The water crisis in Flint, Michigan has dominated the headlines for the past several months and rightly so. America’s confidence in the safety and purity of our drinking water is in question. Having safe, clean drinking water is something that most Americans take for granted. Our plumbing products are regulated by strict performance and now, also, prescriptive standards. PMI spearheaded efforts in the U.S. Congress to craft legislation, and then support passage and implementation of, the Reduction of Lead in Drinking Water Act (RLDWA). The Act, which became effective nationwide in 2014, reduces the permissible levels of lead in certain plumbing products that come into contact with potable water. Beginning in 2012, in advance of the 2014 deadline, PMI played an active role in the “Get The Lead Out” consortium, to diligently promote education, understanding and compliance. We worked with suppliers, distributors and the public to inform them about changes to the manufacture, distribution and installation of this new generation of products. In addition, we’ve participated in Environmental Protection Agency (EPA) webinars on the subject of enforcement of our lead laws, which we support enthusiastically.

Our association supports the notion that U.S. water is among the safest in the world by offering only tap water at PMI events and conferences. No bottled water for us! Those who travel the globe know that there are areas of the world in which drinking water from the tap, or even using it to brush teeth is simply not done. I have often said that plumbing is viewed a bit as the “Rodney Dangerfield” of the industry — taken for granted — given no respect. But take a look now! The importance of good, clean water has rocketed into the forefront. People are thinking about their water. Confidence in the purity of our water has been shaken to its core. No longer will people take for granted the ability to use water directly from the tap.

So how do events in Flint effect PMI and its members? Our association’s vision is: Safe, responsible plumbing. Always. We warn about “unintended consequences” in view of the continued ratcheting down of flow rates as the one-dimensional, knee-jerk reaction of drought-stricken areas to maximize efficiency. We cite aging infrastructure as the unseen culprit in water efficiency and purity issues. The series of events in Flint, Michigan represent the “perfect storm” in which all of these issues have now converged with dire consequences. As if the lead contamination weren’t enough, now there are concerns about Legionella, possibly resulting from the standing water in dead legs and under-used pipes. PMI members will remember presentations on this very topic by Dr. Marc Edwards of Virginia Tech, who is now very prominently in the news.

As PMI members volunteered to help in Flint by donating over 700 faucets which were fitted with filters, we made it known that while we weren’t part of the problem, we wanted to be part of the relief. Together with PMI’s vision of “Safe, responsible plumbing. Always,” our mission could not be more relevant today. As a review, take a look at it here:

- To promote the water efficiency, health, safety, quality and environmental sustainability of plumbing products while maximizing consumer choice and value in a fair and open marketplace.
- To provide a forum for the exchange of information and industry education.
- To represent openly the members’ interests and advocate for sound environmental and public health policies in the regulatory/legislative processes.
- To enhance the plumbing industry’s growth and expansion.

Continued on page 2
The bacteria known as “Legionella” was first discovered in 1976, at the Bellevue Stratford Hotel in Philadelphia, within the building water supply system, during a meeting of the U.S. Bicentennial Convention of the American Legion. By the end of the convention, a total of 221 people had contracted the bacteria which resulted in what would be called Legionnaire’s disease, and sadly, 34 people lost their lives. Today, we know more about the factors that contribute to the growth (i.e. warm water temperatures, biofilm) and the spread (i.e. inhalation of tiny water droplets) of Legionella than we did forty years ago. New outbreaks of Legionnaire’s disease have been discovered throughout the country in New York City, Chicago and, most recently, Flint, Michigan; proving there is still much more to learn.

In the standards arena, where PMI Staff spends a great deal of our time, we are continuing to see efforts by standard bodies to control the spread of Legionella in building water supply systems through the development of new standards. The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) and NSF are responsible for two such Legionella standards.

