A HEALTHY DOSE OF SAFETY IN SEATTLE

Seattle’s Inspectors Demonstrate Their Commitment to Plumbing Infrastructure, Public Health and the Environment

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- ‘Espwa Pou Ayiti’ (‘Hope for Haiti’)
- The Color Purple: TC Meetings Recap
- 2010 Conference Preview Section
  - Host City Profile
  - Preliminary Program
  - Registration and Hotel Information
IAPMO'S 81ST ANNUAL EDUCATION AND BUSINESS CONFERENCE

SEATTLE 2010
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COVER PHOTO BY: JEFF ORTIZ

Official Honors

The award icons in the bottom right hand corner of our cover denote OFFICIAL’s victories in recent media communications competitions. This year the magazine received three APEX awards for writing and magazine design and took home a Gold Communicator Award of Excellence for Best Association Magazine from the International Academy of the Visual Arts.

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Raise your voice in Seattle

It is my great pleasure as president of this esteemed organization to once again invite you to IAPMO’s 81st Annual Education and Business Conference in Seattle, Wash. Your attendance is not only a tremendous opportunity to learn and network with your industry peers and fellow IAPMO members, but provides you with a voice and a vote in reshaping the Uniform Codes for the benefit of millions of Americans.

And what opportunity attendees will have in that regard! At the Assembly Consideration Session scheduled for this year’s conference, IAPMO members will vote on arguably the most substantive changes to the Uniform Codes since the ANSI-accredited code development process began in 2001. If you care deeply or have a stake in the advancement of the Uniform Plumbing Code and Uniform Mechanical Code — and frankly who doesn’t? — these are meetings you do not want to miss.

In addition to the important business of code development, this year’s conference, of course, offers more top-notch educational opportunities, led by the best instructors our industry has to offer — IAPMO instructors. From code review seminars to enlightening presentations and discussions on the most pressing issues of the day, opportunities to advance your understanding of our industry abound.

IAPMO lost a valuable champion of sustainable building practices last year with the far-too-early passing of Joseph Kneidinger, a senior plumbing inspector for the City of Portland, Ore., who dedicated his professional and personal life to the advancement of sustainable and renewable principles. To honor Joseph and ensure his legacy, IAPMO has renamed our annual award honoring the contractor who most embodies the advancement of sustainable practices the Joseph Kneidinger Green Contractor of the Year Award. This honor will be bestowed upon a deserving recipient along with our other annual awards at this year’s conference.

Please join us as we work to advance the Uniform Codes into a new decade of safe, healthy plumbing and mechanical systems for all.

In the pages that follow, you’ll find everything you need in order to register for the IAPMO conference and plan a tremendously enjoyable and professionally worthwhile visit to Seattle. I’m confident that after you’ve seen all that this year’s event has to offer, you’ll make every effort to be a part of it.

Speaking of the pages that follow, please check out some of the offerings in this latest edition of OFFICIAL. On page 6, you’ll find IAPMO Board Member Jed Scheuermann’s incredible first-person account of the devastation caused by the January earthquake in Haiti and his own efforts to help the Haitian people recover and regain hope for their future. IAPMO is incredibly proud of Jed and the work his group from DELTA Ministries performed on the island nation. Their selfless contributions are a tribute to the mission on which IAPMO was founded, to help provide safe, healthy water for everyone.

Be sure to read the latest information on the code development process toward the 2012 editions of the Uniform Codes on page 62. The UPC and UMC Technical Committee Meetings in Milwaukee, Wis., featured a lot of good debate and a lot of hard work toward making the codes the strongest they’ve ever been.

Have a great summer. I hope to see you all in Seattle in September!
Story by Jed Scheuermann

From Feb. 18-28, IAPMO Board of Directors member Jed Scheuermann participated in a 10-day humanitarian operation in the Dominican Republic and Haiti with a team from DELTA Ministries International (DMI) to aid recovery efforts around Port au Prince, epicenter of the devastating 7.0 magnitude January earthquake. The 10-person team set up a DMI base of operations in nearby Lilavois, a small village on the outskirts of Port au Prince, where a structurally sound home had been donated, but lacked potable water and electricity. The group also worked to bring a Lilavois medical clinic back online with safe potable water and electrical systems.

DMI (www.deltaministries.com) is a faith-based organization that mobilizes short-term teams on missions, often humanitarian in nature. Scheuermann previously teamed with DMI in October 2005 to help rebuild the Gulf Coast following Hurricane Katrina. A DMI assessment team was in Haiti days after the quake and Scheuermann got the call requesting his expertise the following weeks.

The following is his first-person account of the inspirational mission he completed on behalf of the Haitian people.

At 4:53 p.m., Jan. 12, a massive 7.0 magnitude earthquake rocked Haiti. Like most earthquakes, no tangible warning hinted at the ominous force pent up beneath the ground. Most structures within a 30-mile radius of the epicenter at Léogâne were no match for the 30-40 second quake, a large majority crumbling entirely. The human toll: some 230,000 dead; 300,000 injured; one million homeless, significantly affecting 3.5 Million Haitians in all.

Sharing the island of Hispaniola with the Dominican Republic, Haiti is the poorest nation in the Western Hemisphere, with annual per capita income less than $340. United Nations (UN) peacekeepers support the current government since the 2004 ouster of President Jean-Bertrand Aristide. Haiti’s predicament is precarious. Already oppressive poverty, hunger and unsanitary conditions have escalated severely since the quake. Perceptible fear and hopelessness are painfully evident on the faces of the Haitian people.

In the immediate aftermath of the quake, Haitian leaders implored DELTA Ministries International to respond and within days of the catastrophe an assessment team was on the ground. This team forged a strong bond and formulated a multi-tiered plan incorporating immediate and long-term goals. Direct partnership maximizes effectiveness and financial stewardship. I was recruited due...
to my experience with Hurricane Katrina and plumbing knowledge vital to Haiti's needs. Our medical and construction team arrived in Haiti less than five weeks after the quake.

Trou Sable (literally “sand hole”) is the most devastated quarter of Port au Prince. Precious few structures remain intact. Looking carefully at a one level building, I realized it was actually once a five story, now garishly arranged like a stack of pancakes. Some structures slid off foundations teetering on ruins or came to rest in the middle of streets or sidewalks. Pulverized small chunks and thick dust blanket everything. It seemed like I trekked into a chaotic jungle out of which no sense can possibly be made.

A stove rests on a roof. Power poles jut strangely into streets. Water mains lay precariously on the surface — some spewing water. Besides a damaged sign, no tangible evidence hints where a church and medical clinic stood. A school utterly destroyed — a few whole desks remain, but most are crushed into tiny splinters beyond recognition. And where are the children?

Amid mountains of rubble, more haunting thoughts occurred to me: How many perished right here? Are there still some of those not accounted for under my feet? In that tangled heap? Here? There? Not yet having an adequate response to these, bigger questions loomed: How do we begin to help people in this endless, absolute chaos? Can we bring hope?
Not surprisingly, the quake continues to affect Haiti. Survivors still wrestle with grief, injuries, despair ... but perhaps none feel it as deeply as the many “new” orphans. While there I was grateful for the ability to communicate in French and I began to pick up Creole, as well. This opened a door into the hearts of the Haitian people, who were amazed people came from all over the globe to help them in their plight. Enduring three strong aftershocks, we experienced first-hand what Haitians have dealt with for many weeks. No wonder they are terrified! Our hosts begged us not to sleep indoors, so we too slept outside — hoping, praying that it would not rain.

In spite of a daunting task, we were determined to make a difference in Haiti. Our medical...
personnel split into two groups. Half went into the heart of Port au Prince to Quesquiyas—a school that emerged as a center of operations for primary medical care and surgery. The rest went to Centre Hospitalier Communautaire de Lilavois, a small hospital/clinic in an outlying quarter. They did surgery, treated various illnesses, set broken bones and dispensed drugs. A startling observation revealed more than 90 percent of patients suffered from insomnia and dehydration/water-borne diseases. The latter were the basis of my involvement, since this is precisely what plumbers change.

Imagine a place where most wells are contaminated. Women and children spend their day hauling water, but ironically their labors yield the very thing causing their sickness. Picture a hospital that depends on hand-carried water brought in by bucket. My first day at Lilavois-Onze entailed attempting to understand an existing but incomplete piping system in the hospital. There was no running water or cistern. My goal was to leave at week’s end with a functioning water system, so I mapped out a plan and detailed materials list for this project.

Dukenzy, the hospital pharmacist and interim director, arranged for me to tour his neighborhood to better understand water issues that most Haitians face daily. There is no public water system. It is instantly obvious why their water sources are contaminated: the majority of wells are shallow, dug and uncased, yet in many cases the well head
Top Left: A woman prepares to get water from a shallow well with a bucket, as two boys look on.

Top Right: Most wells in Lilavois-Onze are open, shallow, dug and uncased wells like this one.

Above: People gather at a UNICEF distribution center in Port au Prince, where UNICEF provides potable water.

Far Left: One of three “good wells” in Lilavois-Onze provides fresh water.

Left: A typical open ditch sewer in Lilavois-Onze. No public piped sewers exist.

Photos by Jed Scheuermann
Right: Jed Scheuermann studies available materials in order to figure out how to make something work.

Far Right: Mike Gallaway (DELTA Team) and Lucien haul a new cistern to the hospital roof.

Middle Right: Mike and Jed discuss a plumbing layout as Lucien watches.

Below: Jean Noél-Penem measures pipe for Jed to cut.

Bottom Right: Mike drills an overflow hole in the cistern.

PHOTOS COURTESY OF JED SCHEUERMANN

elevation is below an open sewer as little as eight feet away. (I observed no piped sewers.) Tragically this explained why our doctors encountered so much water-borne disease. It is truly heartbreaking to see the horrific effect that lack of potable water coupled with inadequate sanitation wreaks on people. There cannot possibly be a clearer illustration of how strong codes and standards save lives; or how our old motto, “The plumber protects the health of the nation,” is so, so true.

Getting construction materials was an adventure in its own right. What is readily available or affordable at home often does not even exist in places like Haiti. Creativity with open-mindedness is essential when building plumbing systems abroad. It brings back
memories of MacGyver, a fabled TV character who could do anything with seemingly nothing. Reginald and Mario, my two new Haitian friends, went with me to get our supplies. Between the three of us, we somehow managed to get what we needed — or enough creative alternatives to make something work. Now it was time to put a plumbing system together.

Nothing remotely resembling OSHA standards is even given a passing or distant thought in Haiti. Nevertheless, we worked carefully to avoid personal injury. Daytime temperatures approaching 100°F with oppressively high humidity made heat a constant concern. Much of my work occurred on the roof of the hospital, where there was no respite whatsoever from the blazing midday sun.

Mike (of the DELTA team) and two trusted Haitians helped me install the plumbing at Lilavois Hospital. Lucien stands scarcely 5-feet tall, yet is a giant of a man! He tirelessly hauled materials to the roof, helped with every difficult task and did so with an indomitable smile. Often he anticipated what I might need next and had it ready for me prior to asking. Always gracious, Lucien’s help was invaluable. Jean-Noél Penem, the security guard at Lilavois Hospital, was equally indispensable. At nearly 6-feet tall, he cast rather intimidating figure when we first met. Stern-featured and wearing a Miami-Dade Federal Security jacket, he pounded a baseball bat into his
hand. I determined that we would be friends
and so we were, as we worked and chatted
for many hours. As the week unfolded,
I came to love Jean-Noél’s sincere warm
smile. As we plumbed the Lilavois hospital,
we taught one another Creole and English.

During previous similar trips, one of my
priorities has been fostering relationships with
those to whom I came to help. Human kinship
transcends culture and language. We can draw
closer to one another. Haiti is no different.

One afternoon, a kite broke free of its string,
crash landing in the hospital compound.
Anxious children’s voices from the other side
of the wall wondered how they might get it
back. Kite in hand, I poked my head above the
wall, asking, “Have you lost a kite?” I suppose
they were quite shocked to hear an obvious
foreigner speaking Creole. As their faces lit up
with broad smiles, I handed back their kite as
a crowd gathered. Grabbing my camera, I
headed over the wall. Dozens of photographs
later I returned with a smile to my plumbing
and watched their homemade kite continue
to soar high above me as I worked.

One wing of the hospital had some existing
water piping. It took effort and careful
sleuthing to determine exactly how the system
had been “designed” originally. In light of
the current power situation at Lilavois-Onze,
it made sense to install a cistern on the roof,
anchoring it above load-bearing columns and
cists. A pump delivers water up the rooftop
cistern when power is available. This way,
they would have a functional gravity down-
feed system that works most of the time even
without electric power. Our team electrician
Larry rewired the hospital, installing a generator
Top: A street produce market scene in Port au Prince – notice the man standing with crutches in the foreground, an amputee, likely as a result of the earthquake. PHOTO BY JED SCHEUERMANN

Above: A woman seeks refuge from the heat of the midday sun in a makeshift tent in Lilavois 11. PHOTO BY GREG WOODMAN

transfer switch to facilitate the hospital running on a standby generator until grid power is restored. Hospital staff ensures the cistern is refilled every time the generator is fired up. Various plumbing fixtures and trim were set inside the building, including washrooms and the lab. Additional water supply and drainage piping completed the plumbing system in that wing of the hospital.

In front of the hospital, a hand-operated water-ram type pump was the sole source of water since its construction. Here, buckets of water were filled by hand and carried inside. Our efforts to re-plumb the building included dropping a new suction line for an electric-powered water pump and resealing the well head. When we finished the system we waited eagerly in anticipation to see if our calculations and design would actually work. They did indeed! The look on Dukenzy’s face, his radiant smile really tells the story of our success best. For the first time ever, Lilavois Hospital had running water! Lilavois Hospital is a bastion of hope in a land that so desperately needs it.

Without doubt, our DELTA team’s accomplishments, and mine in the plumbing of a hospital, were made possible by the generosity and vision of many others. I am deeply indebted to The IAPMO Group and Executive Director Russ Chaney’s advocacy, and to my colleagues on the Board of Directors, in particular President Bob Siemsen and Vice President Dan Daniels. Their financial partnership and encouraging support made dreams become reality in Haiti. Countless others, too, are part of all the meaningful things that happened on this mission. My heartfelt “thanks” are inadequate in the scope of how many partnered in making Haiti a better place today — and most importantly shared in renewing hope.

A question I’m often asked since my return is “How does Haiti’s quake devastation compare with Katrina’s destruction?” Katrina damaged many more square miles, but Haiti’s catastrophe seems greater. One cannot underestimate the individual suffering of those who lost their lives or possessions during Hurricane Katrina’s onslaught in 2005, yet Haiti suffered those same losses on a far greater scale. The death toll is sobering.
Daily I saw people with casts or missing limbs, struggling to merely survive. Haiti was a place that was at best much more “difficult” to begin with even before their disaster struck. It is true that such natural calamities are no respecter of person and affect everyone in their path. Most developed countries may be better equipped to deal with the aftermath of such events due to vastly greater resources. Many nations responded to Haiti’s need and are still working there to improve the situation.

It will require many years to fully address Haiti’s needs since many of their people’s concerns stem from long before that fateful day in January when a mighty earthquake broke their world. We’ve begun that task and the work that remains is less today than when we first started.

Memories of Haiti will always stir me. Eerie images indelibly etched in my mind sometimes haunt my sleep: a man missing a leg that I saw at a local market. There’s the young woman whose desperate eyes appeared to have lost all hope. A man getting his shoes shined sitting on a chair among endless, towering mountains of rubble. I still hear orphans singing their beautiful greeting song to me in Creole, French and English. It causes me to ponder how blessed I am and thus I find myself both obliged and privileged to serve others — this time in Haiti.

In route to Haiti via the Dominican Republic, I investigated a water treatment project in Santa Domingo, D.R. Since poor quality municipal water is available only Tuesdays and Saturdays for a few hours, most people buy expensive bottled or purified water. Agua Bendicion, an extension of a local church understanding this need and seeing a niche, embarked on an ambitious undertaking — build a small water treatment facility.

Agua Bendicion processes public water by filtration, softening, chlorination and sterilization (UV, reverse osmosis and ozonation). This creates jobs in plant operations, for lab technicians and in sales. Lab techs constantly verify water quality and the Dominican health department certifies their operations routinely. Capable of producing 120,000 gallons every month, they provide free high-quality pure water to local churches, schools, police and fire departments.

Water is sold to the public at a discount — below the typical cost of commercially available bottled water — but proceeds keep
Agua Bendicion’s facility running. Profits are reinvested in their community, most visibly as scholarships at an on-site private school. Approximately 70 children from the church and 360 neighborhood children gain access to free education because of the guiding philosophy of Agua Bendicion. Their community need-driven business model strives to be relevant, cost-effective and sustainable. By every measure they have been proven to be so. As a result, four additional treatment facilities have been built in other areas based upon the success of their first effort.

Interestingly enough, their operation is also very “green!” Water (backwash, etc.) often discarded in softening and reverse-osmosis processes is recaptured and piped to a dedicated piping system serving water closets,
Their buildings are provided with a daily water supply without dependence on an unreliable, inferior quality public source.

This simple yet compelling model can be easily replicated. Given Haiti’s desperate water issues, it provides an ideal place to do so. Experts proven in this field should over time undertake initial construction and operations. Based on the Dominican model, it is conceivable that Haitians could be adequately trained with guidance under proper supervision, eventually assuming leadership over the entire operation.
Top Left: The Agua Bendicion water treatment building with rooftop cistern containing low-quality municipal water prior to treatment.

Left: Inside the chapel at the school funded by Agua Bendicion.

Middle Left: Pump for reclaimed water from treatment operations that serves water closets, urinals and irrigation purposes at the school.

Below: Grade 1 classroom at the school funded by Agua Bendicion.

Bottom: Portion of the school and playground.

PHOTOS BY
JED SCHEUERMANN

To see more of Jed Scheuermann’s and Greg Woodman’s photos from Haiti and the Dominican Republic, visit IAPMO’s Flikr photo page at www.flickr.com/photos/iapmo.
The City of Seattle is nestled between two bodies of water, Puget Sound and Lake Washington, and two majestic mountain ranges, the Olympics and the Cascades. It is the largest city in Washington state and home to one of the 10 busiest seaports in the nation. With lush evergreen forests and rich natural resources, Seattle is appropriately referred to as the Emerald City.

A top priority among the City’s leaders and activists is protecting the waters of the state that provide year-round recreation for residents – and life-sustaining habitats for the varied aquatic life and wildlife. A leading force in this initiative is the City’s plumbing and gas piping inspections program, which is part of the Community Environmental Health (CEH) section of the Environmental Health (EH) division within the public health department, Public Health – Seattle & King County (PHSKC).

PHSKC is the 10th largest metropolitan health department in the United States, with 1,900 employees and an annual operating budget of $296 million. The department serves a residential population of 1.8 million people, who speak more than 50 different languages. According to Chief Plumbing Inspector Dave Cantrell, Seattle is the only jurisdiction in the entire state where plumbing and gas piping inspections are part of the health department; in every other jurisdiction, this service is part of the building department.

Historically, Seattle has always had its own health department. In the mid-1960s, however, Seattle and King County combined forces to create a single health department for the entire county. As a result, plumbing inspections for unincorporated areas of King County became the responsibility of CEH.

Today, the section’s plumbing and gas piping inspections program serves a sprawling jurisdiction covering 2,134 square miles, which is nearly twice as large as the average U.S. county. With just 10 plumbing inspectors in the field, the large service area is broken down into districts, which allows the lean team to divide and conquer. Still, it’s not uncommon for a single inspector to travel more than a hundred miles a day to complete their scheduled tasks.

