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OFFICIAL MAGAZINE

## IAPMO Advances Development of 2018 Solar and Swimming Pool Codes During Technical Committee Meetings

IAPMO recently completed Technical Committee Meetings toward the development of the 2018 editions of the *Uniform Solar Energy and Hydronics Code (USEHC®)* and *Uniform Swimming Pool, Spa and Hot Tub Code (USPSHTC®)*, both American National Standards.

During the Oct. 25-26 meetings held via conference call and at IAPMO's World Headquarters West in Ontario, Calif., the committees acted on more than 173 proposed amendments to the 2015 editions of these *Uniform Codes*.

Public proposals to the *USPSHTC* address such issues as:

- Updating requirements for the design, materials and methods of construction, facilities, and decks as they pertain to public and private swimming pools, spas and hot tubs
- Adding reference standards where appropriate and the updating of existing reference standards
- Reviewing the requirements for Aquatic Recreational Attractions with regards to diving facilities, slides, decks, means of access, equipment, and wave pools

Public proposals to the *USEHC* address such issues as:

- Protection of potable water in hydronic systems

- Air testing of plastic piping in hydronic systems
- Tankless water heaters for hydronic heating systems
- Open- and closed-type expansion tanks
- New material for hydronic systems
- Radiant heating and cooling tube fasteners
- Hydronic plastic tubing joining methods
- Hydronic underground piping installation
- Direct exchanger (DX) systems
- Vertical boreholes
- Factory-made air ducts
- Flexible air ducts
- Duct leakage tests
- Electrical provisions in solar photovoltaic systems

Furthermore, the *USEHC* Technical Committee requested the formation of two task groups. A Geothermal Piping Task Group will review items 97-100 of the 2016 *USEHC Report on Proposals (ROP)* with regard to testing of u-bends and headers in Geothermal Systems, Section 703.4.2. A Photovoltaic Task Group will review items 122-126 of the 2016 *USEHC ROP* with regard to Photovoltaic Systems, Sections 901.0, 902.0, 903.0, 908.0, and 909.0.

In accordance with IAPMO's American National Standards Institute (ANSI) accredited code development process, balloting through the *USEHC* and *USPSHTC* Technical Committees will begin on Nov. 15 and conclude on Dec. 16. The *ROP* will be created from these balloted actions and distributed to committee members on Feb. 21, 2017.

For specific information about the *USEHC*, please contact Enrique Gonzalez at (909) 230-5535 or email your question to [enrique.gonzalez@iapmo.org](mailto:enrique.gonzalez@iapmo.org). For the *USPSHTC*, contact Lynne Simnick at (909) 472-4110 or email your question to [lynne.simnick@iapmo.org](mailto:lynne.simnick@iapmo.org).

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## The International Water, Sanitation and Hygiene Foundation signs MOU with the Water Institute at the University of North Carolina

The International Water, Sanitation and Hygiene Foundation (IWSH) has signed an historic memorandum of understanding (MOU) with the University of North Carolina's Water Institute during the Institute's Water and Health Conference: *Where Science Meets Policy* in Chapel Hill, N.C.

Forging together individuals and institutions from diverse disciplines and sectors, The Water Institute empowers collaboration to solve the most critical global issues in water and health. This work, coupled with the IWSH Foundation's mission to improve on the human condition by fostering the basic human right of safe access to clean water and sanitation, affords the exclusive opportunity to define and develop impactful projects to expand on the efforts throughout the WaSH community.

"The Water Institute looks forward to a long lasting relationship with the IWSH Foundation, realizing the opportunity to bridge the gap across all sectors to develop sustainable projects," said Dr. Jamie Bartram, Director of The Water Institute. "Focusing on the expert resources of the IAPMO/IWSH core network, we look forward to the ongoing collaboration and development. It is truly innovation and contemporary thinking that will make this partnership flourish."