Starting with the most widely known standard in the United States, ASHRAE 188 (Legionellosis: Risk Management for Building Water Systems), where PMI serves as a non-voting member on the technical committee, the purpose for this standard is to establish minimum risk management requirements to control the transmission of Legionellosis in building water systems. When using the term “Legionellosis” we are referring to Legionnaires’ disease or Pontiac fever (a less severe influenza-like illness) caused by exposure to Legionella. New York City has adopted portions of the standard for controlling Legionella in cooling towers. However, no city or state has adopted the standard in its entirety into law. As far as codes are concerned, proponents of ASHRAE 188 were unsuccessful in getting the standard referenced within the body of the 2018 International Plumbing Code (newest version). We shall see what happens with the 2018 Uniform Plumbing Code at the first code hearings scheduled for this coming May.

A relatively new standard that deals with Legionellosis risk management, along with other microbial contamination hazards, is NSF 444 (Prevention of Injury and Disease Associated with Building Water Systems). This standard is currently under development, where PMI is actively participating. This standard will incorporate the HACCP (Hazard Analysis and Critical Control Point) methodology, which has been used to ensure food safety by U.S. government agencies, to identify hazardous agents and specify measures to control such agents within a building water supply system. Furthermore, this standard will also address hazards caused by chemical contamination from disinfectant by-products and physical hazards like those that lead to scalding. Finally, this standard will also be incorporating the principles and concepts of ASHRAE 188 into the section of the standard that will pertain to Legionellosis.

As more and more Legionellosis outbreaks occur throughout the country, and both standard bodies and regulators respond to such outbreaks, it is more important than ever for PMI to be engaged in such efforts to assess the potential impact on our membership.

The actions of PMI members in Flint, together with the work of the United Association of Plumbers (UA), has raised the visibility of our industry and our industry association: NPR, local and network news, Huffington Post and more. Check out the PMI website for a compilation of the coverage (safeplumbing.org/flint-relief-effort). I receive calls nearly daily for interviews, speaking opportunities, new product ideas, new volunteers who want to help, and some who just want to say “thank you.” Last week, a woman named Susan Hale, ordinary citizen and Texas resident, called to ask if she could make a financial donation to PMI in appreciation for our good deeds. I directed her to the PMI website and she took note of our membership roster. She said that she will gladly select her future plumbing products from among the PMI member companies listed there, and would encourage her friends to do the same. She views PMI members as “the good guys.”

It’s unfortunate that it took the tragic events of Flint to put PMI and our industry into the spotlight, but now that it has, it’s up to us to decide what to do next to keep the focus on the importance of plumbing to public health and safety. Forward your thoughts and ideas to the PMI Board of Directors, Committee Chairs and staff. Let’s work together to put our words into action for the greater good of public health and safety.
A self-described “change-agent” who believes in that there is the no limit to the growth potential of any situation, Misty Guard approaches every project as a launching point for opportunity. Working in Government and Regulatory Affairs for PMI member company, Bradley Corporation, she is also co-chair of PMI’s Fair Trade Committee, serving alongside Chip Way, director of OEM Sales, Lavelle Industries.

Having just celebrated her two-year anniversary at Bradley, Misty is optimistic about the future and excited about her work, “I really enjoy government affairs and regulations — the ability to take something to the next level. You just have to be willing to find the next level.” Misty is certainly willing to grow and change, as reflected by her work history. In her career, she has worked in all business sectors. Starting as a consultant, she moved into corporate America working for both Home Depot and Walmart. She then shifted to government work for different federal agencies, such as the National Science Foundation Office of Inspector General (DHHS), and Centers for Disease Control and Prevention (CDC), and spent time working for the state of Georgia. Returning to consulting for a time, she also did a stint in the nonprofit arena before taking on her role in private business with Bradley.

Each step along her path was another opportunity for growth and a chance to learn a new perspective. She began that journey at Purdue University and completed her graduate degree at Georgia Institute of Technology. She wrote her master’s thesis “Business Innovation and Regulatory Enforcement, Case Studies of the Big Box Retail Industry and Enforcement Act” while in the Netherlands as a Junior Visiting Researcher at the University of Twente.