The section also has two senior plumbing inspectors, Mark Fallgatter, who is just starting his 12th year as an inspector, and Steve Nastruz, a 14-year plumbing inspector veteran and active member of the IAPMO Board of Directors, and six administrative support personnel who serve all of CEH, including the wastewater and drinking water programs. Fallgatter and Nastruz perform plan reviews and high-level customer service, and handle unforeseen issues that arise. This allows Cantrell to take one step back from the day-to-day operations to focus on larger issues. Most notably, how to continue ensuring the health and safety of the City’s plumbing system and bodies of water amid budget cutbacks and the growing movement toward water reuse programs.
Doing More with Less

In 2007, at the height of the Seattle construction boom, Cantrell’s group had 19 plumbing inspectors in the field. Since the program’s only source of funding comes from plumbing and gas piping permits, when construction crashed, so did their budget. Layoffs were inevitable. “Like most cities, we are facing fewer large projects, more small inspections and an operating budget that’s down by one-third,” Cantrell says. CEH is evaluating its plumbing inspection fee structure to ensure that the current level of service is continued. “We’re staying true to our program by asking our staff to do more with less,” Cantrell adds.

That program includes plumbing and gas piping inspections for commercial and residential construction, medical gas installations and temporary food service installations at local events, such as the annual Bite of Seattle. The group also prepares informational handouts in conjunction with the Seattle and King County building departments, reviews line drawings for property and business owners and participates in occasional home improvement workshops. In addition, Cantrell and Nastruz spend a significant amount of time shaping the plumbing code regulations — at the state and national levels — and sharing what they know with industry and trade organizations throughout the area.

While they do have a lot on their plate, it’s all in a day’s work for the current CEH inspection staff, which represent approximately 430 years of combined plumbing experience, including 180 years of inspection experience. Every CEH inspector has extensive plumbing knowledge. “A prerequisite for employment is that you need to be a licensed journeyman plumber before you can be an inspector, which isn’t the case in all jurisdictions across the state,” Nastruz explains, “We all have hands-on experience in the field, which is a unique asset that we bring to the health department.”

Cutting the Fat, Grease and Oil

After spending 18 years in another jurisdiction’s building department, Cantrell appreciates the value of performing plumbing reviews and inspections as part of the health department. Using a new restaurant to illustrate his point, Cantrell explains how
CEH works in concert with the Food Protection Program, which is also part of the EH division of PHSKC, to not only ensure that a new food service establishment has safe food handling measures in place, but that it also approaches safety from a plumbing standpoint.

“This gives us a wonderful opportunity to address things like backflow prevention, grease mitigation and fixture drainage connections early, from both a health code and plumbing code perspective,” Cantrell explains. This eliminates the health/building code clashes that can occur when plumbing inspections are performed by a building department that is not part of the local health department. Better communication between Food Protection and CEH results in better service for the customer by getting things right the first time, which saves the food service establishment time and money. It saves the plumbing inspection program time and money, too, by reducing the number of correction write-ups and re-inspections needed to serve the customer.

Speaking of restaurants, it’s important to note that CEH also works in concert with Seattle Public Utilities (SPU) to mitigate the impact of commercial kitchen grease on the City’s plumbing infrastructure. “Grease is one of the primary causes of blockages in our pipes,”
states Frank McDonald, SPU’s manager of the Drainage & Wastewater Asset Managers group. “If we can remove it at the source, there is less potential for sewage backup into someone’s home or onto the street.”

Restaurants are required to separate grease from wastewater by installing appropriate grease interceptors, which are regulated by the plumbing inspections program. “We have an excellent relationship with CEH because they perform the plumbing review,” explains Julie Howell, SPU’s Pollution Planning Program coordinator and program planner for the fats, oils and grease (FOG) program.

“The plumbing inspectors help our whole program by ensuring that the grease interceptors match the needs of a particular restaurant.”

But managing grease isn’t the only issue that CEH and SPU have in common. Both groups also share a commitment to protecting Seattle’s state waters.

Collaboration for a Common Cause

Protecting Seattle’s receiving waters takes a collaborative effort by a number of different departments and agencies. According to Brian Robinson, an environmental compliance inspector on SPU’s Source Control and Monitoring Team, one-third of the sewer system fully separates stormwater from sanitary wastewater, one-third partially combines sanitary wastewater and stormwater in one pipe and the remaining one-third fully combines sanitary water and stormwater in one pipe. In every case, stormwater management is critical for the health of Seattle’s water bodies.

“Where the system is combined, we are working to reduce stormwater contributions to combined sewer overflows,” Robinson says. “In the separated system, our concern is keeping stormwater clean by preventing cross-connections.”
The City of Seattle’s building department, the Department of Planning and Development (DPD), plays a role in stormwater management, as well. DPD recently adopted a new stormwater code for most new construction that mandates the use of green stormwater infrastructure that utilizes low impact development (LID) practices. As a result, the department is getting more inquiries about rainwater harvesting and graywater reuse programs, which takes us full circle – back to CEH.

“When our applicants want to use a rainwater harvesting system to meet some of their building code stormwater requirements, we refer them to PHSKC for the specifics because the actual permitting for those systems occurs within the plumbing inspections program,” explains Sherell Ehlers, site development supervisor for the DPD.

In a city that’s known for its measurable rainfall, the practice of capturing and reusing this natural resource is growing. While the need to conserve water isn’t as great in Washington as it is in dryer states, “In Seattle,” Fallgatter states, “it’s just the right thing to do.” Plus, energy savings are realized through water conservation. That’s why Cantrell and crew are working hard to educate — and to regulate!

**A Conduit for Code Change**

The State of Washington has adopted the Uniform Plumbing Code, published by IAPMO, for plumbing, and the International Code Council (ICC) I-Codes for building, mechanical, fire and so forth. CEH is actively involved with both organizations. “Years ago we decided that it was very important, from a public health aspect, to be involved in plumbing code development,” Cantrell states. “Although staying involved is hard work, it allows us to help steer the codes in a safe direction while giving us the expert advantage to deal with the changes once they show up in state law.”

Having this in-depth code knowledge also allows the group to take a proactive approach to educating its customers, and has made CEH the go-to source for cutting edge inspection advice. “Dave and Steve are recognized experts in our industry, so people from other jurisdictions routinely call us to see where we stand on current issues,” Fallgatter explains.
“Water reuse is a great example. Since this is a relatively new situation, other plumbing inspection departments might ask for our input on how to handle it. It’s rewarding to have this level of knowledge in our department.”

Significant water reuse changes are on the way from the 2009 Uniform Plumbing Code and CEH has been an active participant in the creation of state-level amendments and in the support of other jurisdictions that don’t have the same opportunity to get involved. “In many ways, we are a conduit for adopting change and establishing code consistency at a statewide level,” Cantrell adds.

Along the lines of change, CEH isn’t Seattle’s only leader. The city itself is also a proven leader of environmental change.

The Emerald City Takes the LEED®

In February 2000, Seattle became the first city in the nation to formally adopt a Sustainable Building Policy mandating that all new City-funded projects and renovations with more than 5,000 square feet of occupied space achieve a LEED Silver certified rating. The City has 38 projects targeted for LEED certification. Among the completed projects are Seattle City Hall and the Seattle Central Library. Officials estimate that by 2013 Seattle will become one of the largest single owners of LEED facilities in the world (http://www.seattle.gov/dpd/GreenBuilding/CapitalProjects/SeattlesPolicy/default.asp).

Rainwater harvesting plays a big role in the City’s green initiative by contributing to LEED certification and reducing the demand on city potable water systems, sewer infrastructure and stormwater retention systems. An added benefit of rainwater harvesting is the reduction of pollutants released into the area’s receiving waters during combined sewer overflows. The City estimates that for every 100 cubic feet (748 gallons) of potable water that is saved per year, the 10-year payback will be more than $125. Over 25 years, the savings soar in excess of $500.

Touring the Town

With sustainable construction and rainwater harvesting in mind, Cantrell, Nastruz and Fallgatter arranged a multi-site tour of several
green projects so we could see some of these measures in action. After a meet-and-greet photo session at their downtown Seattle office, we hit the road. On our agenda was a sustainable community farm, a City fire station, the new headquarters of the Bill & Melinda Gates Foundation and a compressed natural gas (CGN) fueling station. To put the vast reach of the plumbing inspectors’ jurisdiction in perspective, our tour began in a northern area of unincorporated King County before taking us through the city and ending in the south end of Seattle. Time-wise, we did almost as much driving as touring!

21 ACRES
Our first stop was 21 Acres, a non-profit organization and community farm founded in 1999 and dedicated to cultivating, demonstrating and advancing systems that support sustainable agriculture. Construction is underway on the new 21 Acres Center for Local Food and Sustainable Living in Woodinville, Wash. The Center will serve as an educational facility with classrooms, a commercial-grade teaching kitchen and a small farmer’s market. The building itself will demonstrate, by example, how sustainable design and construction contributes to environmental stewardship by conserving energy, water and resources (www.21acres.org). The organization’s goal is to achieve LEED Platinum certification for the new Center. Sustainable elements of the project include:

- Composting toilets
- On-site graywater treatment
Since construction is still at the early stage, many of the 21 Acres green features weren’t yet in place. But we did get a look at the APEX Block building components. It’s amazing how such a lightweight material is transformed into an incredibly strong and energy efficient building envelope.
The next stop on our tour was Fire Station 39, a one-engine company located in the Lake City neighborhood of north Seattle. The existing station, built in 1949, no longer met safety and operational standards and a new station was constructed behind the original building as part of a nine-year program to upgrade, renovate or replace 32 neighborhood fire stations. The new, three-bay station incorporates a rainwater harvesting system to capture roof drainage for flushing toilets, watering flowerbeds and washing vehicles.
Interestingly, neighborhood residents have visual access to the station’s rainwater capturing apparatus, which is designed to resemble an artistic sculpture and is positioned on the public sidewalk side of the building.

**BILL & MELINDA GATES FOUNDATION**

After leaving north Seattle, we headed downtown to the very active construction site for the new Bill & Melinda Gates Foundation headquarters, which is scheduled for completion in spring 2011. Located just east of the Seattle Center, the 12-acre, three-building campus will be built in two phases. After making our way through the secured gate, we donned hard hats and safety vests and followed Plumbing General Foreman Charlie Dean of McKinstry Co. on a green plumbing and mechanical tour.

First, Dean led us into an immense, partially finished basement area to view the holding tank for the campus’ rainwater harvesting system. It took several moments to realize that not only were we viewing the tank — we were standing in it! Although we walked through doors to enter the tank, those doors will soon be sealed to create a fully contained reservoir capable of storing nearly one million gallons of rainwater. Dean also showed us the complex plumbing and mechanical room that will be used to control the rainwater distribution.
Another interesting, sustainable, water-based feature of the campus is the thermal energy storage system. To save energy, the system will cool water at night in a deep underground reservoir with about 600,000 gallons of storage space. During the day, the cooled water will be circulated for climate control, resulting in a reduced need for power during peak use.

According to the Bill & Melinda Gates Foundation Website (www.gatesfoundation.org), “The new campus was designed and is being constructed according to Seattle’s policy for sustainable construction.” The organization is seeking LEED Gold certification for its new headquarters, which also includes more than half an acre of living roofs and features strategic use of natural light.
A project of this magnitude provides a much-needed boost to the City’s economy, while raising the bar for sustainable construction. “We have already conducted 18 inspections at the site,” Cantrell says, “and that doesn’t include the time we’ve spent on plan reviews and consultations with the designers. We’ve only touched the tip of the iceberg on this project.”

**WASTE MANAGEMENT OF SEATTLE**

Our final stop was the south Seattle headquarters of Waste Management of Seattle. In January 2009, Waste Management of Seattle broke ground on its new CNG fueling station and unveiled the region’s most environmentally advanced solid waste collection trucks fueled by CNG, which will
dramatically lower greenhouse gas emissions. Within five years, all 180-collection trucks in Waste Management’s Seattle-based fleet will be fueled by CNG. This will provide significant environmental, public health and community benefits to our region.

CNG installations are reviewed and inspected collaboratively by CEH and the Seattle Fire Department. Along with the high pressures and intricate design involved with these systems, there are specific requirements for things like system testing, the location of operating and emergency controls, cathodic protection (CP) and seismic bracing. Like the other conservation and sustainable construction measures affecting more and more plumbing installations, CNG is another
emerging technology that the CEH plumbing inspectors had never encountered a few short years ago. Understandably, with the advancements in the plumbing, fuel gas and sustainable construction industries and codes, CEH staff work hard to meet the needs of Seattle and King County through continued education and on-going evaluation of their permit and inspection processes and procedures.

A Dedicated Inspection Team

After spending the day with Cantrell, Nastruz and Fallgatter, there’s no doubt they lead a team of inspectors who are passionate about plumbing, public health and the environment. (They even ride the bus to work when possible.) And it certainly seems like the team’s work is never done. In fact, back at the office, another initiative is in the works: a shift toward paperless permit applications and wireless plumbing inspections.

By mid-2010, a new online permitting process should be up-and-running. The field inspectors, who are already equipped with notebook computers, are looking forward to implementing an electronic workflow solution that will increase productivity and further improve customer service. And until the economy picks up, the Community Environmental Health section will continue doing more with less. Now that’s dedication!

Special thanks to the following people for contributing their time and expertise to this story:

Public Health — Seattle & King County
- Dave Cantrell, chief plumbing inspector
- Steve Nastruz, senior plumbing inspector
- Mark Fallgatter, senior plumbing inspector

Seattle Public Utilities
- Frank McDonald, manager, Drainage & Wastewater Asset Managers Group
- Julie Howell, Pollution Planning Program coordinator
- Brian Robinson, Environmental Compliance inspector

Department of Planning and Development
- Sherell Ehlers, Site Development supervisor
Black and White and **GREEN** All Over

Only one publication spells out the best sustainable plumbing and mechanical building practices in simple, straightforward code language: the Green Plumbing and Mechanical Code Supplement.

- Provides needed guidance for designing, installing and inspecting sustainable plumbing and mechanical systems called for in green building rating systems and standards such as LEED for Homes and NAHB’s National Green Building Standard™

- Provides the most comprehensive collection of plumbing and mechanical provisions available toward increased water and energy efficiency

- Provides related installation and maintenance requirements

- Where possible, the Green Supplement provides commentary detailing the water and energy savings associated with the provisions detailed within its language

The Green Supplement is not a “greener” version of the Uniform Codes, but rather a separate document establishing requirements for green building and water efficiency applicable to plumbing and mechanical systems.
Whether you call it the “Emerald City,” “Coffee Town” or the more straightforward “Rain City,” Seattle goes by many monikers — most only touching the surface of the wealth of culture and geographical splendor the continental United States’ northernmost major city presents.

The birthplace of Jimi Hendrix and Starbucks Coffee, Seattle is the major seaport on Puget Sound and the economic, cultural and educational center of the Pacific Northwest.


History

Though founded by settlers the Denny Party in 1851, indigenous people have inhabited the area for at least 4,000 years. Two tribes, the Duwamish and Suquamish, called the area home and lent the name of their chief at the time, Sealth, to the village.

Seattle has changed identity frequently during its first 160 years, going from a timber town to a gold rush base to a shipbuilding hub and aerospace leader to its current persona blending reputations for high-tech industries, independent music and, of course, coffee.

Seattle hosted the 1962 World’s Fair (also known as the Century 21 Exposition), for which the city’s most famous landmark, the 605-foot-tall Space Needle, the monorail and the Seattle Center were constructed.

Entertainment and Sightseeing

The city is home to a world-class aquarium and the charming Woodland Park Zoo, as well as the famous Farmer’s Market, home of the Pike Place Fish Market, where fish mongers draw a crowd to watch them heave the day’s fresh catch through the air.

Seattle boasts three major sports teams — the Mariners (MLB), Seahawks (NFL) and Sounders (MLS), each of which will be playing during IAPMO’s conference. (The Mariners will host the Oakland A’s Sept. 30-Oct. 3.)

The Great Seattle Fire of 1889 wiped out 25 square blocks of what was then a quickly developing frontier town. When rebuilt, developers opted to raise the new city a full story above the muddy tide flats that previously housed its storefronts, leaving a living museum preserved underground. Tours of the Underground are conducted hourly each day from 10 a.m. to 7 p.m.

Seattle Aquarium
1483 Alaskan Way
Seattle, WA 98101
(206) 386-4320
www.seattleaquarium.org

Woodland Park Zoo
5500 Phinney Avenue North
Seattle, WA 98103
(206) 548-2500
www.zoo.org/
Seattle boasts one of the most magnificent coastal skylines in the United States.

The Pike Place Farmer’s Market is a frequent destination for both tourists and Seattle locals alike.

PHOTOS COURTESY OF THE SEATTLE CONVENTION AND VISITORS BUREAU

Market offers more than just flying fish and Pioneer Square boasts exotic imported and handmade items as well as the original Starbucks Coffee house.

Shopping

Conference attendees will find everything they need within walking distance of the hotel. Downtown Seattle offers two big malls (Westlake Center Plaza and Pacific Place) in addition to more eclectic boutique storefronts along the city streets. The Pike Place Farmer’s Market offers more than just flying fish and Pioneer Square boasts exotic imported and handmade items as well as the original Starbucks Coffee house.
The catch of the day is always fresh at the Pike Place Fish Market.

PHOTOS COURTESY OF THE SEATTLE CONVENTION AND VISITORS BUREAU
The Seattle area is home to some 48 18- and 36-hole public golf courses and an additional 14 9-hole public courses. Another 15 private 18-hole courses, including Sahalee Country Club, home of the 2010 U.S. Senior Open (July 26-Aug. 1), highlight the area’s offerings.

The 2010 Roscoe King Memorial Golf Tournament will be played at Willows Run Golf Course in nearby Redmond, Wash. Located in the Sammamish Valley, Willows Run is a beautiful championship caliber golf course complex, complete with two eighteen-hole, links-style courses, driving range, practice putting green and bunker. The facility also offers a par-three family 9-hole course and an 18-hole “themed” putting course.

**Willows Run Golf Course**
10402 Willows Road NE
Redmond, Wash. 98052
(425) 883-1200
www.willowsrun.com

Getting around Seattle is done primarily by car, but bus service and some light rail is available. The Seattle Center Monorail travels a little more than a mile between the Seattle Center and Westlake Center, a downtown shopping mall a few blocks from the Farmer’s Market.
Weather

September is one of the drier months in the always potentially rainy city, with average highs around 70 degrees and lows around 50. Pack an umbrella, but don't be surprised to find bright sunny skies.
Greetings from the Governor
September 26, 2010

I am pleased to extend warm greetings to all of those attending the International Association of Plumbing and Mechanical Officials (IAPMO) 81st Annual Education and Business Conference. For those of you visiting us, it is a special privilege to welcome you to the beautiful Evergreen State.

This forum is an excellent opportunity for continuing education and networking, as well as lending your voice to the development of the Uniform Codes. I applaud each of you for your commitment to improving practice and protecting public health and safety, and I trust you will all find this year’s event to be informative and well worth the time you have invested.

I am truly delighted that your conference is being held in Washington, and I hope your schedules will permit you to explore some of the exciting sights and traditions that make Seattle and the surrounding Puget Sound area a destination to remember.

Thank you for coming, and please accept my best wishes for a rewarding and productive meeting.

Sincerely,

Christine O. Gregoire
Governor
Greetings,

On behalf of the citizens of Seattle, I extend my warmest welcome to the participants of the International Association of Plumbing and Mechanical Officials’ (IAPMO) 81st Annual Education and Business Conference.