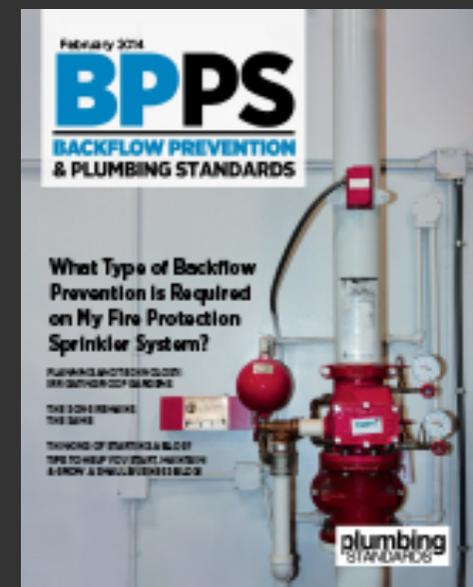
Sharing common objectives, The Water Institute and IWSH Foundation will work together to enhance the wellbeing of people everywhere through the provision of safe



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### BPPS MAGAZINE



Backflow Prevention & Plumbing Standards (BPPS) magazine is the only monthly trade publication dedicated to the backflow prevention and plumbing industries. BPPS is specifically designed to address each of our audiences - including contractors, plumbers, sprinkler fitters, irrigation personnel, backflow prevention assembly installers and testers, water utilities, water operators, inspectors and manufacturers - in each and every issue.

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and affordable water, sanitation systems, and equipment. Focus projects will include the development of a pilot program centered on providing safe water and sanitation services for medical facilities, along with other projects that support the United Nations' Sustainable Development Goals, specifically Targets 6 and 11, as they pertain to delivering safe water and sanitation to homes and buildings in developing areas of need.

"This is a very exciting moment for the IWSH Foundation," said Megan Lehtonen, Managing Director of the IWSH Foundation. "The ability to bring in the expertise and vast network of The Water Institute at UNC will greatly extend the collaborative work of industry, government, and organizations developing frameworks for water and sanitation systems, imperative to build local, sustainable workforces, and enhancing WaSH sectors across the globe. We look forward to expanding our current projects bolstered by the strength of this partnership to bridge the gap throughout the WaSH community and build programs that can be replicated for exponential impact."

During the same conference, The Water Institute and IAPMO renewed an existing MOU introduced in 2011 to continue supporting each organization's training programs and events, conferences, and symposiums.

*The IWSH Foundation is a charitable organization, developed by the IAPMO Group. Learn more about the IWSH Foundation and ongoing projects at [www.IWSH.org](http://www.IWSH.org)*

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## 2017 AHR Expo Education Program Expands Attendance Value

Building on the success of such offerings at previous AHR Expos, the 2017 Show, to be held January 30 to February 1 at the Las Vegas Convention Center, will feature a wide array of educational opportunities. Throughout the week, contractors, engineers and other show attendees will have the chance to participate in numerous free seminars and presentations, paid programming and professional certification exams – all further enhancing the value of Show attendance.

"We pride ourselves on offering these ancillary education, training and certification opportunities as a way to fully maximize the benefit attendees gain from being a part of the AHR Expo," said Clay Stevens, president of show manager International Exposition Co. "Beyond the ability to discover cutting-edge innovations showcased at each year's AHR Expo, attendees have come to appreciate the opportunity to combine valuable educational sessions into their agendas. The show has thus become a place where attendees can earn CEUs, complete professional certification exams, and engage in meaningful discussion with peers about solutions to the industry's most difficult challenges."

### Free Seminars and Training

A series of topics will be covered in free seminars and presentations, offered across several umbrella categories, during the first two days of the show. These include:

- Industry Initiatives and Best Practices – Participants will have the opportunity to learn more about such issues as "Selling Profitable Hydronic Radiant Systems," "Global Trends in the HVAC Market," "Humidity and Occupants: What the Latest in Humidity Means for You" and others.
- Building Automation – Addressing such topics as "Unifying a Building to Reduce Energy Consumption with BACnet," "The Future of Building Automation – The Self-Learning Edge Revolution," and "Intelligent Buildings and Cybersecurity," these sessions will provide the latest information on building automation's evolving relationship to HVACR practices.

education: 800-SAVE-H2O  
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Certification Sets  
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More than 100 presentations will be held in the show's new product and technology theaters, featuring the latest innovations being introduced by AHR Expo exhibitors in 2017. Attendees can participate in these free 20-minute overview sessions and better understand the cutting-edge products and technologies being displayed on the 2017 show floor.