Born in a small town in Michigan, she grew up in the Midwest, but spent most of her adult life in Georgia. Now living in Milwaukee, Wis., she considers the city to be a “gem” saying it reminds her of Atlanta. She does not look so favorably on the brutal winters, but doesn’t let that keep her from getting out and enjoying the area — more often than not with her loyal companion Zara. A Catahoula Leopard dog, Zara is Misty’s running partner and boasts a six-and-a-half-minute mile pace, although, Misty says she often slows Zara down.

An avid reader, Misty, considers herself an online-curator of knowledge, and is addicted to RSS feeds. Although she has a soft-spot for science fiction, one of her favorite books is Stephen Mitchell’s translation of Lao-Tzu’s Tao Te Ching, or Book of the Way. She says the philosophies in the book have helped her find encouragement and clarity, to mentally take a step back, “get out of her mind,” and be grounded.

Misty’s latest hobby is Jiu Jitsu. Her other hobbies include, culinary experiences, learning to play acoustic guitar and piano, and singing. She is also a certified speed reader able to take in 22,500 words per minute, with an 85% retention rate on the first read!

Misty applies her personal motto of “do no harm” and her intention to leave the world a better place than she found it to all she does. We look forward to working with her and can’t wait to see what new levels she finds at Bradley and at PMI.
Recognizing World Plumbing Day; Calling Safety Sentinels

By Ray Valek, PMI Public Relations Consultant

As we celebrated World Plumbing Day, March 11, 2016, Barbara C. Higgins, CEO/Executive Director of PMI, published her views about why plumbing matters and what must be done to safeguard plumbing and water systems. Written for the US Water Alliance’s blog (uswateralliance.org/resources/blog), Higgins’ article describes how Virginia Tech professor Marc Edwards, Ph.D. spoke at last fall’s PMI conference about his team’s efforts to call attention to the brewing crisis in Flint, Michigan. In addition to raising concerns about lead in water, Edwards and his colleagues have published research about the potential dangers of opportunistic premise plumbing pathogens (OPPPs) that can develop in water systems and cause disease. The best known OPPP is legionella pneumophila, the cause of Legionnaires’ disease.

On World Plumbing Day 2016, Our Responsibility to Assure Safe Water is More Important Than Ever

By Barbara C. Higgins, PMI CEO/Executive Director. Printed courtesy of the U.S. Water Alliance and Value of Water Coalition.

Virginia Tech professor Marc Edwards, Ph.D. presented at the annual conference of Plumbing Manufacturers International (PMI) last October. His presentation centered around opportunistic premise plumbing pathogens (OPPPs) that can develop in water systems and cause disease. But he took some time to tell us of his involvement in the Flint water crisis, which at the time was brewing. Over the past few months, Edwards has risen to national prominence by leading the response to the crisis and by being a model of integrity in action.

As we celebrate World Plumbing Day on March 11, Edwards’ work serves as a reminder about why plumbing matters and what we must do to safeguard our plumbing and water systems in the future.

In remarks about OPPPs and Flint at our conference, his overall message was clear: we can’t take the safety of our water systems for granted, particularly as changes are made to current systems and newer kinds of water systems are introduced. Building more sustainable water systems with the best intentions can still result in unintended consequences if proper precautions are not taken. It’s the duty of those of us in the plumbing and water industries to make sure the potential consequences of change are thoroughly explored before going down the path unknown.

When Flint decided to switch its water supply from Lake Huron to the Flint River, officials in charge of making the transition failed to consider all the consequences of that change, leading to disastrous decisions pertaining to corrosion control and lead testing. This failure led to lead leaching into the water and a terrible public health crisis. PMI and its members have joined with other concerned groups and individuals to help mitigate the effects of the Flint crisis. PMI also advocates for the higher utilization of Water Sense plumbing products to save water (learn more at: https://goo.gl/qMCs4I).

Now, Edwards is warning us that OPPPs pose a threat to public health. To learn how they can be prevented, he is advocating for more research on how these pathogens grow. The best known OPPP is legionella pneumophila, the cause of Legionnaires’ disease. The Centers for Disease Control and Prevention (CDC) has acknowledged that these pathogens are now the primary source of waterborne disease deaths in the United States.