The City of Seattle recognizes and appreciates the work IAPMO has done for the past 84 years protecting public health and safety by working in concert with government and industry to implement comprehensive plumbing and mechanical systems all over the world.

It has been more than 20 years since our city has had the opportunity to play host to your conference, so I hope your members will take advantage of the opportunity to enjoy the diverse arts, culture, and natural beauty that Seattle has to offer.

You have my best wishes for a successful conference and pleasant stay in Seattle. It is good to have you here; I hope you will come back and visit again soon.

Sincerely,

Michael McGinn
Mayor
<table>
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<tr>
<th>Saturday, September 25</th>
<th>Sunday, September 26</th>
<th>Monday, September 27</th>
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<tbody>
<tr>
<td>3:00 pm – 6:00 pm Registration Desk and Cyber Café Open</td>
<td>6:30 am Golfers Depart for the Roscoe King Memorial Golf Tournament Meet at IAPMO Registration Area to Board Buses</td>
<td>7:00 am – 5:00 pm Registration Desk and Cyber Café Open</td>
</tr>
<tr>
<td>6:00 am Arrive at Willows Run Golf Course</td>
<td>7:00 am Coffee and Lite Breakfast</td>
<td>7:00 am – 9:45 am Conference Exposition</td>
</tr>
<tr>
<td>8:00 am Tee Off - Shot Gun Start – Scramble Format</td>
<td>7:30 am – 9:30 am Chapter Photos</td>
<td>9:30 am Photo Presentation of Previous Day’s Highlights</td>
</tr>
<tr>
<td>11:00 am – 6:00 pm Exposition Set Up Session for Exhibitors</td>
<td>10:00 am Opening Session Begins</td>
<td>1:00 pm Introduction of Keynote Speaker President Bob Siemensen</td>
</tr>
<tr>
<td>11:00 am – 6:00 pm Registration Desk and Cyber Café Open</td>
<td>12:00 pm Luncheon for Honored Guests (Invitation Only)</td>
<td>10:00 am Keynote Speaker Ron Pearson</td>
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**IAPMO Conference Motorcycle Ride**

If a round of golf is not your thing, the conference host chapter is organizing a motorcycle ride on Sunday, Sept. 26. Please contact chapter member Marc Schoenberg at (253) 278-0328 or by e-mail at marcschoenberg@comcast.net for info. The bikes may be reserved from Seattle Harley by calling (425) 988-2100 or on their Website, www.downtownhd.com/miscpage_005.asp.

Ron Pearson is a comedian, actor and world record holding juggler. Ron has taken multitasking to a whole new level, from starring on the sitcom “Malcolm and Eddie” for several years, to guest starring on shows like “The Drew Carey Show,” “Two Guys and a Girl,” “That ’70s Show” and “The George Lopez Show.” As a comedian, Ron has made numerous late night appearances from “The Late Late Show” to “The Dennis Miller Show” and Comedy Central. He also found time to do years of hosting game shows and reality television on the Family Channel and The Discovery Channel.
Concurrent Education
1:00 pm – 5:00 pm
Backflow Prevention Assembly Repairer (Day 1) (2.0 CEUs)

Presented by Dr. Stu Asay, P.E.
This 20-hour course is taught over three days. The ASSE Backflow Prevention Assembly Repairer certification is a national certification and this class prepares the individuals for the ASSE written and practical plumbing system repairer exam. Participants taking this certification must first be certified as a backflow prevention assembly tester.

ASSE Certification Prerequisite:
Applicant must be either
1) certified by ASSE as a backflow prevention assembly tester or
2) certified by a recognized agency as a backflow prevention assembly tester (State of Washington and Oregon Tester certifications meet this prerequisite)

1:30 pm Call to Order
President Bob Siemsen

1:30 pm – 3:00 pm 2009 UMC Workshop
Presented by UMC Workshop Committee

The UMC Workshop Committee presents an opportunity for participants to test their code knowledge and learn from their peers. During the workshop, participants are placed into groups and are given drawings of mechanical installations and asked to determine if the systems and components are in compliance with the 2009 Uniform Mechanical Code®. The findings are then presented to everyone in attendance to determine if they are correct and discuss any code issues discovered in the drawing.

Door Prizes
3:15 pm – 4:45 pm
2009 UPC Workshop
Presented by UPC Workshop Committee

The UPC Workshop Committee presents an opportunity for participants to test their code knowledge and learn from their peers. During the workshop, participants are placed into groups and are given drawings of plumbing installations and asked to determine if the systems and components are in compliance with the 2009 Uniform Plumbing Code®. The findings are then presented to everyone in attendance to determine if they are correct and discuss any code issues discovered in the drawing.

Door Prizes
5:00 pm – 7:00 pm
Conference Exposition

Tuesday, September 28

Cocktail Reception Honoring First-Timers and Committee Members
All registered members and registered guests are invited. (Badges Required)

Brief Announcements of Top Golf Winners

6:00 pm – 8:00 pm
7:00 am – 5:00 pm
Registration Desk and Cyber Cafe Open
7:00 am
Coffee and Lite Breakfast
7:00 am – 9:45 am
Conference Exposition

1:30 pm – Completion
Call to Order
President Bob Siemsen

UPC/UMC Assembly Consideration Session
Door Prizes
Evening on Own

Concurrent Education
8:00 am – 5:00 pm
Backflow Prevention Assembly Repairer (Day 2) (2.0 CEUs)
Presented by Dr. Stu Asay, P.E.
This is day two of a three day course and will be closed to new enrolment.

9:00 am Photo Presentation of Previous Day’s Highlights
9:30 am Call to Order
President Bob Siemsen

9:30 am – 12:00 pm
UPC/UMC Assembly Consideration Session
Door Prizes

12:30 pm
President’s Luncheon (Invitation Only)
All Past Presidents, current Committee Chairs and current Chapter Chairs are invited.

1:30 pm Call to Order
President Bob Siemsen
Wednesday, September 29

7:00 am – 5:00 pm Registration Desk and Cyber Café Open
7:00 am Coffee and Lite Breakfast
7:30 am Photo Presentation of Previous Day’s Highlights

Concurrent Education
8:00 am – 5:00 pm Backflow Prevention Assembly Repairer (Day 3) (2.0 CEUs)
Presented by Dr. Stu Asay, P.E.
This is day three of a three-day course and will be closed to new enrolment.

8:00 am Call to Order
President Bob Siemsen

Credentials Committee and the Nomination Committee Reports
8:30 am – 10:00 am 2010 GPMCS HVAC Energy Efficiency
Presented by Tom Meyer
This seminar discusses the 2009 Uniform Mechanical Code® and 2010 Uniform Green Plumbing and Mechanical Code Supplement™ provisions pertaining to HVAC energy efficiency and environmental quality. Covered in this seminar will be the provisions related to the design, installation and maintenance of systems that are designed to enhance the energy efficiency associated with plumbing and mechanical systems within a building.

10:15 am – 11:45 am 2010 GPMCS Rainwater Harvesting and Gray Water
Presented by Mike Mitchell
Participants in this seminar will learn about the use, installation and code requirements for several nonpotable water reuse systems. Specifically, the types of systems covered in this session will include gray water and rain water harvesting. Each system will be defined and the potential benefits and safety hazards will be discussed.

Door Prizes
Noon 6th Annual Chapter Leadership Summit Luncheon (Invitation Only)
2:00 pm – 3:30 pm 2009 UMC Type I Hoods
Presented by Mike Mitchell
This session will discuss the provisions of the 2009 UMC Part II Kitchen Hoods and help participants understand the options available for design of hoods, grease ducts, clearances and terminations. Several new concepts are now available since the inclusion of NFPA 96 into the Uniform Mechanical Code and will also be discussed. Inspectors and plan reviewers need to be aware of the specifics of these new concepts. Bring your 2009 UMC® and a calculator for this class. Case studies and sample sizing problems will be included to test the knowledge that you have gained.

Door Prizes
3:45 pm – 5:15 pm
2009 UMC Vents and Venting
Presented by John Jordan
This session discusses the Chapter 9 Uniform Plumbing Code provisions regulating vents and venting. The topics covered in this module include a vent overview, cross-sectional area venting, vent connections, special venting requirements, and combination waste and vent systems.

Door Prizes
6:30 pm – 9:00 pm Evening Event at Experience Music Project Science Museum (EMP)
All registered members and registered guests are invited. (Badges and monorail passes required)

Thursday, September 30

7:00 am – 5:00 pm Registration Desk and Cyber Café Open
7:00 am Coffee
7:30 am Photo Presentation of Previous Day’s Highlights
8:00 am Call to Order
President Bob Siemsen

Treasurer’s Report
Mike Durfee, Treasurer

President’s Report
President Bob Siemsen

Executive Director’s Report
Executive Director Russ Cheney

Standing Committee Report
Conference Resolutions
Membership Report
Election of Officers
Unfinished Business
New Business

10:30 am – 12:00 pm 2009 UPC FOG Systems and Interceptors
Presented by Phil Ribbs
This course discusses the Uniform Plumbing Code provisions regulating fat, oil and grease (FOG) disposal systems. During this session, major focus is placed on what FOG systems are and how they work, significant code changes impacting FOG systems and FOG equipment and equipment sizing.

2009 UPC Wet Venting
Presented by Mike Wynne
This seminar discusses the Uniform Plumbing Code provisions regulating wet venting, and the 2009 UPC® requirements governing the installation of those systems. The discussion will also cover the proper functioning, use and installation of these two venting options, as well.

2009 UPC Faucets and Fixtures
Presented by Tim Collings
This session discusses the Uniform Plumbing Code’s provisions in Chapter 4.
Instructors Bio

Dr. Stu Aux is the Director of the Backflow Prevention Institute for IAPMO and chair of the Backflow Prevention Reference Manual Committee. He has published Drinking Water and Backflow Prevention magazine for 22 years prior to joining IAPMO. He has served as the standards development leader for the American Society of Sanitary Engineering, and participates in several standards committees throughout North America. His education includes degrees in civil and environmental engineering and business. He is a registered professional engineer in seven states, a certified plumbing inspector by IAPMO and ICC, a certified backflow protection assembly tester, repairer, and a certified cross-connection control surveyor by ASSE under ANSI/ASSE Series 500 standards.

Scott Hamilton began his plumbing career at UA Local 75 as an apprentice in 1988. He completed the apprenticeship and became a Wisconsin licensed journeyman in 1992. During his career in the field, he has installed plumbing in both commercial and residential settings. Scott also served as a part-time plumbing inspector from 1997 – 2004 for a Milwaukee suburb. In 1993, he began teaching apprenticeship and journeyman classes for Local 75 and completed the UA Instructor Training program in 1999. He is currently a UA instructor in Ann Arbor and became the Training Director for Local 75 in 2004. He has been on the IAPMO Technical committee since 2007 and a member of the Education and Career Services committees since 2008. Scott currently serves as the chair of the UA Plumbing Apprentice Curriculum committee.

Tim Collins is the senior inspector for Salt Lake City Corporation. He has been inspecting plumbing, mechanical and fire protection systems for Salt Lake City Corporation since August 1981. Tim taught in the plumbing apprenticeship program in Salt Lake City for 18 years. Tim’s instruction is supported by a solid background that combines professional experience with a wide variety of committee service.

Roger Courtney, retired chief plumbing and mechanical inspector for the municipality of Anchorage, Alaska, has acquired over 35 years of professional experience in the plumbing and mechanical fields. That experience extends from field work to supervisor of the American Society of Heating, Refrigeration and Air Conditioning Engineers and participates in several standards committees throughout North America. His education includes degrees in civil and environmental engineering and business. He is a registered professional engineer in seven states, a certified plumbing inspector by IAPMO and ICC, a certified backflow protection assembly tester, repairer, and a certified cross-connection control surveyor by ASSE under ANSI/ASSE Series 500 standards.

John Jordan has been involved in the plumbing industry in the Houston, Texas, area since 1976. John has been an instructor for HAPJAC for UA Plumbers Local #68 in Houston, Texas since 1995. In addition John teaches for the Institute of Continuing Education for license renewal of all State of Texas plumbing licenses. John is available to teach the Uniform Plumbing Code, the Uniform Mechanical Code and the International Plumbing Code. Due to his many years of teaching experience, John is very comfortable teaching a variety of topics to different audiences.

Roger Fuller currently serves the County of Sacramento as a Supervising Building Inspector for Plumbing and Mechanical Inspections. His 34 years of experience include 11 years as a HVAC installer and estimator, 11 years as a HVAC contractor and 12 years as an inspector/plan reviewer. His contracting experience is infused in his teaching style to make his classes both interesting and applicable.

Tom Meyer is the principal of Praxis Green Inc., an international training and consulting company specializing in green, high performance and energy efficient mechanical systems. He is a graduate of Ohio State University with more than 20 years experience in hydronics. Most recently, Meyer was president of Precision Hydronics Corporation, an international design, consulting and training firm. Meyer was the founding Executive Director of the Green Mechanical Council (GreenMech), an international non-profit. He has written several articles, training modules and two textbooks.

Michael Mitchell has served as the Senior Plumbing Inspector for the City of San Francisco and has been with the City since 1990. Additionally, Michael has spent five years as an instructor at the California Plumbing Code College of San Mateo. Also, since 2002, he has been an instructor teaching the California Plumbing Code and Trade Math for Local 467. Michael is a consummate professional in everything he does and this professionalism is always well-received in the classroom.

Phil Ribbs has enjoyed a long and varied career. He was on IAPMO’s Board of Directors and held the office of vice president. Phil has been a member of the Standards Council since 2006. His efforts were recognized when he was given the Government Person of the Year Award in 2004. Phil is a dynamic and extremely well informed instructor. He has the gift of presenting information in a way that is interesting and easy to understand.

Mike Wynne has been a licensed journeyman plumber for 38 years and has served as a plumbing inspector in Oregon for 12 years. He has been teaching the plumbing code for Local 290 in Portland and also served as the Assistant training coordinator for that local until his retirement in May 2009. Mike has also been an active member of IAPMO for numerous years and continues to serve on the IAPMO Education, UPC Workshop, and Career Services committees. He has served as the past Secretary, Chairman and Vice-Chairman for the Cascade Chapter of IAPMO. Having presented at prior IAPMO conferences, IAPMO is proud to see Mike presenting again.
here was a time when being a “companion” at the annual IAPMO Education and Business Conference meant exactly that: you were just kind of along for the ride. And there was nothing wrong with that. I mean, we can all enjoy a little time away from home in an exciting new (or old favorite) city, right?

Well, we still make sure we enjoy our time together, but these days being a Companion means so much more!

Not only have we formed our own organization of professional women, who share insights with each other they can take back to their work, we’ve recently taken our group’s collective purpose up another notch altogether.

In March we launched a fund-raising campaign on behalf of Water for People, a Denver-based non-governmental organization (NGO) committed to bringing sustainable water and sanitation solutions to the hundreds of millions of people worldwide without access to clean water and safe toilets.

Water for People’s history is rooted in the North American water and wastewater industry. Founded in 1991 by the American Water Works Association (AWWA), the organization has grown into a global NGO with programs in 11 countries. Applying water and sanitation lessons learned from the developed world within the communities in which it works, Water for People looks beyond the mere installation of the water system and concentrates on what will foster a functional environment for keeping the water flowing and toilets working in perpetuity.

Championing an organization like Water for People is something the Companion Committee has talked about doing for quite some time; and now we’re thrilled to have taken the initiative to get involved and put our time together to really good use. We truly welcome the opportunity to express the same high standards in which our spouses and partners believe about delivering water solutions to those in need.

For more information about Water for People, direct your Web browser to www.waterforpeople.org.

Please join us at conference in Seattle and be part of something truly meaningful and satisfying. There is no doubt in my mind you’ll be glad that you did.
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<th>Sunday, September 26</th>
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<td>6:30 am</td>
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<td>Golfers Depart for</td>
<td>Registration Desk</td>
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<td>the Roscoe King</td>
<td>and Cyber Café Open</td>
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<td>Memorial Golf</td>
<td>7:00 am</td>
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<td>Tournament Meet at</td>
<td>Coffee and Lite</td>
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<td>IAPMO Registration</td>
<td>Breakfast</td>
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<td>Area to Board Busses</td>
<td>7:00 am – 9:45 am</td>
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<td>Conference Exposition</td>
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<tr>
<td>Arrive at Willows</td>
<td>Chapter Photos</td>
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<td>Run Golf Course</td>
<td>9:30 am</td>
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<td>10402 Willows Road</td>
<td>Photo Presentation</td>
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<td>NE Redmond,</td>
<td>of Previous Day’s</td>
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<td>Washington 98052</td>
<td>Highlights</td>
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<tr>
<td>(425) 883-1200</td>
<td>10:00 am</td>
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<tr>
<td>Breakfast and Range</td>
<td>Opening Session</td>
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<tr>
<td>open to all golfers</td>
<td>Begins</td>
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<tr>
<td></td>
<td>Call to Order</td>
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<tr>
<td>8:00 am</td>
<td>President Bob Siemsen</td>
</tr>
<tr>
<td>Tee Off - Shot Gun</td>
<td>Invocation</td>
</tr>
<tr>
<td>Start – Scramble</td>
<td>Pastor Marc Gronholz</td>
</tr>
<tr>
<td>Format</td>
<td></td>
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<tr>
<td>8:00 am – 6:00 pm</td>
<td>Color Guard</td>
</tr>
<tr>
<td>Exposition Set Up</td>
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</tr>
<tr>
<td>Session for Exhibitors</td>
<td></td>
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<tr>
<td>11:00 am – 6:00 pm</td>
<td>Welcome to Seattle</td>
</tr>
<tr>
<td>Registration Desk</td>
<td>Conference Host</td>
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<tr>
<td>and Cyber Café Open</td>
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<tr>
<td>6:00 pm – 8:00 pm</td>
<td>Response</td>
</tr>
<tr>
<td>Western States Pipe</td>
<td>President Bob Siemsen</td>
</tr>
<tr>
<td>Trades Council</td>
<td>Bylaws Report</td>
</tr>
<tr>
<td>Cocktail Reception</td>
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<tr>
<td>7:00 am – 5:00 pm</td>
<td>Appointment of</td>
</tr>
<tr>
<td>Registration Desk</td>
<td>Conference Committees</td>
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<tr>
<td>and Cyber Café Open</td>
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</tr>
<tr>
<td>7:00 am</td>
<td>Award Presentations</td>
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<tr>
<td>Call to Order</td>
<td>• American Flag Award,</td>
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<tr>
<td>President Bob</td>
<td>• Industry Person of</td>
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<tr>
<td>Siemsen</td>
<td>the Year</td>
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<td>• Government Person</td>
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<td>of the Year</td>
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<td>• Joseph Kneidinger</td>
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<td>– Green Contractor</td>
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<td>of the Year</td>
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<td></td>
<td>• George Kauffman</td>
</tr>
<tr>
<td></td>
<td>• Lifetime Achievement Award</td>
</tr>
</tbody>
</table>

Spouses and companions are invited to join us for a light lunch. Please remember to register for the daily door prizes.
6:30 pm – 8:30 pm

Cocktail Reception
Honoring First-Timers and Committee Members
All registered members and registered guests are invited.
(Badges Required)
<table>
<thead>
<tr>
<th>Tuesday, September 28</th>
<th>Wednesday, September 29</th>
<th>Thursday, September 30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10:30 am</strong>&lt;br&gt;Meet in the Lobby and Depart for Outing&lt;br&gt;(Badges Required)**</td>
<td><strong>9:30 am – 12:00 pm</strong>&lt;br&gt;Spouses’ and Companions’ Hospitality Suite – Guest Speaker: TBD&lt;br&gt;Spouses and companions are invited to join us for Breakfast. Please remember to register for the daily door prizes.&lt;br&gt;6:30 pm&lt;br&gt;Evening Event at Experience Music Project Science Museum (EMP)&lt;br&gt;All registered members and registered guests are invited. (Badges and monorail passes required)**</td>
<td><strong>6:30 pm</strong>&lt;br&gt;Installation of Officers Reception&lt;br&gt;7:00 pm – 11:00 pm&lt;br&gt;Installation of Officers Dinner&lt;br&gt;(Badges Required)&lt;br&gt;All registered members and registered guests are invited.**</td>
</tr>
</tbody>
</table>

Companions will enjoy a scenic three-hour cruise of Lake Union and Lake Washington, offering spectacular glimpses of Seattle’s unique inner-city shoreline. On Lake Union, companions will float past entire neighborhoods of house boats, including the one made famous in the film “Sleepless in Seattle.” From there, the cruise will make its way onto Lake Washington, where it will pass the University of Washington football stadium, Seattle’s famous floating bridge and the multi-million dollar mansions of Bill Gates, Kenny G, Steve Miller and the Nordstrom family. Catered buffet lunch will be served. Bring your camera!

