pump Controller Applications

Date: **February 27, 2019**
Speaker: Sherman Engineering Company
Topic: Lab Specialty Gas Sources and Distribution

Date: **March 27, 2019**
Speaker: Highland Tank
Topic: Grease Interceptor Design

Date: **April 24, 2019**
Speaker: Ultra Pure Water Systems
Topic: Lee Heikkinen—NEU-ION

Date: **April 26, 2019**
Event: Golf Outing
Location: [The Timbers at Troy](#)

Date: **May 22, 2019**
Speaker: EJ Dwyer
Topic: Digital Mixing Valves



Monthly Sponsorship Opportunities

The Baltimore Chapter of ASPE continues to have successful meetings and is looking to continue improving throughout the year.

The Chapter has the following sponsorship opportunities for each month:

Tabletop Presentations: \$100 to provide a tabletop presentation of equipment or material relative to the plumbing profession. The tabletops will be set up from the beginning to the end of the monthly meeting and provides the opportunity to provide a brief (under 5 minutes) presentation.

Please make checks payable to the Baltimore Chapter of ASPE.

Contact Jeff Edwards or Kathy Dwyer if interested

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