Edwards’ research shows that OPPPs are more likely to grow when water lies stagnant in pipes leading to the tap. This finding provides an alert at a time when lower flow rates and alternative kinds of water systems that keep water in pipes longer are being considered as solutions to water shortages.

A recent Virginia Tech study authored by Edwards and his colleagues showed that water is retained longer within some green building systems than within conventional systems. As water ages within these systems, the chance for OPPP growth increases. From the authors’ point of view, the chemical and microbiological stability of water quality in systems with high water age must be better understood, as must various other factors relating to water temperature, the kinds of materials used in plumbing systems, and much more.

In California, reduced water usage combined with lower flow rates are having “unfortunate side effects,” according to a February 27 story in the Washington Post. In addition to killing trees and putting financial pressures on water utilities, the reduced usage has lowered the outflow of water needed to push waste through sewage tunnels. The story quotes George Tchobanoglous, professor emeritus of civil and environmental engineering at the University of California at Davis. He said the flow has dropped to 50 gallons per day within sewers designed to receive about 120 gallons a day to move waste water sufficiently. “You have solids that you flush and there’s not enough water to carry the material,” he told the Washington Post. The consequences of this reduced water flow are the rotten-egg odor of hydrogen sulfide and pipe corrosion.

Do these side effects mean that we shouldn’t strive to save water? Of course not. But what it does mean is that we

Continued on page 5
President Obama Recognizes World Plumbing Day

By Dawn Robinson, PMI Communications Director

U.S. President Barack Obama added his voice to those celebrating World Plumbing Day on March 11, 2016. Recognizing the important role plumbing plays in our lives the President issued the following statement:

“I send greetings to all those observing World Plumbing Day.

No matter who we are or where we come from — whether it’s from the world’s highest peaks or its lowest valleys — we all have responsibilities to one another and to the one planet we share. When hundreds of millions of people from around the globe are denied access to clean water or proper sanitation, their suffering not only tears away at our common humanity, but also at the brighter future we hope to secure for our children and grandchildren.

By developing creative and innovative methods to access safe, clean, and reliable water sources and environments, plumbers and other trained professionals are helping shape a healthier, more sustainable reality — one where a person’s circumstances do not limit their ability to make of their life what they will. This World Plumbing Day, let us recommit to building a world where people from all walks of life are afforded the basic rights they deserve as human beings.”

– Barack Obama

The White House gave further attention to water and plumbing issues during a water summit on March 22 in Washington, DC. The Administration hosted the event to raise awareness of the national importance of water, and to highlight new commitments and announcements that the Administration and non-federal institutions are making to build a sustainable water future. Video of the event can be viewed at: http://goo.gl/nVzTAc

On World Plumbing Day 2016, Our Responsibility to Assure Safe Water is More Important Than Ever

Continued from page 4

must fully leverage methods of saving water proven to be safe and effective rather than methods that are untested. For example, toilets, showerheads and faucets certified by the EPA's WaterSense program meet stringent performance standards while being 20 percent more water efficient than other plumbing products meeting federal standards. But WaterSense products are underutilized across the country. In California, where residents are being encouraged to replace lawns with expensive landscaping alternatives, millions of homes and businesses have not simply replaced toilets, showerheads and faucets with WaterSense models that can collectively save hundreds of millions of gallons of water a day. Only 5.5 percent of the state’s 33.5 million residential and commercial toilets meet WaterSense standards, as well as only 21.1 percent of the bathroom faucets and 23.9 percent of the showerheads, according to a study commissioned by PMI and conducted by GMP Research, Inc. (See the full study here: https://goo.gl/qMCs4I)

While reminding us not to take the safety of our water systems for granted, Edwards also asked us at our fall conference to serve as sentinels as we move into a time of rapid change. To avert a public health crisis, it’s up to plumbing and water professionals to ask the hard questions, to do proper due diligence to protect public health and safety, and suggest solutions, like WaterSense products, that we know will be safe and effective.