**Evening on Own**
Ron Pearson

Story by Geoff Bilau

Ron Pearson owes much of his career success to his ability to juggle — and that’s not talking about what he can do with three bowling pins while balancing a 6-foot ladder on his chin. The lanky funnyman has spent the last 20-plus years expertly balancing life as a stand up comedian, actor, game show host, public speaker/emcee and, more recently, husband and father.

A native of nearby Bellevue, Wash., Pearson started his career as a stand up comic at nightclubs and an audience warm up guy for various television programs. He eventually worked his way into guest acting spots on sitcoms, including “Mama’s Family,” “They Came from Outer Space” and “Brother’s Keeper,” as well as small film roles in “Midnight Cabaret” and “Lena’s Holiday.” He also hosted the syndicated kids game show “Skedaddle” for six weeks in 1988. In 1996, Ron landed the hosting job for the game show “Shopping Spree” on the Family Channel. The show ran daily for two and a half years. After honing his comedic chops for 10 years, Pearson finally landed his big break when he was cast as bartender Doug Rickets on the sitcom “Malcolm and Eddie,” a role he played for 39 episodes until the program’s cancellation in 2000. The notoriety earned him recurring roles on “The Drew Carey Show,” “The Norm Show,” “Nikki,” “That ’70s Show,” “George Lopez” and “Boston Legal.” He also continued his stand up career and made appearances on late night television, including several appearances on “The Late Late Show with Craig Ferguson,” “The Dennis Miller Show” and “Chelsea Lately,” among others.

In 2008, Pearson was featured on the multi-comedian showcase DVD “The Apostles of Comedy” with comedian/actor Brad Stine and Chicago natives Jeff Allen and Anthony Griffin. The quartet later launched a cross-country tour as The Apostles of Comedy in 2009. Also, Ron can currently be seen starring in the Disney Channel movie “StarStruck.”

Pearson’s routine incorporates audience participation, side-splitting humor and, of course, some amazing feats of juggling prowess.

Pearson, his wife Tanya and their two children, Regan and Tex, live in Los Angeles.

Ron Pearson
By Geoff Bilau

Nestled in the city’s vibrant core, The Sheraton Seattle Hotel and Towers is a gateway to all the sights, sounds and experiences of the Emerald City.

The AAA four-diamond hotel offers the best of all worlds for the traveler visiting Seattle. Transformed by a $130 million renovation and expansion, the Sheraton Seattle Hotel is now the largest hotel in the Northwest, featuring 1,258 guest rooms and 75,000 square feet of meeting and event space. Sheraton Seattle is located in the center of the city, steps from exciting nightlife, gourmet restaurants, world-class shopping, Pike Place Market and Seattle’s best attractions.

Reservations and Room Rates

Take advantage of the special $180/night IAPMO group rate by booking your reservation online at: www.iapmo.org.

Accommodations

Each tastefully-appointed guestroom offers maximum comfort and convenience, including 300-thread count linens, LCD flat panel television with premium channels, Starwood Turbo Net laptop high speed Internet access ($10.95 per day).

Guests can also take advantage of the Sheraton Seattle’s modern health club that features an indoor heated lap pool, sauna, Jacuzzi, massage and a comprehensive selection of exercise equipment.

Dining

Dining options at the hotel include the Daily Grill for a casual breakfast, lunch or dinner, and the Lobby Lounge, with one of the most fantastic views of Seattle and a selection of Seattle’s finest microbrews. Need to grab something on the go? Check out In Short Order for a pre-made sandwich, salad or snack.

Numerous outside options are within walking distance of the hotel.
Getting There

Centrally located, the Sheraton Seattle Hotel is easily accessible from Seattle’s Sea-Tac Airport and a wide variety of destinations. Getting there is simple with frequent airport shuttle service provided by Grayline of Seattle’s Downtown Airporter Service ($18, 800-551-5903), various taxi services and car rental companies, and Seattle’s local transit system. Parking at the hotel is $33.48 per day.

- From Seattle-Tacoma International Airport: Follow State Route 518 Eastbound to Interstate 5 Northbound (Seattle). Take the Seneca Street exit (exit will be on your left). Turn right immediately onto 6th Avenue. Drive north on 6th Avenue for two blocks. The hotel is on the right. Turn right into the entrance for valet parking and drop-off.

- From the North: Driving Southbound on Interstate 5, exit the interstate at Union Street. Proceed for one block to 6th Avenue. Turn right onto 6th Avenue. Continue one block. The hotel entrance will be on your right.
From the East: Driving Westbound on Interstate 90, proceed on Interstate 90 to Interstate 5 North. Take the Madison Street Exit. Turn left onto Madison Street. Follow Madison and turn right onto 6th Avenue. Continue on 6th Avenue for four blocks. The hotel will be on the right.

From the South: Driving Northbound on Interstate 5, take Seneca Street exit (Exit 165) on your left. Turn right immediately onto 6th Avenue. Follow 6th Avenue past Union Street. The hotel is on the right.
REGISTRATION FORM

IAPMO’s 81ST ANNUAL EDUCATION AND BUSINESS CONFERENCE

Sunday, September 26 – Thursday, September 30, 2010
Sheraton Seattle Hotel ◆ 1400 Sixth Avenue, Seattle, Washington 98101
Registration available online at www.iapmo.org

CONFERENCE REGISTRATION

IAPMO Member No. ____________________________
Name ____________________________
Badge Name ____________________________
Title ____________________________
Representing ____________________________
Address ____________________________
City ____________________________
State/Zip ____________________________
Telephone ____________________________
E-mail ____________________________

Is this your first IAPMO Conference?  o Yes  o No
I was referred by ____________________________

Companion Name ____________________________
IAPMO Member No. ____________________________
Emergency Contact No. ____________________________

DINNER CONFIRMATION
(Included with paid registration)

In order to better serve you, we request that you indicate which of the following events you plan to attend.

❑ Monday: Evening Reception
❑ Wednesday: Evening at Experience Music Project
❑ Thursday: Installation Reception/Dinner

MEMBERSHIP CLASSIFICATION

❑ Individual  ❑ Senior  ❑ Honorary
❑ Government  ❑ Life  ❑ Student
❑ Organization  ❑ Non-Member

If you are a jurisdictional member, are you the designated voting member for the governmental jurisdiction you listed above?  o Yes  o No

ASSEMBLY CONSIDERATION SESSION REGISTRATION

(For those wishing to vote* at this session only, registration is required by May 30, 2010 per IAPMO Bylaws Section 8.2A)

IAPMO Member No. ____________________________
Name ____________________________
Badge Name ____________________________
Address ____________________________
City/State/Zip ____________________________
Telephone ____________________________
area code

*Voting privileges for those attending this session only do not require paid conference registration.

CONFFERENCE ATTENDEE RECRUITMENT PROGRAM

In an effort to get the word out about IAPMO’s Annual Education & Business Conference as well as bring new members to the association, IAPMO will extend a discount to existing members who recruit someone to attend Conference. In particular, IAPMO is looking to welcome someone who has never or not recently attended an Annual Conference.

The member who recruits the most attendees will be recognized for their efforts during the conference’s Opening Session.

Qualifying requirements for Recruiter:
• The recruiter must be an existing member of IAPMO, in good standing.
• Only one individual or organization can receive credit for the recruit(s).

Qualifying requirements for Recruit:
• The recruit must be or become a member of IAPMO prior to recruit receiving credit.
• The recruit must have a fully paid Conference registration.
• The recruit is required to list the referring individual or organization.
• The recruit will not have attended an IAPMO Annual Education and Business Conference in the past 3 years.

Reward:
For each person recruited in accordance with the rules above, the member (recruiter) will receive a $50 discount off of the member Full Conference Registration Fee up to a maximum of $500.
Please indicate with a check mark which of the following seminars you plan to attend.

**Special Course***

- **BACKFLOW PREVENTION ASSEMBLY REPAIRER**

  This 20-hour course is taught over three days. The ASSE Backflow Prevention Assembly Repairer certification is a national certification and this class prepares the individuals for the ASSE written and practical plumbing system repairer exam. Participants taking this certification must first be certified as a backflow prevention assembly tester.

  ASSE Certification Prerequisite: Applicant must be either:
  1) certified by ASSE as a backflow prevention assembly tester or
  2) certified by a recognized agency as a backflow prevention assembly tester

  (State of Washington and Oregon Tester certifications meet this prerequisite)

  **Monday, September 27**
  1:00pm – 5:00pm

  **Tuesday, September 28**
  8:00am – 5:00pm

  **Wednesday, September 29**
  8:00am – 5:00pm

  * Additional Cost

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**CONFERENCE REGISTRATION FEES**

<table>
<thead>
<tr>
<th></th>
<th>Received by on July 30</th>
<th>Received or July 31</th>
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</thead>
<tbody>
<tr>
<td>Member</td>
<td>$495.00</td>
<td>$545.00</td>
</tr>
<tr>
<td>Member w/Backflow Prevention Assembly Repairer &amp; Certificate</td>
<td>$560.00</td>
<td>$610.00</td>
</tr>
<tr>
<td>Non-Member</td>
<td>$620.00</td>
<td>$670.00</td>
</tr>
<tr>
<td>Non-Member w/Backflow Prevention Assembly Repairer &amp; Certificate</td>
<td>$685.00</td>
<td>$735.00</td>
</tr>
<tr>
<td>Day Pass (includes all that day’s education sessions and evening event) (excludes Backflow Prevention Assembly Repairer)</td>
<td>$150.00</td>
<td>$150.00</td>
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<tr>
<td>Companion</td>
<td>$420.00</td>
<td>$445.00</td>
</tr>
</tbody>
</table>

**Registration also available online:** www.iapmo.org

Please return this form with payment to:

IAPMO Attn: Conference Registration
5001 E. Philadelphia St. Ontario, CA 91761-2816 or fax 909-472-4220

Conference Registration Fee
Companion Registration Fee
Golf (please enclose necessary form)
Sponsor
Expo
Total

**METHOD OF PAYMENT**

Please keep conference registration payment separate from any other payment to IAPMO.

- Check
- Master Card
- Visa
- AMEX

Credit Card No. ____________

CVC Number: ____________ Exp.date ____________

The CVC number is the last 3 digits located on the back of MasterCard and Visa Cards. American Express cards, the CVC number is a printed (not embossed) group of four digits on the front towards the right.

Signature as shown on credit card ____________ date ____________

Organizations (as defined in Section 2.5 of the IAPMO Bylaws) paying for conference fees are only entitled to one vote per organization. Organizations that pay conference fees for multiple registrants must select one registrant as their voting representative; all other registrants paid for by that same organization will be registered as non-voting.

Individual members paying for their own conference fees who are members on or before March 30, 2010 are eligible to vote as individuals.

For conference fees paid by personal check or charge card:
Are you being reimbursed for any or all of your conference fees?
If yes, please state name of person or organization reimbursement is coming from:

**Refund Policy**

Cancellation prior to July 30, 2010 – full refund
Cancellation on or after July 31, 2010 – no refund

If you have any questions, physical disabilities or special needs, please call Travel Services at 909-472-4207, Fax 909-472-4220 or E-mail: seattle2010@iapmo.org

When faxing please include front and back
**GOLF REGISTRATION FORM**

**IAPMO ANNUAL CONFERENCE**

---

**TWIN OAKS GOLF COURSE**

10402 Willows Road NE  
Redmond, Washington 98052  
425-883-1200

IAPMO is not responsible for golf clubs rentals. Please contact the golf course directly at 425-605-1110

**FORMAT:**  
4 person scramble

**TIME:**  
5:45am – Depart by bus from hotel lobby  
6:00am – Breakfast and Range Open  
7:00am – Shot-gun start

**COST:**  
$130.00 per person (Includes greens fees, cart, continental breakfast, refreshments and prizes)

**DRESS CODE:**  
Soft spikes only, Collared shirts/shorts/slacks  
(No denim jeans, tank tops or cut-offs permitted)

**PRIZES FOR:**  
- $10,000 Hole-in-One  
- First Place Team  
- Second Place Team  
- Third Place Team  
- Longest Drive (Men)  
- Longest Drive (Women)  
- Closest to the Pin (Men)  
- Closest to the Pin (Women)

---

**GOLF REGISTRATION**

- Yes! Sign me up for the Roscoe King Memorial Golf Tournament.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>City, State, Zip</th>
<th>Telephone</th>
<th>E-mail</th>
</tr>
</thead>
</table>

- My average score for 18 holes is  
- My handicap is  
- I request to be paired with

- Yes! I want to register a guest.

<table>
<thead>
<tr>
<th>Name of the Guest</th>
<th>Guest’s average score for 18 holes</th>
<th>Guest’s handicap</th>
</tr>
</thead>
</table>

- I have enclosed payment to IAPMO in the amount of $

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**METHOD OF PAYMENT**

Please keep conf. registration payment separate from any other payment to IAPMO.

- Check  
- Master Card  
- Visa  
- AMEX

**CREDIT CARD NO.**

<table>
<thead>
<tr>
<th>CVC Number</th>
<th>Exp. Date</th>
</tr>
</thead>
</table>

The CVC number is the last 3 digits located on the back of MasterCard and Visa Cards. American Express Cards, the CVC number is a printed (not embossed) group of four digits on the front towards the right.

**SIGNATURE**

Signature as shown on credit card  
Date

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If you have any questions, please contact:  
Travel Services at 909-472-4207 or email: seattle2010@iapmo.org

---

**REGISTER ONLINE**

[www.iapmo.org](http://www.iapmo.org)

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Please return this form with payment to:  
IAPMO • Attn: Conference Registration  
5001 E. Philadelphia Street, Ontario, CA 91761-2816  
or fax 909-472-4220
IAPMO’s 81ST ANNUAL EDUCATION AND BUSINESS CONFERENCE
Sunday, September 26 – Thursday, September 30, 2010
Sheraton Seattle Hotel • 1400 Sixth Avenue, Seattle, Washington 98101
Registration available online at www.iapmo.org

CONFERENCE ITEM SPONSORSHIP

Messenger Bag – Reserved
- Two pages of advertising in Official (pre- and post-conference) ($3,780 value)
- Logo slide shown twice during the loop on every day pre-meeting slide show
- Single page ad in conference pocket program
- Sponsor’s logo recognized in post-conference Official and I-Connection

T-Shirts – Logo Screened on Item
Cost of Shirts includes:
- Two pages of advertising in Official (pre- and post-conference) ($3,780 value)
- Logo slide shown twice during the loop on every day pre-meeting slide show
- Single page ad in conference pocket program
- Sponsor’s logo recognized in post-conference Official and I-Connection

CONFERENCE SPONSORSHIP LEVELS

PLATINUM – $5,000 Investment includes:
- Two pages of advertising in Official (pre- and post-conference) ($3,780 value)
- Logo slide shown twice during the loop on every day pre-meeting slide show
- Single page ad in conference pocket program
- All Platinum sponsors’ logos recognized in post-conference Official and I-Connection

GOLD – $2,500 Investment includes:
- Two pages of advertising in Official (pre- and post-conference) ($3,780 value)
- Logo slide shown once during the loop on every day pre-meeting slide show
- All Gold sponsors’ logos on one page of conference pocket program
- All Gold sponsors’ logos recognized in post-conference Official and I-Connection

SILVER – $1,000 Investment includes:
- One page of advertising in Official (pre- and post-conference) ($1,890 value)
- All Silver sponsors logos on one slide shown once during the loop on everyday pre-meeting slide show
- All Silver sponsors’ logos on one page of conference pocket program
- All Silver sponsors’ logos recognized in post-conference Official and I-Connection

BRONZE – $500 Investment includes:
- All Bronze sponsors’ names on one slide shown once during the loop on everyday pre-meeting slide show
- All Bronze sponsors’ names on one page of conference pocket program
- All Bronze sponsors’ names recognized in post-conference Official and I-Connection

YES, I WOULD LIKE TO SPONSOR THE FOLLOWING:
- T-Shirt – Your company one color logo screened on item
- Keynote Speaker
- Conference Pins
- Plantinum  □ Gold  □ Silver  □ Bronze

Company Name ____________________________
Contact Name ______________________________
Address __________________________________________
City _______________________________________________
State/Zip __________________________________________
Telephone _________________________________________
E-mail ____________________________________________

METHOD OF PAYMENT

Please keep conf. registration payment separate from any other payment to IAPMO.
- Check  □ Master Card  □ Visa  □ AMEX

Credit Card No. ___________________________________
CVC Number: ___________________________ Exp. Date __________

The CVC number is the last 3 digits located on the back of MasterCard and Visa Cards. American Express Cards, the CVC number is a printed (not embossed) group of four digits on the front towards the right.

Signature as shown on credit card

Please return this form with payment to:
IAPMO  ▪ Attn: Conference Registration
5001 E. Philadelphia Street, Ontario, CA 91761-2816
or fax 909-472-4220

If you have any questions, please contact Travel Services at 909-472-4207 or email: seattle2010@iapmo.org

Terms of Agreement and Payment Method: IAPMO does not pay agency commissions. Mail or fax your completed contract reservation to IAPMO. Requests for sponsorship and/or advertising will be on a first-come, first-served basis. If a Marketing Contract is expired and a reservation request has been checked off, it is not officially confirmed or assigned unless full payment has been received and a signed confirmation from IAPMO has been returned to you. If full payment is not received and another reservation request for the same opportunity is received with full payment, your reservation will not be processed.

Cancellation Policy: No refunds will be issued.

General Policy: No advertiser or sponsor shall have first right of refusal. No advertisement will run without full payment. Rates are net, no agency discount will be applied. Advertiser agrees to furnish all copy, art (film or disk), and color proofs prior to closing deadline stated on specification sheet (or insert date). Publisher shall not be responsible for errors caused by typesetter or for claims made in any advertisement. In the event of an error or omission, the Advertiser’s sole remedy shall be to seek reimbursement of the payment made by it to the Publisher hereunder, and the Advertiser waives any claim it may have against the Publisher or its employees and/or agents or any other liability or loss arising out of this contract or actions of Publisher with respect to said advertisement. Advertiser warrants that all photographs and endorsements are covered by valid, written consents. Advertiser shall indemnify and hold the Publisher harmless from liability of any kind resulting from publication.