Attendees will also have the opportunity to participate in more than 50 free seminars on a range of topics presented by endorsing associations and other HVACR industry groups. These industry expert-led one- and two-hour sessions have been designed to allow for easy integration of valuable education time into attendees' overall show agendas.

A town hall meeting, hosted by the Continental Automated Buildings Association (CABA), will provide opportunity for open-forum discussion on the topic of technology integration into HVACR practices. Ron Zimmer, CABA president and CEO, will guide dialogue on drill-down topics including automation, usage tracking, and ways to increase efficiency through the latest technological advances in the industry.

### **Paid Programming and Testing**

Numerous courses, continuing educational sessions and opportunities for testing will be offered for a nominal fee, both prior to and during the 2017 AHR Expo in Las Vegas. These include:

- ASHRAE Learning Institute (ALI) Continuing Education Courses – Held concurrently with the ASHRAE 2017 Winter Conference, AHR Expo will incorporate several opportunities for attendees to participate in ASHRAE Learning Institute (ALI) continuing education courses. A total of 20 courses will be offered prior to and during the 2017 AHR Expo, and all courses are approved for continuing education units (CEUs) toward maintaining P.E. licensure.

Each full-day course will earn attendees six professional development hours (PDHs)/learning units (LUs) or 0.6 CEUs, with topics including: "Commissioning Processes in New and Existing Buildings (code 62);" "Complying with the Requirements of Standard 62.1-2016 (code 76)" and "Energy Modeling Best Practices and Applications (code 61)."

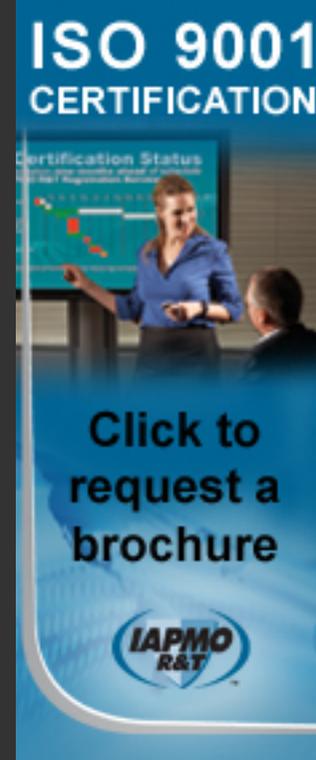
Numerous half-day courses, from which participants will earn three PDHs/LUs or 0.3 CEUs, will also be offered throughout the week. Among the many topics addressed will be "Designing High-Performance Healthcare HVAC Systems (code 79)," "Design of Affordable and Efficient Ground Source Heat Pump Systems (code 72)," "High-Performance Building Design: Applications and Future Trends (code 70)" and "Designing Toward Net-Zero Energy Commercial Buildings (code 68)."

Advance registration is required for all ALI continuing education courses and can be completed by visiting [www.ashrae.org/lasvegascourses](http://www.ashrae.org/lasvegascourses).

- PM Live Seminars – On Jan. 31 (the first day of 2017 AHR Expo), PM Live will present two seminars covering essential information for the design of heat pump and hydronic systems.

"Common Errors in Hydronic System Design and Installation," featuring speaker John Siegenthaler of Appropriate Designs, will specifically address a wide range of common errors in design and installation of hydronic heating and cooling systems, and how to avoid these for the future.