Over the last several decades, water-borne illnesses and lead poisoning have been relatively rare occurrences. We avoided these crises because plumbing and water professionals have guarded against potential hazards and have worked diligently to keep our water systems safe. That’s why plumbing matters, and why our continued advocacy for safety is so important. We are the safeguards at the interface between water sources and kitchens and baths where water is consumed. We have a more important role to play now than ever. That’s why everyday is World Plumbing Day at PMI. We stand with our members to assure safe, responsible plumbing. Always.
PMI Joins the Global Water Works Organization

By Dawn Robinson, PMI Communications Director

PMI has recently begun working with Global Water Works (GWW) an organization “committed to advancing solutions designed to ensure that water will be available for future generations.” Including participation on conference calls, panel discussions and more, GWW aims to help bridge gaps between industry associations, research, academic institutions and studies, and other water leaders.

“While thousands of concerned organizations have been advocating for water conservation for years. Only now, with the arrival of big data, sensors, analytics and automated, real-time metering, can we measure what we’ve always wanted to manage. Global Water Works showcases the technology, leaders and resources that help water work for the planet, people and profit,” as noted on their website.

Mary Conley Eggert, Technology Evangelist and Social IMPACT Business Developer, Global Water Works, recently visited the PMI headquarters in Rolling Meadows, Illinois. She worked with PMI CEO/Executive Director Barbara C. Higgensto arrange for PMI members, Rob Zimmerman, Senior Manager of Sustainability, Kohler Co., and Nate Kogler, Director of Product Management, Bradley Corp. and 2016 PMI Board Member, to participate on a recent panel discussion hosted by GWW. Details about the panel discussion can be found at http://goo.gl/uydMr6.

“I wanted to thank you personally for arranging for Nate and Rob to be with us. They did a great job representing you, but we still missed articulate Barbara!

Kudos to you on your very informative blog post [see article on page 4]… Made me realize that there are two sides to ‘don’t be a waster,’ and I can hear you saying, ‘there’s the rub!’

To learn more about PMI’s partnerships and alliances please visit: safeplumbing.org/pmi/about/alliances.
Higgins to Chair Crystal Vision Executive Committee

By Larry Noble, World Vision

The Crystal Vision Executive Committee and the Store House of World Vision are pleased to announce the election of Barbara C. Higgens, CEO/Executive Director, Plumbing Manufacturers International as its 2016 Chair, and Amy Eaton, Human Resources Generalist of Gerber Plumbing Fixtures, LLC., Danze, Inc., Globe Union Group, Inc. as Vice Chair. The announcement was made following the Crystal Vision Awards Breakfast held in January during Design and Construction Week in Las Vegas.

The Storehouse serves thousands of community-based organizations, churches and low-income individuals, distributing donated building materials from 11 locations including facilities located in Chicago, West Virginia, (serving Appalachia), the Gulf Coast (serving Katrina victims), Los Angeles, and Dallas. Each year, the organization gives its Crystal Vision Award to recognize and celebrate corporations in the building industry who have made significant donations of products to aid the under-served in the United States through World Vision’s domestic programs. The event draws executives from all sectors of the building industry. These corporations have enabled World Vision to serve millions of the most vulnerable in the United States through the donation of much-needed products.

Both Ms. Higgens and Ms. Eaton are long-time members of the Crystal Vision Executive Committee. Their dedication and influence in the plumbing industry has been instrumental in increasing awareness of the work of the Committee and World Vision.

“It has been my pleasure to serve as a volunteer and ambassador for the Storehouse of World Vision. The program is the ultimate win/win: The Storehouse provides manufacturers with an efficient channel for repurposing their excess inventory in the most wonderful way. The donations of PMI members and other manufacturers through this program truly improve people’s lives. Having clean, safe drinking water; a decent kitchen for preparing food and gathering together; working, water-efficient bathrooms are things most of us take for granted. It has been a joy to help connect those who have products to donate with those who need them most,” Ms. Higgens said.