IAPMO Show Management reserves the right to exercise its sole discretion to accept or refuse any material or condition of the contract. IAPMO Show Management reserves the right to terminate this contract immediately. Any bids paid to the sponsor/advertiser may be retained by IAPMO Show Management. Sponsorship/advertisements may not be resold, shared, or solicited without permission from IAPMO Show Management. In the event of a failure or other error or omission of IAPMO Show Management in its performance and terms of this contract, IAPMO Show Management reserves the right to exercise its sole discretion to accept or refuse any material or condition of the contract. IAPMO Show Management reserves the right to terminate this contract immediately. Any bids paid to the sponsor/advertiser may be retained by IAPMO Show Management. Sponsorship/advertisements may not be resold, shared, or solicited without permission from IAPMO Show Management. In the event of a failure or other error or omission of IAPMO Show Management in its performance and terms of this contract, the Sponsor Advertiser waives any claim it may have against IAPMO Show Management or its employees and/or agents or any other liability or loss arising out of this Contract Agreement or actions of IAPMO Show Management with respect to said opportunity.
2010 California Codes Now Available

If you work or design for California projects, you need the latest editions of the California Plumbing Code and California Mechanical Code.

- Developed by the industry for the industry, the CPC includes specific:
  - Medical Gas and Vacuum Systems
  - Manufactured/Mobile Home Parks
  - Firefighting Breathing Air Replenishment Systems
  - Fuel Gas
  - Exhaust Venting
  - Private Sewage Disposal Systems
  - Installation Standards

The CMC includes specific:
- Fuel Gas
- Sizing of Venting Systems
- One- and Two-Family Dwellings
- Appliances for Installation in Manufactured Housing

- Reduced personal liability from code change omissions — protect yourself and your clients by getting completely up to date

- Build your foundation on more than 80 years experience in the plumbing/mechanical field

hey put in some long days (and nights) to do so, but the IAPMO Uniform Plumbing Code® (UPC) and Uniform Mechanical Code® (UMC) Technical Committees plodded through more than 500 proposed changes to the Uniform Codes during a sometimes exhausting week, April 26-30, in Milwaukee, Wis. When the smoke cleared, the committee members had agreed upon a general framework for what the 2012 editions of the codes might look like.

In all, the UPC Committee looked at 251 submitted proposals and addressed another 47 committee proposals, accepting or amending 208 of them and rejecting 90. The UMC Committee looked at 163 proposals, as well as another 54 committee proposals, accepting or amending 181 of them and rejecting 35. One committee proposal was withdrawn.

The first day’s marathon session ran from 8 a.m. until 9:30 p.m., with short breaks for lunch and dinner mixed in. Though the process seemed arduous at times, attendee Phil Ribbs of PHR Consultants, a regular at these meetings, said it was pretty much par for the course.

“I see a lot of debate, exchange of good ideas, a lot of cooperation,” Ribbs said. “You see people listening, changing their minds and becoming more aware. Obviously there are lines people have, directions they’d like to see the code go, but nothing out of the ordinary; there’s just a lot of potential code changes.”

UPC Technical Committee member David Mann, president of Mann Plumbing of Bloomington, Ind., said he felt a stronger sense of camaraderie among his fellow committee members than in past years.

“I think there’s been more seeing eye to eye on things and issues that people, myself included, may have thought were a big deal and really they’re not that big of an issue,” Mann said. “I think that people are listening to what the other members are saying and weighing it out.”

After another two long days, the UPC Technical Committee wrapped up its work and the UMC Technical Committee settled in to power through its work in one busy day, again wrapping up long after sundown.

All Technical Committee actions discussed at the meeting are subject to ballot, which will have concluded by the mailing of this magazine. Ballot results will be included in the Report on Proposals (ROP), which will be available in August. To follow, all ROP items are subject to discussion at the Assembly Consideration Session held at the Annual Education and Business Conference in Seattle.

Here are some of the more notable decisions preliminarily made by the technical committees in Milwaukee:

- **UPC Technical Committee accepted as amended Proposal No. 5, which would add Section 203.0 Air Admittance Valves definition to Chapter 2 of the UPC.**

- **UPC Technical Committee accepted as amended Proposal No. 98 regarding 601.2.1**
Alternate Water Sources: “Alternate water source systems shall have a purple background with black uppercase lettering...” This amendment applies to field labeling of pipes carrying gray water, reclaimed water, on-site treated water and rainwater catchment.

- UPC Technical Committee accepted Proposal No. 105 adding “603.3.11 Backflow prevention devices with atmospheric vents or ports shall not be installed in pits, underground, or submerged locations.” Backflow devices could be submerged and therefore rendered inoperable.

- UPC Technical Committee rejected Proposal No. 118, which would have removed cross link polyethylene (PEX) tubing from the UPC.

- UPC Technical Committee accepted as amended Proposal No. 174, which would add Part III: Vacuum Waste Drainage Systems to Chapter 7 of the UPC. This section regulates the design and installation provisions of these “green” drainage systems.

- UPC Technical Committee accepted as amended Proposal No. 182, which would add Section 911.0 Air Admittance Valves to Chapter 9 of the UPC.

- UPC Technical Committee accepted Proposal No. 202 concerning 1214.3 Test
Pressure in fuel gas pipe. The new language would change the testing pressure from a minimum of 1.5 times the maximum operating pressure to 10 psi for 15 minutes.

- UPC Technical Committee accepted Proposal No. 231, which would add four classifications of alternate water sources to Chapter 16 of the UPC: gray water systems, reclaimed (recycled) water systems, on-site treated non-potable water systems and rainwater catchment systems.

- UPC Technical Committee accepted Proposal No. 250, which would add L10.0 Air Admittance Valves into Appendix L of the UPC.

- UPC Technical Committee accepted as amended Proposal No. 251, which would add Appendix M: Green Plumbing Code Supplement to the UPC.

- UMC Technical Committee accepted Proposal No. 3, which would govern the maintenance of residential HVAC systems in accordance with ACCA 4 QM.

- UMC Technical Committee accepted as amended Proposal No. 4, which would govern the maintenance of commercial HVAC systems in accordance with ASHRAE 180.

- UMC Technical Committee accepted as amended Proposal No. 21, which would add balancing requirements for all HVAC systems, including hydronics systems, in accordance with recognized standards.

- UMC Technical Committee rejected Proposal No. 41, which would permit the installation of mechanical control systems in a vertical space connecting more than two stories in a building in accordance with NFPA 92A and NFPA 92B.

The public at large is encouraged and invited to participate in IAPMO’s open consensus code development process. A code development timeline and other relevant information are available at IAPMO’s Website, www.iapmo.org.
The following is the complete list of proposed changes to the UPC and UMC and the preliminary action taken by the respective technical committees. Refer to your copy of the Report on Proposals to read each item in full and to see the official ballot results.

- **A** = Accepted as Submitted
- **AM** = Accepted as Amended
- **R** = Rejected
- **W** = Withdrawn

**Uniform Plumbing Code**

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Above: UMC Technical Committee Chairman April Trafton seeks clarification on a proposed committee action.

Right: Jeffrey Shapiro of International Code Consultants addresses the UMC Technical Committee on behalf of the International Institute of Ammonia Refrigeration.

Below: A motion carries during the UMC meeting.

PHOTOS BY GEOFF BILAU
# Uniform Mechanical Code

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For a company so deeply rooted in the past, Kohler spends a surprising — and quite successful — amount of time remaining one step ahead.

By 1900, operations had outgrown the small factory in Sheboygan and co-founder John Michael Kohler began building a new facility four miles west in a town then known as Riverside. Rapid growth, to both the Kohler Company and the surrounding village, ensued and in 1912 the town was incorporated as Kohler.

Over the past nearly 100 years, the Kohler Company has become a worldwide leader in the manufacture of plumbing products, furniture, engines and generators, yet the small hamlet that bears its name retains much of its charm as one of America’s last remaining true factory towns.

Most of the houses in Kohler were built by the Kohler Improvement Company as part of planned communities and were originally sold to Kohler employees at cost. The company also recognized the challenges faced by its mostly immigrant workforce and built the American Club, a boarding house for new employees that enabled them to save their earnings to
purchase homes and send for their families back in Europe.

Today the village is home to just more than 2,000 people and truly represents a throwback to mid-20th century Americana, when similar factory towns dotted the countryside. The Kohler Company, however, never stopped moving forward, as evidenced by our tour of the factory facilities.

Led by the affable and highly informative Ron Schoenfeld, the tour demonstrated the balance Kohler has struck between what is tried and true and the anticipation of what customers will want and expect in the future.

Schoenfeld was an ideal guide. After all, he’s been with Kohler since 1959, when he started in the enamel works. Talk about inside knowledge!

Our first stop was the vitreous china foundry, where sinks, toilets, bidets and a host of other products are created. As a testament to Kohler’s advancement through the years, the foundry works surround two enormous kilns that no longer operate because faster, more efficient models have replaced them. Even on significantly shortened timelines, great care and attention to detail is put into every product on the factory floor.

Also located in this foundry is the Kohler Arts/Industry Program. Since 1974, emerging and established visual artists have worked in residency with the pottery, iron and brass foundries and the enamel shop developing art from functional to abstract in clay, enameled cast iron and brass. Some of their designs make their way into Kohler’s product line.

Next up was a quick pass through the brass foundry. Here Kohler’s extensive line of fixtures are produced in an assortment of finishes, including an antique finish Schoenfeld joked used to require 50 or more years of hard use to achieve. “But that’s something the customers want and Kohler has sold a lot of products by providing exactly that,” Shoenfeld said.

Last on our tour was the cast iron foundry, which cranks out everything from bathtubs to transmission clutch plates for the Ford Motor Company. Here we saw how a new mold is created from tightly compacted sand for each and every product cast from 2,000-degree molten iron. The machinery runs 24 hours a day and can produce 1,800 enameled cast iron bathtubs every day.

At every stop along the way, Schoenfeld was sure to point out the UPC Mark of Conformity affixed to just about every product we saw in production.

Tours of the Kohler factory are conducted weekday mornings at 8:30 a.m. For more information, direct your Web browser to http://www.us.kohler.com/designkb/designcenter/tours.jsp. I highly recommend it!

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**CODE DEVELOPMENT TIMELINE**

**UPC AND UMC CODE DEVELOPMENT TIMELINE FOR 2012 CODE CYCLE**

<table>
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<th>Date</th>
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<tr>
<td>MAY 4-8, 2009</td>
<td>Technical Committee Meetings</td>
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<tr>
<td>SEPT. 27 – OCT. 1, 2009</td>
<td>IAPMO Annual Education and Business Conference</td>
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<tr>
<td>OCT. 12, 2009</td>
<td>Call for Proposals</td>
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<tr>
<td>FEB. 1, 2010</td>
<td>Deadline for submission of proposals</td>
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<tr>
<td>MARCH 29, 2010</td>
<td>Distribute proposals to committees</td>
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<tr>
<td>APRIL 26-30, 2010</td>
<td>Technical Committee meetings</td>
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<tr>
<td>MAY 5, 2010</td>
<td>Initial ballot to Technical Committee</td>
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<td>MAY 28, 2010</td>
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<tr>
<td>JUNE 7, 2010</td>
<td>Final closing date for ballots, including receipt of vote changes based on re-circulated comments</td>
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<tr>
<td>AUGUST 2, 2010</td>
<td>Distribution of Report on Proposals (ROP)</td>
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<tr>
<td>SEPT. 27-30, 2010</td>
<td>IAPMO Annual Education and Business Conference, Assembly Consideration Session</td>
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<td>OCT. 4, 2010</td>
<td>Call for Comments</td>
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<td>MAY 2-6, 2011</td>
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<td>MAY 16, 2011</td>
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<td>Ballot of Technical Committees on membership amendments from floor; two-thirds vote of approval required from the Technical Committee</td>
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<td>DEC. 9, 2011</td>
<td>Deadline for notification of intent to file written petition to the Board of Directors</td>
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<td>JAN. 24, 2012</td>
<td>Board of Directors meet to address petitions</td>
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Please visit [http://www.iapmo.org/Pages/CodeDevelopmentTimeline_UPC-UMC.aspx](http://www.iapmo.org/Pages/CodeDevelopmentTimeline_UPC-UMC.aspx) for any updates to this timeline.
Sewage Ejectors

By Anne V. Sonner

The last article in this series covered subsoil drains (UPC Section 1105.1). This one is on sewage ejectors. Both of these code sections are about how to remove liquid in situations where it cannot drain by gravity. While pumps are used for both situations, there are differences are in the kind of liquid being removed, how it must be drained and where it goes.

Subsoil drains are designed to remove storm water and groundwater that accumulate around the foundation of a building. The discharge from subsoil drains often drains into a sump in the basement or crawl space and is then pumped out by a sump pump.

Sewage ejectors, on the other hand, are for wastewater from fixtures that are used inside the building and drain out through the sanitary drainage system. Due to health concerns, a sanitary drainage system has requirements for pipe sizing, materials, backflow protection, venting and the ultimate destination of the discharged wastewater. The requirements for ejectors and pumps are also more stringent than those for sump pumps, especially for public use.

Per Section 710.1, where a fixture is installed on a floor level that is lower than the next upstream manhole cover of the public or private sewer, its drainage piping must be protected from backflow of sewage by a backwater valve. Fixtures on floor levels above that elevation are not allowed to discharge through the backwater valve.

Drainage piping for fixtures below the crown level (top) of the main sewer must discharge by gravity into a sump or receiving tank (Section 710.2). The waste from the sump is pumped by a sewage ejector or other pump up to the building drain.

Section 710.3 contains several requirements for the performance of the sewage ejector or pump. It must have a minimum discharge capacity of 20 gpm. In single dwelling units, it must able to pass a 1-1/2-inch solid ball, and have a backwater valve and gate valve at least 2 inches in diameter. In buildings other than single dwelling units, the ejector or pump must be able to pass a 2-inch solid ball and...
have a backwater valve and gate valve at least 3 inches in diameter. The proper size pump is usually determined by the total amount of waste entering the sump and the desired pump cycle frequency. Many manufacturers provide guidelines for optimum operation of their pumps. Section 710.4 covers the required valves on the discharge line from an ejector, including backwater or swing check valves, and gate or ball valves.

To avoid an overload where the pump discharge piping connects to the horizontal building drain, the building drain needs to be adequately sized. Section 710.5 requires calculating the load, allowing two fixture units for each gpm of pump discharge.

For example, a pump designed to have a 20-gpm discharge rate would impose a 40-fixture unit load on the drainline at the point where the pump discharge piping is connected to the gravity drainage system. Authorities Having Jurisdiction typically require plans and specifications on sewage ejectors and sumps before the work begins.

The drawing at the top of the page shows an example of pipe sizing on a system with two pumps or ejectors. In this system with a load of 190 drainage fixture units, the gravity drain (building drain that drains by gravity), would be 4-inch, per Table 7-5.

Section 710.6 requires that valves, unions, motors, compressors, air tanks and other mechanical devices required by Section 710.0 be accessible for inspection and repair. Unless they are continuously exposed, they must be enclosed in a covered masonry pit.

Per Section 710.7, the drainage and venting systems for fixtures, sumps/tanks, and waste-lifting devices must be installed under the same code requirements as for gravity systems.

Section 710.8 contains requirements for sumps and receiving tanks. They must be watertight, constructed of approved materials such as concrete or metal, and designed to the appropriate standards. The concrete needs to be reinforced; the metal must be treated to resist corrosion, both internally and externally.

Section 710.10 requires that sumps and receiving tanks have bolted covers with a gasket-type manhole to permit access for inspection, repair, and cleaning. The sump or tank must also be properly vented. The vent must be large enough to maintain atmospheric pressure within the sump under normal operating conditions and must be
at least the size required by Table 7-5, with a minimum vent size of 1-1/2 inches in diameter.

Ejectors and pumps must discharge automatically and have an accessible alarm to signal pump failure or overload (Section 710.9). The lowest sump inlet must have a minimum clearance of 2 inches from the high water or “starting” level of the sump.

There are different requirements for sump discharge in public and private uses. Section 710.9 requires that public use installations have two pumps in case of overload or mechanical failure, while private use installations only need one pump. The dual pumps are required by code to function alternately for normal use. A “cycling” switch can be installed to activate each pump for every other cycle. Alternating pumps is better than using one primary pump and having the other be on “standby,” because an inactive pump can become useless over time. In an emergency situation, both pumps can operate.

Why are dual pumps required for public use occupancies? If waste cannot be removed, the public building could be declared “unsanitary” and need to be evacuated for public health reasons. Two pumps remove waste better than one.

As always, check the Uniform Plumbing Code for complete code requirements.

Thanks to Bob Shepherd for assistance with this article.
Answers & Analysis

Taken from the 2003/2006 Editions of the UPC & UMC Answers & Analysis

SUBJECT: Embedding Piping in Concrete or Masonry
SECTION: 313.2 (2006/2009 UPC)

Question: Does Section 313.2 prohibit the direct embedment of hubless cast-iron pipe in a concrete slab on grade or in a trench backfilled with concrete or a concrete slurry?

Answer: Yes. All piping in connection with a plumbing system shall be so installed that piping or connections will not be subject to undue strains or stresses, and provisions shall be made for expansion, contraction, and structural settlement. Direct embedment of piping in concrete or masonry is in conflict with this objective and is, therefore, unacceptable under any and all conditions.

SUBJECT: Chemical Wastes

Question: Does the code require that chemical waste systems are readily accessible after installation? If not, then are they required to be accessible? If they are required to be accessible, then what minimum provisions shall be required?

Answer: Section 811.4, as it pertains to chemical waste system accessibility stipulates, “...wherever practicable all piping shall be readily accessible...”. Site-specific Authority Having Jurisdiction determination would conclude whether or not any such installation may be concealed and, if so, what degree of accessibility is required. If all pipe, fitting, and incidental materials were appropriately listed (for concealment) and an Authority Having Jurisdiction believes a concealed application is warranted, then they have discretion to permit it. Section 811.4 does not prohibit the installation of chemical waste pipe in concealed locations if it is necessary to do so.

SUBJECT: Commercial Hoods – Kitchen Ventilation
SECTION: 502.0, see also 507.0 (2006/2009 UMC)

Question: What criteria would an Authority Having Jurisdiction use to determine the class of canopy hood to be installed over an oven used for cooking? What criteria would an AHJ use to determine the class of canopy hood to be installed over an open, conveyor-type oven used for cooking that produce grease and vapors? Can the use of an oven eliminate or change the class of the hood? What criteria would an AHJ use to determine if a “pizza oven” is approved for use as provided by the code?

Answer: The UMC defines Type II hoods as a “general kitchen hood for collecting and removing steam, vapor, heat or orders.” If the appliance produces anything more than steam, vapor, heat, or orders, a Type I hood is required. During our research we found a health department that uses 250 degrees as the maximum temperature for low-temperature appliance. The UMC does not define low-temperature appliances. It is the responsibility of local AHJ to establish or determine what constitutes a “low-temperature appliance.”

SUBJECT: Retesting Existing Gas Piping
SECTION: 1304.0 (2006/2009 UMC)

Question: My city has a number of buildings that are being converted from LPG to natural gas as fuel for water heaters, furnaces, and ranges. Some of these conversions consist of only new gas piping being installed outside the structure from the meter location to the supplier’s gas main. Is it the intention of the UMC to require a pressure test on the entire system when no modification to the existing building piping has occurred? All new gas piping outside the building will be tested.

Answer: No, the Authority Having Jurisdiction may use discretionary authority to waive the test on the existing portion of a gas piping system, provided that it has been determined that the existing work has not suffered structural damage, complies with the sizing and material requirements of the code, and was previously properly tested.
Questions related to the 2006 UPC Study Guide, Chapter 8

1. All indirect waste piping that requires an airgap shall discharge into the building drainage system through ____________.

2. Drains, overflows, or relief pipes from a water distribution system shall be connected to the building drain by ____________.
   (A) indirect waste by means of an airgap
   (B) direct connection to the building drain
   (C) direct connection to the building drain through a trap
   (D) indirect waste piping through a vented trap

3. A standpipe for a clothes washer shall have a minimum and maximum length of ____________.
   (A) 4 inches and 12 inches
   (B) 18 inches and 30 inches
   (C) 18 inches and 24 inches
   (D) 12 inches and 36 inches

4. Every indirect waste interceptor receiving discharge containing particles that would clog the receptor drain shall ____________.
   (A) have a readily removable beehive strainer
   (B) drain into a funnel connected to the floor sink
   (C) be connected directly into the drainage system
   (D) both A and B

Questions related to the 2006 UMC Study Guide, Chapter 9

5. Chapter 9 is primarily applicable to ____________ gas utilization equipment.
   (A) commercial
   (B) residential
   (C) commercial and residential
   (D) nonindustrial-type

6. Front clearance to central-heating furnaces and low-pressure boilers shall be ____________.
   (A) a minimum of 6 inches
   (B) a minimum of 12 inches
   (C) sufficient for servicing the burner and the furnace or boiler
   (D) a minimum of 18 inches to a door

7. Nonrecirculating direct gas-fired industrial air heaters shall not serve any area containing ____________.
   (A) vapors or dusts
   (B) flammable vapors or dusts
   (C) sleeping quarters
   (D) oil-based paints

8. The vertical distance between the tops of all domestic hot plates and laundry stoves and combustible material shall be at least ____________ inches.
   (A) 36
   (B) 30
   (C) 24
   (D) 18
Averting Environmental Terrorism

The Backflow Prevention Institute has an important mission: To work toward protecting the potable water supply from contamination. Many may initially think the Institute is all about cross-connection control. If questioned further, a response might include keeping somebody from attaching a garden hose sprayer to a hydrant without a vacuum breaker. Yes, one purpose of the Uniform Plumbing Code is to protect building occupants from sickness or death due to hazardous connections. However, the Institute also works toward keeping the public safe from the dark side of humanity.

You might remember a couple of years ago that a proposed code change was considered that would have required the installation of a backflow preventer on a new residential service connection. A persuasive argument prevailed to stop the idea. It cited that the requirement would add an excessive cost to the new building when items such as expansion tanks were included. Consider the cost of a cross connection incident and compare it to the product cost.

Today, let’s consider the value of that service connection device in relation to an intentional cross connection — and not a mere hose attached to the faucet of a utility sink.

The use of environmental terrorism can be much more devastating toward crippling a city than packing an SUV with propane tanks. Certainly one can disable a public water supply through the destruction of infrastructure. The basics would include the contamination of an aquifer, destruction of a dam, or explosives to destroy a storage tank. Although these things are relatively easy to do, many utilities are taking measures today to secure and monitor obvious or visible infrastructure.

Now consider an intentional cross connection. How many residential rental properties have no service line backflow preventers? Knowing the answer to that question, assume a terrorist purchased a Sunday newspaper with real estate ads and proceeded to lease several homes scattered throughout a municipal system. A visit to a local supply house might yield the terrorist several pumps, hoses and chemical tanks. The last ingredient needed to tamper with the potable water supply is electricity.

What is the terrorist mixing in the tank today for introduction to the water supply? Let’s consider easy to obtain materials. A visit was made to the local garden center to obtain herbicides or pesticides. Are you familiar with Chlordane? This pesticide is oil based. The importance of that is the product is designed to adhere to surfaces for long periods of time, allowing insect exposure to the poison.

Those of us who do yard work are thinking to ourselves, “Yeah, but it would be stupid to use something like that in the chemical tanks because people would smell it and see a white milky appearance when drawing a glass of water. They wouldn’t drink it.” Exactly. But how long would it take for your family to trust water from the faucet again?

The aesthetics of drinking water is an interesting discussion point. But the real damage from this substance has been done to the infrastructure. The oil-based pesticide would stick to the inside of a pipe. Experience with such a cross-connection incidents demonstrates that utility crews can flush and flush and flush the distribution system and not remove the material to a safe level. This contamination would necessitate new water mains, new potable water piping for plumbing systems, new water heaters, ice cube makers, water softeners — you’re getting the idea.

A biological weapon is a device used to intentionally cause disease through the dissemination of bacteria, virus or a microbial toxin. Depending on the microbe or toxin, the resulting disease may or may not be contagious. Biological terrorism is the use of a biological weapon against a population for the purpose of creating terror and anticipating that the use of such a weapon may result in an epidemic. There are a number of organisms that could easily be spread by ingestion, inhalation or even skin exposure.

Through the use of an intentional cross connection, are the objectives of a terrorist met?
Consider their checklist.
1) It must impact the public health.
2) It must disrupt the potable water supply.
3) Physical damage to the system must be done.
4) Public confidence in the water supply must be lost.
5) Long-term water loss was achieved.

It’s not a question of if, but when this will happen. The use of explosives is limited to a terrorist and access to the necessary materials is becoming limited. Imagine the greater impact of a water utility’s destruction and simultaneously creating an epidemic in the population. With no service connection backflow preventer, it is easy to accomplish.

Most utilities have emergency response protocols in place. It might be interesting for you to inquire about the protocol for an intentional contamination incident from a cross connection. That training involves drills, tabletop exercises, functional exercises and full-scale exercises; it also involves response personnel, those that sample, make decisions, manage remediation and much more.

If you have an interest in training on this subject, please contact me at stu.asay@iapmo.org.

Be aware. Keep your drinking water safe.
The following document(s) direct my jurisdiction's backflow prevention program:
- Municipal plumbing code
- Water supply ordinance
- District rules or regulations
- State regulation or statute
- Other: ____________________________

My jurisdiction requires the testing and record-keeping of the following assembly applications:
- Containment (service connections)
- Isolation (plumbing appliances/fixtures)
- Irrigation
- Fire-sprinkler systems
- Other: ____________________________

The length of time that I've been involved in backflow prevention is:
- Less than 1 year
- Between 1 and 3 years
- Between 4 and 6 years
- More than 6 years
- I am not active in backflow prevention

When I attend a 40-hour training session toward a certification (including the examination fee), the cost of the class is typically in the range of:
- $250 - $350
- $400 - $500
- $550 - $650
- $700 - $800
- More than $850

If I could make one or more plumbing code change/additions regarding backflow prevention, it/them would be summarized as:

My jurisdiction requires the following backflow prevention professional certification:
- Assembly tester
- Assembly repairer
- Fire-sprinkler cross-connection control testers
- Other: ____________________________

My jurisdiction is: ____________________________
there are a lot of terms to know.
thankfully they’re all crammed in a book,
in case they’re not all crammed in your head.
I am applying for the following Personnel Certification Examination. (Choose only one examination per application)

<table>
<thead>
<tr>
<th>Examination</th>
<th>Fee</th>
<th>Choose Code</th>
<th>Year</th>
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<tr>
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<td>$145.00</td>
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See next page or visit www.iapmo.org for the most current examination dates, registration deadlines and locations. Application and fee must be received by NITC before the registration deadline.

I wish to attend the exam to be held at: ___________________________________________ on _______________ 

Exams administered by:
National ITC Corporation
501 Shatto Place, Suite#201
Los Angeles, CA 90020
Phone: (877) 457-6482
Fax: (213) 351-7632
E-Mail: info@nationalitc.com

Rev. 12-31-09
PERSONNEL CERTIFICATION SCHEDULE

The schedule of upcoming dates and locations for the paper based version of IAPMO’s certification examinations is shown below. To sign up for a paper based examination, complete the application on the previous page. Mail the application with your payment to NITC in time to be received by the cut off date shown below for your testing date. A letter of confirmation, including time and location of exam, will be sent by mail approximately two weeks prior to your exam date.

Please see the Certification Candidate Bulletin, found at www.iapmo.org/Pages/GetCertified for complete details.

### General Information

Successful candidates will receive a wall certificate and wallet card valid for three years from date of issue. Complete information about IAPMO Certification Examinations, Reciprocity Certification and Certification Renewals is contained in the 2008 Candidate Information Bulletin at www.iapmo.org/Pages/GetCertified.

Certifications by the INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS are administered by National Inspection Testing Corporation (NITC). If you need additional help with the application process, please contact NITC Corporation 1-877-457-6482 or info@nationalitc.com.

### Exam Schedule

<table>
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<th>Exam Date</th>
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2. Click on the “certifications” button located on the left hand side of the page.
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   - 1 to 25,000 (Level 1) .................................. $ 150.00
   - 25,001 to 50,000 (Level 2) .............................. $ 200.00
   - 50,001 to 300,000 (Level 3) .......................... $ 250.00
   - Over 300,000 (Level 4) .................................. $ 300.00

2. Individual .................................................. $ 75.00
3. Senior ......................................................... $ 15.00*
4. Organization ................................................ $ 425.00
5. Student/Apprentice ....................................... $ 25.00**

* To qualify for a senior membership, applicants must be 62 years of age or older.

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Please Print or Type

First Name: ________________________________
Last Name: ________________________________
Date of Birth: _____ / _____ / _____
Company Name (optional): ____________________
Title/Position: ______________________________
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  City: ____________________ State: ______ Zip+4: ________
Daytime Phone: ____________ Fax. No.: ____________
E-mail: ______________________________

How did you hear about IAPMO? ________________________________

Please check the applicable boxes in both of the Professional & Specialty Fields

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- Backflow/Cross Connection Prevention
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- Drain & Sewer
- Fire Sprinkler
- Gas
- HVAC/R
- Hydronics
- Mechanical
- Plumbing
- Professional
- Refrigeration
- Retired
- Water Filtration
- Water Heating Equipment
- Other

Specialty Fields:
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- Commercial, Industrial or Institutional
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- Design Engineer
- Educator (instructor, professor)
- Engineer
- Estimator
- Inspector
- Journeyman (installer)
- Legal
- Manufacturer
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- Plan Check
- Public Service (commissioner, government agency)
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Jurisdictions and Organizations Must Submit a Letter That Designates Their Voting Representative.
NEW MEMBERS
See previous page for membership application or get it online at http://www.iapmo.org/pages/becomeamember.aspx

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Salt Lake City, Utah

INDIVIDUAL
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Fort Madison, Iowa
Karen Richards
Tooele, Utah
Daniel R. Robles
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John Thatcher
Arlington, Texas
Sherrie Engellant
Deer Park, Wash.
Scott Parkhurst
Tulsa, Ok.

STUDENT
Micah MacArthur
Milwaukee, Wis.
Eric Sumamkat
West Los Angeles, Calif.

Code Quiz Answers
(Questions located on page 75)

Uniform Plumbing Code
1. C Sec. 801.1
2. A Sec. 801.4
3. B Sec. 804.1
4. A Sec. 810.4

Uniform Mechanical Code
5. C Sec. 902.0 (A)
6. C Sec. 904.2 (E)
7. C Sec. 909.2 (A)
8. B Sec. 915.0 (C)

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HONOR IAPMO MEMBERS WHO HAVE RECENTLY PASSED ON

If you know of an IAPMO member or IAPMO Chapter member who has passed away during the past year, we’d like to know so that we can honor their memory during the opening session of the Annual Education and Business Conference in Seattle, Wash.

Please forward the deceased’s name, chapter, job title and any other relevant information to the editors and we’ll make sure this person is recognized for their contribution to IAPMO’s work.

Geoff.Bilau@iapmo.org or Jeff.Ortiz@iapmo.org
<table>
<thead>
<tr>
<th>Location</th>
<th>Contact Information</th>
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| **ALASKA** | **SOUTHERN (CENTRAL)**
Jim Gadowski 4700 South Bragele Anchorage, AK 99519 (907) 343-8313 gdadowski@ciANCHORGE.ak.us Meeting location: Contact chapter for location and time. |
| **ARIZONA** | **ARIZONA (CENTRAL)**
Meetings in Tucson.
Contact chapter for location and time. |
| **CALIFORNIA** | **CALIFORNIA (CENTRAL)**
Don Wauthurst 2368 W. Heddington San Jose, CA 95128 (408) 249-7155 chairman@ccipa.org Meetings on third Tues. of each month, 6:00pm-8:00pm, Tuesday Chamber of Commerce, 465 W. My Rd. Tucson, AZ |
| **FLORIDA** | **FLORIDA (MIAMI)**
Contact chapter for info coming soon. |
| **GEORGIA** | **ATLANTA**
Shea Strickland 5975 Tutule Dr, SW Atlanta, GA 30336 (404) 696-1711 F: 247-7630 Contact chapter for location and time. |
| **HAWAII** | **HONOLULU**
Jenney Baler 11109 Bethel St, Lower Level Honolulu, HI 96813 (808) 345-5454 Meeting location: Contact chapter for info. |
| **IDAHO** | **IDAHO (SOUTH)**
Mike Brede 456 N. Arthur Ave., Suite 4 Pocatello, ID 83204 (208) 232-6806 Meeting location: Contact chapter for location and time. |
| **IDAHO (SOUTHERN)** | **BOISE**
Kevin Hinsdale P.O. Box 638 Idaho Falls, ID 83401 (208) 781-0044 F: 208-781-0044 Contact chapter for location and time. |
| **ILLINOIS** | **JAVA CENTER**
Shane Peters 1685 Main St., Rm. 111 Santa Monica, CA 90401 (310) 458-2201 Ext. 5603 F: (310) 458-2202 Shane. Peters@smgov.net Meetings on third Tues., of each month, 11:30am-2:00pm, Hometown Buffet, 10061 E. 17th St., Santa Ana, CA. |
| **ILLINOIS (SOUTHERN)** | **CHICAGO**
Ed Avila 9632 W. Argyle St. Chicago, IL 60649 (773) 696-8723 F: (773) 696-8723 Contacts.pms@icase.com Meetings held the second Tuesday of each month. Contact the Chapter for meeting location and time. |
| **INDIANA (SOUTHERN)** | **SOUTH BEND**
Robert Bruner Jr. 202 North El Dorado Rd. Lincoln, NE 68510 (402) 441-6411 F: (402) 441-6411 rbrunelj@yahoo.com Meetings held on third Wed of each month. Contact chapter for location and time. |
| **KANSAS** | **WICHITA**
Malcolm Grier 706 Cherokee Hays, KS 67644 (785) 742-1734 F: (785) 742-1734 c: mgrier@cityofhays.org Meetings held quarterly. Contact chapter for location and time. |
| **KANSAS CITY** | **MISSOURI**
Jenney Hinson 375 Jackson St., Ste. 220 Paul, MO 65101 (626) 936-9044 F: 626-936-9044 Contact chapter for location and time. |
| **KENTUCKY** | **LEXINGTON**
Ralph Varon Plumbing Mech. Inspector City of Albquequen 600 2nd St. N.W. Albuquerque, NM 87123 (505) 924-3314 F: (505) 924-3314 Contact chapter for location and time. |
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Dave Bingham 2585 SW 11th St., Topeka, KS 66612 (785) 231-6366 F: 785-231-6366 more@yahoo.com Contact chapter for location and time. |
| **KANSAS (SOUTHERN)** | **HICKORY INN**
Dagli Begar 6110 N. Hydraulic Plaza, City, KS 67219 (316) 744-2026 F: (316) 744-3865 Contact chapter for location and time. |
| **LOUISIANA** | **METairie**
Dana Comolto 3515-11 Service Road Metairie, LA 70002 (504) 885-3054 F: 504-885-3054 dana@nationalitc.com Meetings held quarterly; locations vary. Contact chapter for location and time. |
| **MASSACHUSETTS** | **MORRIS**
Contact info coming soon. |
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Kevin Hinsdale P.O. Box 638 Michigan Falls, MI 48859 (208) 781-0044 F: 208-781-0044 Contact chapter for location and time. |
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Jerry Hanson 375 Jackson St., Ste. 220 Paul, MN 55101 (626) 936-9044 F: 626-936-9044 Contact chapter for location and time. |
| **MISSOURI** | **JEFFERSON CITY**
Reggie Castanares 1109 Bethel St., Lower Level Jefferson City, MO 65101 (505) 924-3314 F: (505) 924-3314 Contact chapter for meeting location and time. |
| **MISSOURI (SOUTHERN)** | **ST LOUIS**
| **MONTANA** | **MONTANA (BIG SKY)**
Ralph Varon Plumbing Mech. Inspector City of Albquequen 600 2nd St. N.W. Albuquerque, NM 87123 (505) 924-3314 F: (505) 924-3314 Contact chapter for location and time. |
| **NEBRASKA** | **OMAHA**
Contact info coming soon. |
| **NEVADA** | **NEVADA (CEDAR CITY)**
Jeff Karshos P.O. Box 106 Sparks, NV 89432 (775) 771-3144 F: 775-771-3144 jk@zsidental.com Meetings every second Wed. of the month, except July and Aug. Contact chapter for location and time. |
| **NEVADA (SOUTHERN)** | **LAS VEGAS**
| **OHIO** | **OHIO (SOUTHERN)**
Dan Hackett 980 Keynote Circle Columbus, OH 43141 (614) 593-2990 F: 614-593-2990 Contact chapter for location and time. |
| **OKLAHOMA** | **OKLAHOMA CITY**
Contact info coming soon. |
| **OREGON** | **OREGON (CASCADE)**
Ken Carlson 720 SW Blaine Place Gresham, OR 97080 (503) 556-2081 F: 503-556-2081 Carlson@comcast.net Meetings third Thursday of every odd month, 6:30pm at Crown Plaza Hotel, 14811 Kruse Oaks Dr, Lake Oswego, OR 97035 |
| **OREGON (SOUTHERN)** | **PORTLAND**
David Klipschi 710 N.W. Wals St. Bend, OR 97701 (541) 330-4012 F: 541-330-4012 klipski@bend.or.us Contact chapter for location and time. |
| **OREGON (LANE COUNTY)** | **COOS BAY**
Contact info coming soon. |
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Ed Cooley 136 South Main St., Ste. 110 Berkeley, PA 19512 (610) 545-2125 F: 610-545-2125 Contact chapter for location and time. |
| **TEXAS** | **TEXAS (ERIE)**
Contact info coming soon. |
| **UTAH** | **UTAH (SOUTH)**
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| **WEST VIRGINIA** | **WEST VIRGINIA (CHARLESTON)**
Contact info coming soon. |
| **WISCONSIN** | **WISCONSIN (MADISON)**
Contact info coming soon. |
| **WASHINGTON (SOUTHERN)** | **WASHINGTON (SOUTHERN)**
Contact info coming soon. |
IAPMO Applauds U.S. Congress for Introduction of High-Performance Buildings Legislation

WASHINGTON, D.C. – The International Association of Plumbing and Mechanical Officials (IAPMO) assisted in the creation of H.R. 5112, the Federal Buildings Personnel Training Act of 2010, bipartisan legislation introduced today by Congressman Russ Carnahan, D-Mo., and Congresswoman Judy Biggert, R-Ill., that would promote best practices, including water efficiency, in federal buildings. Senators Tom Carper, D-Del., and Susan Collins, R-Maine, introduced identical legislation in the U.S. Senate, as well.

H.R. 5112 would require the federal government’s General Services Administration (GSA) to identify core competencies that federal personnel must maintain in all federal buildings — consistent with industry best practices. GSA would also be required to work with private professional societies, industry associations and apprenticeship training providers to ensure their personnel meet the required competencies. While GSA may identify its own required core competencies, this legislation directs that their findings must include water efficiency as a required core competency.

IAPMO’s work with Congress as this legislation was being crafted helped ensure that water efficiency was included in the bill.