Ms. Eaton has served on the Executive Committee for five years, and she will be entering her 4th year as Vice Chair.

“It has been an honor and absolute joy to be a part of such a great organization. At Globe Union one of our core values is to be a positive force in the world. We have found that the Storehouse is a great fit for us from donating product to our annual participation in the School Tools Kit Build. The Storehouse does so many amazing things for those in need and I feel very fortunate to be a part of it all,” Ms. Eaton said.

Ms. Higgens is the CEO/Executive Director of Plumbing Manufacturers International, the voluntary, not-for-profit international industry association of manufacturers of plumbing products, serving as the Voice of the Plumbing Industry. Member companies produce 90 percent of the nation’s plumbing products, and represent more than 150 brands. As part of its mission, PMI advocates for plumbing product performance and innovation contributing to water savings, sustainability, public health and safety, and consumer satisfaction.

Ms. Eaton has been with Globe Union Group, Inc. since 2007 in a variety of Human Resources positions. Gerber Plumbing Fixtures and Danze are subsidiaries of Globe Union Group Inc. and are based just outside Chicago, IL. Gerber is a leading manufacturer of high performance plumbing fixtures, faucets and fittings sold exclusively through professional wholesalers throughout the United States and Canada. Danze is known for its unique combination of fresh styles and finely crafted products in the kitchen and bath industry.

For more information on the Storehouse of World Vision contact Mary Garcia at megarcia@worldvision.org.
Welcome to PMI’s Newest Member, Reliance Worldwide Corporation

2016 PMI Board President Paul Patton, Senior Manager, R & D and Regulatory, Delta Faucet Co., has announced Reliance Worldwide Corporation as PMI’s newest manufacturing member. Reliance Worldwide is a manufacturer of push-to-connect plumbing fittings and specialist water control valves. Reliance Worldwide is the second new member to join PMI this year — last month we welcomed back returning member, Jing Mei Industrial (USA).

“RWC understands the importance of PMI’s role in the plumbing industry, specifically as it pertains to advancing innovation and contributing to sustainability, water efficiency and public well being,” said Sean McClenaghan, CEO of Reliance Worldwide Corporation USA. “We feel this partnership is extremely valuable and mutually beneficial for influencing the progress and advancement of the industry, as well as the satisfaction of our customers.”

Reliance Worldwide’s McClenaghan and Rich Houle, Director of Codes and Standards-USA, both attended the 2015 PMI Conference as prospective members. Eligible prospective members may attend a maximum of two PMI meetings as a non-member. In addition to the annual conferences, PMI hosts industry events and initiatives throughout the year including legislative fly-ins which prospects may attend.

PMI membership consists of both manufacturing and allied members, who together represent more than 90 percent of the nation’s market share of plumbing products, and more than 150 brands. Participation in PMI affords members the opportunity to work with other manufacturers to effect positive changes in the industry. PMI projects a strong voice on legislative and regulatory matters, plumbing and building codes and standards, and water conservation and provides marketing and management information to its members and the industry. Visit our website for more on PMI membership at: safeplumbing.org/pmi/join-us

Learn more about Reliance Worldwide Corporation at: rwc.com

PMI STAFF

Barbara C. Higgens
CEO/Executive Director
bhiggens@safeplumbing.org

Matt Sigler
Technical Director
msigler@safeplumbing.org

Dawn Robinson
Communications Manager
drobinson@safeplumbing.org

Jodi Stuhrberg
Association Manager
jstuhrberg@safeplumbing.org

Ann Geier
Administrative Assistant
ageier@safeplumbing.org

PMI CONSULTANTS

Ray Valek
Public Relations
ray@valekco.com

Frederick Desborough
Technical Consultant
frd@flex-fluss.com

Erin Shencopp
Legal Consultant, Jones Day
eshencopp@jonesday.com

Words of Thanks From a Departing PMI Board Member

“A belated thank you for the plaque and the mention in the PMI newsletter [March, 2016]. I enjoyed being on the board. I really like the direction PMI has been heading in the past few years.”