“In order to be responsible stewards of taxpayer dollars, in addition to investing in high-performance buildings, we must invest in the people maintaining these buildings so that we recoup the largest energy and cost savings possible,” said Rep. Carnahan, author of the legislation and co-chair of the Congressional High-Performance Building Caucus.

“Saving money and improving efficiency is exactly what this legislation will accomplish.” Carnahan praised IAPMO for “its long history of writing codes that benefit scarce natural resources,” and called the association’s support “critical as the federal government worked to retrofit and improve its existing building stock into high-performance buildings.”

The federal government is the single largest owner and operator of buildings in the United States and requiring its personnel to maintain core competencies, especially water efficiency, will greatly move the government toward adopting better codes and standards. Furthermore, the private sector often follows the federal government’s lead; therefore, this legislation would allow the government to lead by example.

“Congressman Carnahan has stalwartly taken the reins of federal policy affecting high-performance buildings for several years,” stated GP Russ Chaney, IAPMO executive director. “He has conceived, crafted and has now introduced this legislation, and deserves substantial credit for his efforts in moving America’s aging building infrastructure to a much needed higher performance level.

“We look forward to working with Rep. Carnahan to get this valuable piece of legislation passed.”

IAPMO Solicits Proposals for 2012 Solar, Swimming Pool Codes

ONTARIO, CALIF. – The International Association of Plumbing and Mechanical Officials (IAPMO), publisher of the Uniform Solar Energy Code (USEC) and Uniform Swimming Pool, Spa and Hot Tub Code (USPSHTC), is calling for formal code proposals toward the development of the 2012 editions of these model codes.

The code proposal form, as well as proposal instructions and background on IAPMO’s ANSI-accredited consensus development process, can be found at http://www.iapmo.org/Pages/CodeDevelopment.aspx.

All proposals recommending new text, revised text or the deletion of text must be written in legislative format and clearly state the reason behind the recommendation.

No proposals will be accepted after the 5 p.m. EDT deadline on Aug. 2. All proposals will be distributed to Technical Committee members in September and reviewed at their meetings on Oct. 18.

The USEC is a model code developed by IAPMO to govern the installation and inspection of solar energy systems as a means of promoting the public’s health, safety and welfare. The USPSHTC governs the installation and inspection of both public and private swimming pools, spas and hot tubs to ensure the safety of their operation.
The advantages of these codes, acceptable in various jurisdictions, had long been recognized, prompting IAPMO to pass a resolution at its 1975 annual business conference that directed the president to form committees to develop basic solar energy and swimming pool documents. After months of concerted endeavor, these committees, composed of representatives from industry and public utility companies, inspectors, plumbers and engineers, successfully completed the first editions of the USEC and USPSHTC, which were officially adopted by IAPMO in September 1976.

IAPMO employs a consensus development process accredited by the American National Standards Institute, gathering the largest assembly of plumbing and mechanical experts in the world at its annual education and business conference and technical committee meetings, enabling anyone — members and non-members alike — to have a voice and a vote on proposed changes to the code. The 2009 editions of the USEC and USPSHTC represent the first time these codes were developed in this manner.

IAPMO urges its members and other interested parties to get involved in the code development process to ensure effectiveness in preserving the public health, safety and welfare through strict governance of the Uniform Codes. Installers, plumbing and mechanical officials, the construction industry, engineers and manufacturers all benefit from a cooperative effort in developing codes.

For questions about submitting proposals for the USEC, contact Adam Muliawan, by phone at (909) 472-4111 or by e-mail at adam.muliawan@iapmo.org. For questions about submitting proposals for the USPSHTC, contact Matt Sigler by phone at (909) 230-5535 or by e-mail at matt.sigler@iapmo.org.

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World Plumbing Council Launches Education and Training Scholarship for 2010

The World Plumbing Council is pleased to invite applications for its 2010 Education and Training Scholarship. The Scholarship, which has been renamed after a review, is available to anyone involved in plumbing industry education and training. The award for 2010, worth a maximum of $10,000, will enable the successful applicant to travel to another country to investigate aspects of industry education and training.

“The WPC has previously awarded six Scholarships which have allowed individuals involved in industry training to travel to a range of countries and see how industry training is managed,” said WPC Chairman Robert Burgon. “We have reviewed the terms of the award and believe that this significant Scholarship should lead to benefits for industry education and training worldwide. We look forward to receiving a good number of quality applications before the closing date.”

The deadline to submit applications is July 31. For more information and to download the scholarship application package, direct your Web browser to www.worldplumbing.org.

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Keith Bienvenu Elected PHCC Vice President

At its April 30 meeting, the Board of Directors of the Plumbing-Heating-Cooling Contractors—National Association (PHCC) elected Keith Bienvenu of Bienvenu Brothers Enterprises, Inc., Metairie, La., as vice president of the organization.

Bienvenu hails from a fourth-generation family business that has served metropolitan New Orleans area since 1937. He has been a member of PHCC since 1975, and has held several national positions, such as Zone 2 Director from 1993-1996, and national secretary from 2003-2004. He has served in every office of both the Louisiana PHCC and the Metro New Orleans PHCC and remains active as the state chapter’s director-at-large and metro chapter’s PHCC’s president. He also is very active with the state continuing education program, and has served on numerous PHCCC committees for local, state and national chapters.

Bienvenu serve until the 2010 annual business meeting, scheduled for Oct. 30 in Las Vegas. At that time, the PHCC membership will elect a vice president to complete the remainder of the 2009-2010 term; once this individual is elected, he or she will succeed to the office of president-elect at the close of the convention. The members will also be asked to elect a vice president who will serve for the 2010-2011 year.
SMACNA-Sponsored Report Unveils Ways to Achieve Greener, Energy Efficient Buildings

CHANTILLY, VA. – A report recently released by the U.S. Green Building Council (USGBC) and co-sponsored by the Sheet Metal and Air Conditioning Contractors’ National Association (SMACNA) and other leading energy, housing and real estate organizations, documents all the existing legal authorities that federal agencies have to spur the use of energy efficiency in the country’s multifamily and commercial buildings.

"Using Executive Authority to Achieve Greener Buildings: A Guide for Policymakers to Enhance Sustainability and Efficiency in Multifamily Housing and Commercial Buildings" concludes that under current executive authority, the Obama Administration has the ability to use more than 30 existing federal programs worth $72 billion to enhance efficiency in commercial buildings and multifamily housing, with no new legislation.

This new report unveils an even larger opportunity for the Obama Administration to increase the nation’s energy efficiency, while creating thousands of jobs and saving taxpayers money. To view the report, visit the Business Management page on the Business/Project Management section of the SMACNA website www.smacna.org.

The report was developed in response to a White House request during a high-level meeting where SMACNA leaders were called to discuss energy efficiency policy as part of the Rebuilding America Coalition, now the chief sponsor of Building Star, an energy efficiency proposal in pending legislation.

The report was prepared by Van Ness Feldman. Other sponsors of the report included the Real Estate Roundtable, UDR, Johnson Controls Inc., the Energy Foundation, Building Owners and Managers Association International, the American Institute of Architects (AIA), Natural Resources Defense Council (NRDC), International Facility Management Association (IFMA), Energy Future Coalition, and C3.

SMACNA, an international trade association representing 4,500 contributing contractor firms engaged in industrial, commercial, residential, architectural and specialty sheet metal construction markets, is dedicated to promoting quality and excellence in the sheet metal and air conditioning industry. SMACNA has national offices in Chantilly, Va., outside of Washington, D.C., as well as on Capitol Hill.

MCAA Honors Construction Trade Student Chapter for Achievements

CHICAGO – Members of a building trade student association at Illinois State University (ISU) are giving back to the community — by helping to build the community. Recently, they were recognized for their achievements by a national construction association.

Like many college groups, the members of the ISU Mechanical Electrical Student Association (MESA) take part in homecoming events. They work with Relay for Life to help in the fight against cancer. They also participate in Trick or Treat for Change to help fund Habitat for Humanity. These activities would be considered exceptional for any group of students — but the members of MESA do even more.

Through Habitat for Humanity, they help in building homes for people in need. Also, they have raised funds for, designed, built and painted a special playroom for the autistic child of a low-income family.

“We worked closely with the child's parents," said Mitchell McClellan, president of MESA. “The building of the room included drywall, paint, carpeting, and a playset with a ball-pit. Everything is appropriate for his medical condition. We even sanded down all the corners and edges in the room for maximum safety.”

For these contributions to the community, as well as other achievements, the Mechanical Contractors Association of America (MCAA) presented its 2009 Student Chapter of the Year Award to MESA during the Awards of Excellence Breakfast at the recent MCAA annual convention in San Francisco, CA. MESA is sponsored by the Mechanical Contractors Association (MCA) of Chicago.

“These students are giving back to the community before their full-time careers have even begun,” said Stephen Lamb, Executive Vice President of MCA of Chicago. “We are proud of them and see them as excellent role models for other students aspiring to construction careers.”

Lamb also stated, “We are grateful to our member contractors who work with and hire students from our student chapter. Their support makes this entire venture possible, and the guidance they give to these students will help them to someday become industry leaders.”

The MCAA Career Development Committee chose the winner on the basis of several criteria, including membership recruitment, fundraising, community involvement, promotion of student interest in the industry, and members' employment.
with mechanical, service and plumbing contractors as interns or full-time employees.

"These young people represent the future of construction," Lamb said. "They don't just wait for things to happen in life -- they make things happen."

For information on how to become involved with student chapters, please contact Jen Murray at jmurray@mca.org or call the MCA of Chicago office at 312-384-1220.

Plumbing Manufacturers Institute Volunteers on San Diego Habitat for Humanity project

ROLLING MEADOWS, ILL. — Preceding the Plumbing Manufacturers Institute (PMI) Spring Meeting this March, members and staff volunteered on Habitat for Humanity’s G Avenue project in National City, Calif. PMI’s team assisted with foundation preparation, retaining wall construction, irrigation system installation and other tasks.

When completed in 2011, the project will provide eight semi-attached, two-story homes. Each home will have three bedrooms and one-and-a-half baths.

The association’s board president, Lee Mercer, director of product compliance for Moen Incorporated (North Olmsted, Ohio), led PMI’s Habitat team. "PMI and its members play a critical role in providing safe, clean drinking water and sanitary conditions. This directly and positively contributes to healthy lives and livelihoods for people across the globe," said Mercer.

"This is the first year that we've included a hands-on opportunity, allowing members to personally contribute their time. It's a way for us to give back, leave a positive impression and remain connected to the community hosting our meeting. We hope to incorporate similar activities into future meetings."

Key volunteers on San Diego Habitat for Humanity’s G Avenue project in National City (http://www.sdhfh.org/), included: Barbara C. Higgens, executive director, PMI; David Hagopian, director of strategy and technology, PMI; Peter Jahrling, director of design engineering, Sloan Valve Company (Franklin Park, Ill.); Sally Remedios, product compliance manager, Delta Faucet Company (Indianapolis, Ind.); and Matt Dos Remedios, production planner, American Faucet and Coatings Corporation (Vista, Calif.).

Volunteers received on-site supervision and guidance from John Pulliam, volunteer coordinator, and Joe Carton, site superintendent. Ken Kosman, chief construction officer for the San Diego Habitat for Humanity, offered advance coordination for the PMI team. Kosman spoke at the Spring Meeting, thanking PMI for its volunteers' efforts and $500.00 donation, and for its members' ongoing and past donations of plumbing products and materials.

Dedicated to eliminating substandard, poverty housing from its community, the San Diego Habitat for Humanity relies on contributions of land, materials, money and labor to keep building costs low. Partner families invest hundred of hours of their own "sweat equity" and qualify for a zero-interest mortgage that is no more than a third of their income. Mortgage payments are typically less than rental fees charged for inadequate shelter and unsafe living conditions.

"With adequate housing, families can devote more attention to career opportunities, education and health," according to Kosman. "As the crushing cycle of poverty is broken, children benefit, neighborhoods change for the better, and entire communities improve."

San Diego Habitat for Humanity has constructed more than 100 homes throughout the county. Learn more at http://www.sdhfh.org/.

For more information about the PMI Spring Meeting, visit http://www.pmihome.org or call 847-481-5500. PMI's 2010 Fall Meeting will take place Oct. 3-6, at the Liaison Capitol Hill in Washington, D.C.

KB Home First National Builder to Partner with EPA’s WaterSense Program

LOS ANGELES — KB Home, one of America’s premier homebuilders, in partnership with the U.S. Environmental Protection Agency's (EPA) WaterSense® program, announced today plans to be the first national homebuilder to construct homes to meet the WaterSense specification.

According to the EPA, WaterSense labeled new homes use 20 percent less water than conventional new homes and save homeowners more than 10,000 gallons of water per year. A new WaterSense labeled home built by KB Home will also allow homeowners to significantly reduce their water and energy consumption, resulting in lower monthly utility bills.
KB Home currently includes WaterSense bathroom lavatory faucets as a standard feature in all its new homes. With its new commitment to the WaterSense program, KB Home will incorporate additional water-efficient products and features inside and outside its homes at select communities that meet the full WaterSense guidelines — all at no additional cost to the homeowner.

"KB Home is proud to collaborate with the EPA to set a benchmark standard and build consumer awareness of the benefits of water-saving features in new homes," said Jeffrey Mezger, president and chief executive officer of KB Home. "We believe that much like how the EPA's ENERGY STAR® qualification has raised awareness among consumers regarding energy-efficiency, the WaterSense program will heighten consumers' sensitivity to water consumption. In addition to being earth-friendly, homes built to the EPA's strict guidelines for energy- and water-efficiency help to drive down the costs associated with day to day living in a home, saving buyers money and natural resources."

"KB Home has been a good partner for us in building new homes that are more environmentally friendly, first by embracing the EPA's ENERGY STAR for Homes program, and now by implementing this new WaterSense for New Homes program," said EPA Assistant Administrator for the Office of Water Peter S. Silva. "We're pleased that KB Home is leading the industry by example by pledging to become the first national homebuilder to incorporate these water-saving standards into their new homes."

To meet the criteria of a WaterSense labeled home, builders must upgrade to more environmentally friendly features. This includes installing WaterSense labeled shower heads, faucets and toilets and utilizing landscaping designs and technology that minimize water usage. Additionally, the program calls for the use of energy-efficient hot water distribution systems. Once the home is completed, it is inspected and certified by a third-party rater to ensure that the upgrades meet the specification's requirements. This results in a more efficient and comfortable home for the consumer.

KB Home has long been a leader in building energy-efficient homes. In January 2009 the company announced that all homes in its newly opened communities nationwide would be built to ENERGY STAR guidelines. Since 2001, the Company has built more than 55,000 ENERGY STAR qualified homes.

Sheet Metal Industry Resource Alliance Created as Resource for Sheet Metal, Air Conditioning Community

ALEXANDRIA, VA. — For years, three organizations, International Training Institute (ITI), the National Energy Management Institute (NEMI) and the Sheet Metal Occupational Health Institute Trust (SMOHIT), have collaborated to provide support, education, information and other resources to the sheet metal and air conditioning training community.

Simply known as "the Funds," ITI, SMOHIT and NEMI determined a need for brand consistency and ease-of-use for their members (which include sheet metal journeymen and apprentices and general contractors), who may not even realize all three organizations work together. Therefore, they have formed the Sheet Metal Industry Resource Alliance (SMIRA).

ITI, NEMI and SMOHIT, under the umbrella organization SMIRA, work together to ensure that today's sheet metal workers are the best-trained, highest-quality and most safety-conscious technicians in the building trades industry.

"Each of SMIRA's three arms provides a distinct area of support for our members," said James Shoulders, executive administrator for ITI, SMOHIT and NEMI. "Especially in economic times such as these, it's important our members understand all of the services and support we provide and how ITI, SMOHIT and NEMI complement one another."

Each organization that comprises SMIRA offers unique services. ITI provides apprenticeship and advanced career training for union workers in the industry at more than 180 training facilities (JATCs) throughout the United States and Canada. It offers a standardized sheet metal curriculum and is jointly sponsored by Sheet Metal Workers International Association and the Sheet Metal and Air Conditioning Contractor's National Association.

The training offered by ITI works hand-in-hand with NEMI, a not-for-profit organization established in 1981 to identify emerging markets and employment opportunities for the sheet metal industry. NEMI works to develop programs to capitalize on those opportunities as well as offer certification programs through their affiliations with the Testing, Adjusting and Balancing Bureau and the International Certification Board for HVAC technicians and supervisors.

SMOHIT was created in 1986 to address issues of asbestos exposure through screenings and education and has since expanded its mission to include health and safety training products, health and safety training curriculum, and health and safety services. SMOHIT works directly with ITI to offer the training programs.

More information on each of the three organizations can be found at their respective Web sites: www.sheetmetal-iti.org, www.nemionline.org and www.smohit.org. For more information on SMIRA call (703) 739-7200.
The IAPMO Group’s tremendous worldwide growth has prompted a need for more space at World Headquarters in Ontario, Calif. To accommodate this present and anticipated continued growth, a second building was purchased just down the street from the existing facility and work to create a state-of-the-art new home for staff, meetings and education is nearing completion.

Work on the new building, which will house administrative staff, code development and member services and will include a new 100-seat Ron Ridenour Training Center, a 40-seat amphitheater and a new board room, is almost finished. The IAPMO Group World Headquarters West will officially open in June.

Vacated space at the existing building will be renovated to enable the expansion of IAPMO R&T, IAPMO ES and IAPMO R&T Lab.

We welcome you to track the progress online by visiting IAPMO’s flickr photo page, www.flickr.com/photos/iapmo.
IAPMO R&T certifies septic tanks to the requirements of the ANSI/IAPMO Z1000 standard, as well as the requirements of the UPC and the International Plumbing Code (IPC). The standard covers septic tanks made of several different materials. Our product evaluation engineers enjoy reviewing calculations for septic tank product certification because they use many of the engineering fundamentals for such reviews.

The majority of the septic tanks certified by IAPMO R&T are made of precast concrete with steel reinforcements. The calculations submitted for such products are based upon the requirements of the standard, which include earth load as well as highway loads based on the location of installation. Many clients submit design calculations. Such calculations get deep into civil engineering, although mechanical engineers with design and structure background can handle such reviews, as well. In design calculations, the strength of the materials is known. The engineers calculate the thickness of the concrete and the center-to-center distance of the rebars for a selected rebar number.

We also certify plastic septic tanks. The calculations for such tanks are more closely related to the mechanical engineering field. Such tanks may be considered as thin wall vessels. Such plastic tanks can be considered as cylindrical vessels. In such tanks, the radial stresses are negligible in comparison with the tangential stresses because the material thickness is negligible in comparison with the diameter of the tank.

In such cases, the stress is dependent on the average diameter of the tank, the resultant pressure and the thickness. In these instances, the tank thickness can be determined for production purposes. In recent years, some manufacturers use finite element analysis (FEA) for such submittals. This analysis, because it is three dimensional, is much more accurate and much more representative of the real world.

Septic tanks inspections are very thorough. During these inspections, the tanks undergo a variety of measurements, such as the location of the rebars, the manhole dimension and the location of the baffles. Concrete septic tanks as mention before include steel reinforcements. This gives the tank tensile strength. But the compressive strength comes from the concrete. Therefore, in order to assure that the material strength of 4,000 psi (compressive) is met, concrete cylinders are crushed in universal testing machines to assure compliance. Among other inspection requirements is a water test.

For further information regarding certifying septic tanks, please contact us.

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When you develop the standard...

YOU MAKE THE RULES

Level the playing field to your advantage by creating the standards that govern your innovative new products. Make your competition play by your rules with help from IAPMO Standards.
The Product Evolution Continues

If you work for either an independent testing laboratory or the manufacturer of plumbing and mechanical products, you are frequently exposed to changes and trends in the industry. Plumbing has changed considerably in the last 10 years or so due to many factors. The building and construction industries have begun focusing on sustainable and eco-friendly designs. Both the national and international plumbing communities have become aware of the limited amount of clean water available and this information is now filtering down to individual consumers, who have become more aware of their personal water consumption due to local programs that focus on water conservation products.

However, that is not to say that plumbing products labeled as green are not stylish. As consumers become more educated about plumbing products and materials, they have created a demand for more sophisticated and multi-functional products.

For instance, the standard toilet has evolved in the last century from the standard two-piece type (still popular) to the sleek new one-piece toilets or matching suite with lavatories and bathtubs. Many have pressurized tanks to help lower water consumption. Some toilets are state of the art. These new designs incorporate heated seats, bidets, remote controls and even a music system.

Another toilet system was designed with your health in mind. This system will measure urine sugar, blood pressure, body fat and weight on a daily basis. The data can be transferred over a home network, too, for viewing on your PC.

Other technology allows toilets to be flushed using water recycled from the washing machine or shower.

Bathtubs are no longer just for therapy. Televisions and sound systems are now a common part of the bathing experience, as these products have been incorporated right into the spa. New bathtubs are the walk-in type, specially designed to assist us as we age. These walk-in versions incorporate many of the features of the regular whirlpool tubs.

Lavatory sinks and bathtubs made of glass, metal, plastic, marble, jade and other natural stone have transformed our bathrooms into works of art. Beautifully designed faucets are low flow to help conserve water.

Kitchens are no longer just for cooking. They have developed into part of the consumer’s personality, reflecting his or her taste. They are now family rooms, meeting rooms and entertaining rooms. From beautiful granite countertops and stainless steel sinks or granite composite to faucets that you just touch to turn on or off and built-in water filtration systems, kitchens are an important part of our daily life.

Many plumbing manufacturers now have Websites to which the consumer can go to view products and even design their own kitchens or bathrooms.

The next decade is sure to bring more exciting changes to the plumbing industry.
**Electrical, Mechanical Testing and Certification Under the Same Roof**

- IAPMO R&T can now assist you in certifying:
  - Hydro-massage bathtubs (UL 1795)
  - Electrical plumbing accessories (UL 1951)
  - Electric Spas (UL 1563)
  - And many others

- IAPMO R&T now allows transfer of your hydro-massage bathtubs from other agencies.

- Faster service, faster turnaround, faster time to market.

missed my deadline for this column.

I have missed deadlines before, not frequently, but I have missed them. When that happens, I always contact the editors, apologize, and ask if they could squeeze a little more time out of the schedule for me to get my submission to them. None of this happened, not this time. I just flat missed the deadline, by a lot.

I was traveling and was on a very hectic schedule, arriving at a new function or meeting, in a new location every second or third day. Upon my arrival back at IAPMO World Headquarters in Ontario, Calif., I immediately went to Jeff Ortiz, co-editor of OFFICIAL magazine. One of his responsibilities is the layout of the magazine, and layout is literally the last stop before the magazine is published.

“Hi, Jeff,” I greeted him, mustering my friendliest smile. He greeted me warmly. I apologized, “I’m sorry, Jeff. I missed the deadline and worse, I don’t have a column written for you and don’t think I will. I hope this will not cause you too much extra work.” With a shrug, Jeff just said, “It happens,” but he looked really sad.

I did not want him to be sad. What I wanted was a little empathy, sympathy even, along with his understanding. So, I continued explaining the situation — or trying too. I wanted him to know that I was just too busy to give any thought to writing the column.

I explained that I had met with Dr. Stu Asay of the IAPMO Backflow Prevention Institute about the expanded training and educational programming we have undertaken and the classes we will be conducting in Africa and South America. A very good beginning to the program, which is expanding across the United States, as well, into regions in which IAPMO or the Institute have not been before. We also worked on the timeline and process for creating a second edition of the Backflow Prevention Reference Manual in concert with the United Association. The Backflow Prevention class at the UA Instructor Training will review the draft of the new Manual this year. The second edition of the Manual will be published and available in late November. An interesting aspect of the new Manual is that it will spawn a new IAPMO BPI Test Procedures Manual, covering all of the generally used and approved Test Procedures in the United States.

Jeff was listening, so I went on explaining that the IAPMO Chicago office was expanding into a new larger space, big enough to accommodate the Green Technical Committee’s meetings toward development of new initiatives. In addition, we are discussing a “Green Certification” tied to the IAPMO Green Plumbing and Mechanical Code Supplement and discussing how we could tie it into the GreenPlumbers USA program as part of a comprehensive package. Once implemented in America, we have a plan to next introduce it in India, as well as offer it to other countries.

Also, the Training and Education Department in Chicago has completed the first phase of a US AID contract with the Country of Jordan, which provides the materials to train and certify plumbing, all based on the Plumbing Code of Jordan, which utilizes the 2009 UPC as its basis. Further, we have training contracts with the State of Oregon to teach the IMC, as well as initiatives in several other States and Countries.

I could tell I had Jeff’s interest now, so I went on to explain that we just had a meeting with the new Director of Government Relations in Washington, D.C., and were working on establishing an office and the strategic legislative plan.

Then I moved the conversation to India, where our UPC – India is continuing to expand and grow, along with the training and education efforts, with several Universities and Colleges implementing the program. Our relationship with the Indian Plumbing Association just getting stronger and better, with the introduction of the Green Plumbing Code Supplement – India and the Uniform Swimming Pool, Spa and Hot Tub Code – India under development. I did tell Jeff I had a secret to share about India and his eyes got really wide with curiosity. In a hushed tone I
informed him that we are just completing an agreement to develop the *Uniform Mechanical Code – India*! This will include the premier Mechanical organization in India and is supported by several Government Agencies and the Indian Green Building Council.

In addition to all of this, I am working with Dwight Perkins to put together a meeting of the IAPMO Field Service Managers, designed to make an already great group even better in serving the needs of the membership and promoting the use of IAPMO Codes and Standards across the country.

I was ready to tell Jeff that with all of this going on I hadn’t even had time to think what I would write a column about. Then it dawned on me, everyone just might like to know what we have going on. I could write about what I just explained to Jeff. “Wow, Jeff,” I exclaimed. “You are a real inspiration.”

Jeff just smiled and said, “It happens.”

The Green e-newsletter is designed to quickly and regularly communicate information and resources regarding the various green building and water efficiency activities and IAPMO’s active involvement with them. Delivered 8 times a year, this free newsletter is one you’ll look forward to getting in your inbox.

Sign up today at: www.iapmo.org/Pages/GreenNewsletter.aspx

Join us on Facebook

http://www.facebook.com/IAPMO
for decades as IAPMO recognizes a green contractor of the year in his name.

The remainder of conference week promises to provide first class educational sessions. As a result of the positive feedback received from those of you who have attended conferences in the past, the education sessions will include topics such as “Backflow Prevention Assembly Repairer” and will address provisions from the Green Plumbing and Mechanical Code Supplement such as “HVAC Energy Efficiency” and “Rainwater Harvesting.” The sessions will also include the workshops offered by the Plumbing and Mechanical Committees, as well as seminars on the Uniform Codes. Of course, the conference schedule will include the usual networking events such as the evening receptions and an evening event at the Experience Music Project Science Museum.

Switching gears, IAPMO staff, under the direction of the board, has been investigating how to make the Uniform Codes more accessible in electronic format. Staff’s initial investigation into the applications available for products such as the iPhone/iPod, BlackBerry and other small hand held devices shows that they are too small to effectively provide a basis for one to use and interpret the code. The screens are simply not large enough for the user in the field. Additionally, having a powerful search engine is critical to the device. Products such as iPads, Kindles and other similar devices will better serve a user as the screen is large enough to read and the search engine is more powerful. Additionally, IAPMO has learned that it is important to a code user to immediately gain access to a digital code that is searchable and more user-friendly. As a result of this, IAPMO is developing a more robust digital offering of its UPC, UMC, USEC, USPSHTC and the Green Plumbing and Mechanical Code Supplement. I expect that these will be available by early 2011, so look to this magazine and the IAPMO Website for more on these digital offerings.

Once the Codes and Supplement are released in a format that can easily be applied to the new Building Information Modeling (BIM) system.

(BIM is the process of generating and managing building data during its lifecycle. Typically, it uses three-dimensional, real-time, dynamic building modeling software to increase productivity in building design and construction. The process produces the building information model, which encompasses building geometry, spatial relationships, geographic information and quantities and properties of building components. (Courtesy of Wikipedia.))

For those of you who prefer a hard copy of the code, please know that IAPMO will continue to make the codes available in this traditional form, as well.

As many of you recall, I have reported on IAPMO’s involvement in the Green Plumbers program. I’m pleased to report that Green Plumbers India (a collaboration between IAPMO India and Green Plumbers USA) has already begun to certify plumbing professionals throughout India. The first seminar was held in March and I am pleased to report that approximately 1,500 students will be certified by the end of 2010. This is an aggressive effort that is being undertaken with the support of the Indian Plumbing Association (IPA).

IAPMO India and the Indian Plumbing Association (IPA) worked closely together to develop the UPC–India (UPC–I) and UPC–India Illustrated Training Manual (UPC–I ITM). IAPMO and the IPA have also worked closely together to develop and implement the Plumbing Education to Employment Program (PEEP). PEEP is an educational program that IAPMO and the IPA have undertaken to train those working in the plumbing industry on the requirements of the UPC–I. Today, the IPA, in collaboration with IAPMO India, is in the final stages of creating the 2011 edition of the UPC–I, as well as the UPC Green Supplement – India.

Upon reflection, it amazes me how much has been done in India through the strong trust and respect that has been developed between IAPMO India and the IPA. These programs were not in existence prior to 2007, thus this
illustrates the amazing confidence that each organization has had in the other and that has enabled us to accelerate the development and introduction of these invaluable documents and programs. In particular, I would like to recognize the major effort which Allen Inlow has committed on behalf of IAPMO India to ensure the success of these programs. In the past three years, Allen has made no less than 12 trips to India to set up the offices in Bengaluru (Bangalore) and Pune (just outside of Mumbai). Allen has done an incredible job of establishing trust and has created an invaluable relationship that will pay dividends for years to come. Of course, Sudhakaran Nair, World Plumbing Council Executive Board member and IPA president, has been the lead representative. He has creativity and a dynamic personality. It was his vision and his assistance that enabled the formation and home for IAPMO India. This joint effort is a classic example of the success that can be achieved when trust and mutual respect are the cornerstones of a relationship.

Finally, many of you will recall a joint project between the World Plumbing Council (WPC) and World Health Organization (WHO). That project, which occurred over a nine-year span, created the Health Aspects of Plumbing. This publication illustrates the important linkage between the plumbing industry and its contribution to public health. The WPC also recognizes the plumbing industry’s invaluable contribution to the environment. In recognition of this contribution, the WPC has created a paper on the Environmental Aspects of Plumbing. This document lays out the plumbing industry’s role and involvement in protecting natural resources, in creating sustainable systems and ensuring that those involved in the plumbing industry are properly educated on creating a sustainable environment. This document, as well as the Health Aspects of Plumbing, is available at the WPC Website, worldplumbing.org.

Lastly, I am pleased to welcome back to the IAPMO Group staff Ms. Tricia Schwenke. Tricia’s involvement with IAPMO predates me as she originally started in 1989. Many of you may have the opportunity to speak with her as she will be working directly with me as the Assistant to the Executive Director. In closing, I wish everyone a great summer!
Meet Your Staff

Bob Carpenter
SOUTHEAST REGIONAL MANAGER

1. What is your title and what role are you now filling at IAPMO?

My title is Southeast Regional Manager. I will be servicing the needs of the plumbing and mechanical officials in Georgia, Alabama, Tennessee, Kentucky and Florida. This will include membership development, chapter organization and code adoption.

2. Any special projects and/or areas of focus you are addressing in your new job?

Top priority will be building relationships with the people involved in the piping industry in the region. One of my first projects is to work with the Georgia WaterWise Council, the Georgia State House and Senate members, as well as the Governor of the State of Georgia, Sonny Perdue, in getting the GPMCS recognized in the Water Stewardship Bill that the Governor is waiting to sign.

3. Where were you working previously?

Previous to taking the position at IAPMO, I was working for Art Plumbing in Atlanta, Ga. Art is a signatory contractor with Local Union 72. The project I was working on was the new International Concourse at Atlanta Hartsfield International Airport. I served as Job Steward and had about 80 men on the job.

4. Any relevant/interesting memberships?

I am a proud member of UA Local 72 and will continue to be a faithful member, attending all meetings when possible. I am a member of the University of Georgia Alumni Association and proud supporter of the Bulldogs. I am also a member of the Professional Association of Dive Instructors (PADI). I have been a Master Scuba Diver Instructor since 1995. Of course, I am also a member of IAPMO and have been for two years.

5. Family?

My wife, Cindy, and I were married in Las Vegas on Nov. 29, 1996, at the Little White Chapel of Flowers. We did go inside and not opt for the drive-thru. Together, we have five children. She has three daughters: Stephanie, 34, lives in Somerset, Ky.; Cristy, 31, lives in Young Harris, Ga.; and Erin, 27, lives in Monroe, Ga. I have two sons: Rob, 23, lives in Athens, Ga., and will be graduating from the University of Georgia in May with a degree in Sports Management; and Matt, 18, lives in Lilburn, Ga., and will be graduating from Parkview High School in late May.

6. Outside interests?

One of my favorite activities is attending UGA football games in the fall. I also like fresh and saltwater fishing and golf. My favorite travel get-away is a seven or eight day cruise. We have been on 14 and loved every one.

7. What is something interesting about you that people would be surprised to discover or immediately want to know more about?

People would be surprised to discover that Cindy and I used to live in a little hut made of palm fronds. We lived in the British Virgin Islands on a little island called Saba Rock (3/4 of an acre at high tide) near the Bitter End Yacht Club. I was employed by Kilbride’s Underwater Tours as a scuba instructor. I still love to dive ... but only in warm water.
8. Quotable
“I have always enjoyed working in the plumbing field, seeing buildings go up and know that I had a part in it. Now that I am involved in the plumbing industry in a different role, I will get my satisfaction when the membership and chapter development in my region grows, and when states in my region adopt the Uniform Codes. Instead of pointing at a building and saying I helped build that, I will be able to point to a state plumbing, mechanical or green code and say ‘I helped to protect the people’s health that live in that State.’”

Dain Hansen
DIRECTOR, GOVERNMENT RELATIONS

1. What is your title and what role are you now filling at IAPMO?
Director, Government Relations. At IAPMO, I will oversee IAPMO’s first-ever Washington, D.C., office, which includes our legislative and regulatory initiatives.

2. Any special projects and/or areas of focus you are addressing in your new job?
In particular, I will meet with Members of Congress, key agencies and relevant stakeholders to further increase IAPMO’s influence and position IAPMO before policy makers.

3. Where were you working previously?
Before joining IAPMO, I was a lobbyist at the National Electrical Manufacturers Association (NEMA), and prior to NEMA, I worked on Capitol Hill as a Senior Policy Advisor for several members of Congress. My past experience and expertise has focused on energy and water policy and federal appropriations.

4. Any relevant/interesting memberships?
I am involved in many political associations. I also sit on the board for several societies and associations.

5. Family?
I am married to a wonderful wife, with two beautiful young daughters.

6. Outside interests?
I have been active my entire life. I enjoy competitive basketball, football, golf, running and biking. My family and I also are very active in our community and our church.

7. What is something interesting about you that people would be surprised to discover or immediately want to know more about?
Due to my job, and personal interest in policy and politics, I have met every member of congress, know many of them on a personal level, and have personally met every President since Ronald Reagan.

8. Quotable
“IAPMO has so much to offer in the public policy debate; therefore, I look forward to working with IAPMO’s staff and membership to further IAPMO’s mission before federal and state policy makers.”

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Y. Melbourne, Australia

OFFICIAL MAY/JUNE 2010
REGIONAL AND INTERNATIONAL OFFICES | WORLDWIDE SERVICES
As I write this article, staff is busy preparing for the second International Emerging Technology Symposium (ETS), co-sponsored by IAPMO and the World Plumbing Council. The goal of the ETS is to provide a platform for the exchange of ideas and concepts with respect to new technologies, particularly those with a green emphasis. IAPMO is extremely fortunate to have S. David Freeman as the keynote speaker. Freeman once served as Interim General Manager of the Los Angeles Department of Water and Power (LADWP), and oversaw the largest municipal utility in the United States. Nicknamed the “Green Cowboy,” Freeman was the first person with responsibility for energy policy in the federal government (at the appointment of President Johnson in 1967) and served as an energy advisor to President Nixon. I am truly looking forward to hearing Mr. Freeman’s keynote address.

On behalf of the World Plumbing Council, President Siemsen and the IAPMO Board of Directors, I would like to thank the numerous trade associations and manufacturers that sponsored the second International Emerging Technology Symposium. I look forward to reporting further on this in my next article.

On the code adoption front, I am very pleased to announce that the Maine Plumbing Board voted unanimously to adopt the 2009 **UPC**. It is hoped that the adoption and implementation will become official in July. I would like to thank Commissioner Ann Head and Cheryl Hersom for shepherding the new code through this adoption process. I would also like to thank the members of the Maine Plumbing and Electrical Board for their continued confidence in using the **UPC** as the basis for the **Maine State Plumbing Code**.

As many of you recall, IAPMO uses an ANSI consensus process to develop and maintain its four model codes – the **Uniform Plumbing Code (UPC)**, **Uniform Mechanical Code (UMC)**, **Uniform Solar Energy Code (USEC)**, and the **Uniform Swimming Pool, Spa and Hot Tub Code (USPSHTC)**. A critical part of the ANSI consensus process is affording the opportunity for anyone and everyone to participate in the development of these codes. Some of you were in Milwaukee, Wis., at the Technical Committee meetings in late April and got a flavor for what issues will be discussed in Seattle when the Assembly Consideration Session is held. In August, the Report on Proposals will be released. This is a summary of the actions taken by the Technical Committee on all submitted proposals. For those of you planning to attend the Seattle conference, be sure to get your copy of the Report on Proposals and prepare yourself for the Assembly Consideration Session, which will be held on Tuesday, Sept. 28.

Each year at conference, IAPMO recognizes members who have achieved significant advancement in their profession and have contributed to the science of plumbing and mechanical systems. These individuals are chosen by the Board of Directors and are traditionally not aware that they are about to receive an award. One of the awards presented is the newly renamed Joseph Kneidinger Green Contractor of the Year Award. Different than the others, the recipient of this award is notified in advance. This award was given for the first time in 2009 and was known as the Green Contractor of the Year Award. The inaugural recipient was David Kruse, past president of the Mechanical Contractors Association of America (MCAA) and green advocate. David was a worthy recipient.

Not long ago, the IAPMO Board of Directors renamed this award to honor Joseph Kneidinger — IAPMO member, contractor, inspector and green advocate. Joe was a member of the IAPMO Cascade Chapter and participated in several Green Technical Committee meetings. Sadly, Joe passed away last September. Joe was a senior plumbing inspector for the City of Portland, Ore., who dedicated his professional and personal life to the advancement of sustainable and renewable principles. I had the opportunity to meet Joe on several occasions and was impressed and intrigued by his knowledge of the code and his unstinting commitment of the green movement. Joe’s legacy will live on.

(Continued on page 100)
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Welcoming Home Our Veterans

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