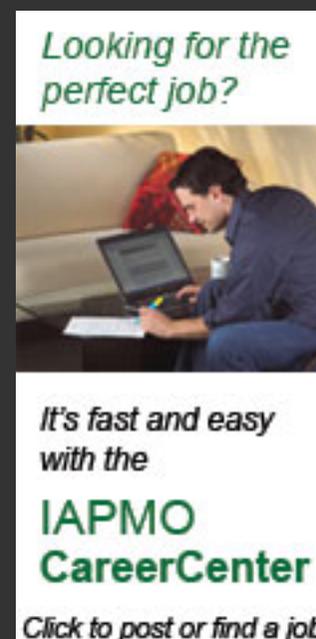
"Brewing with Steam," led by Fire and Ice Heating and Cooling president Ray Wholfarth, will address the design, installation and maintenance of steam boilers for



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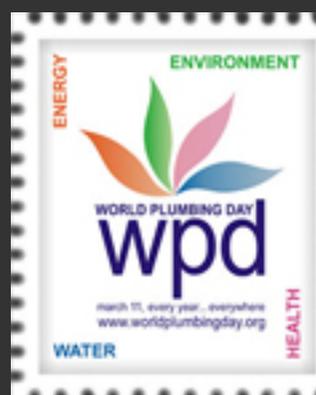
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Several discounts are available for advance registration in one or both courses, and more information is available by visiting [www.pmlivesymposium.com](http://www.pmlivesymposium.com).

- Certification/Exams – Those attending the 2017 AHR Expo in Vegas can additionally sit for exams from several HVACR industry organizations, including the AABC Commissioning Group's (ACG) CxA Workshop and Exam; the National Air Filtration Association (NAFA) CAFS Testing and Two-Hour Tutorial; and testing by the North American Technician Excellence (NATE).

Exam sessions will cover more than 11 industry specific topics for certification, including air conditioning; air distribution; heat pumps; gas heating; oil heating; hydronics gas; hydronics oil; commercial refrigeration; light commercial refrigeration; ground source heat pumps; and senior efficiency analyst certification.

A complete list of 2017 AHR Expo educational opportunities can be found at <http://ahrexpo.com/education-overview/>. For general information or to register for the 2017 AHR Expo visit [www.ahrexpo.com](http://www.ahrexpo.com).

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## **ASSE International, Plumbers Without Borders Launch 'Plumbing Term of the Day' Campaign**

On Oct. 3, 2016, ASSE International and Plumbers Without Borders announced the launch of their "Plumbing Term of the Day" campaign. Continuing every workday morning, a plumbing term and its definition are published on the new ASSE International "Plumbing Term of the Day" blog and shared on Twitter, Facebook, and LinkedIn. Each term and definition are pulled from the ASSE International *Plumbing Dictionary (Sixth Edition)*, which contains more than 4,000 plumbing words, terms, and abbreviations.

"Every craft or trade has unique and peculiar terms; knowing their meaning is essential in the plumbing industry," said Richard J. Prospal, ASSE International Past President and Plumbers Without Borders Advisory Board Member. "For those who don't have time to read through the *Plumbing Dictionary* every day, the 'Plumbing Term of the Day' is a great way to have a bit of knowledge and entertainment delivered directly your phone, tablet, or computer every day, for free."

By keeping up with the "Plumbing Term of the Day" blog, experienced plumbing professionals and new students of the profession can expand their knowledge, fine-tune their vocational vocabulary, and become encyclopedias of plumbing trivia. The terms of this campaign and the *Plumbing Dictionary* are intended to be descriptive, not prescriptive — to describe, define and explain, not to prescribe limitations or establish fixed and restrictive meanings. Wherever possible, nontechnical language has been used for ease of readability, but specialized and technical terminology have been retained wherever necessary to help give the truest pertinent meanings.

"Plumbers Without Borders is thrilled to be a part of this campaign," said Domenico DeGregorio, President of Plumbers Without Borders. "Training and education is critical to building, maintaining and improving plumbing systems — both locally and globally. Any way of spreading knowledge and bringing plumbers together is proudly supported by Plumbers Without Borders."

As part of this campaign, ASSE International is offering free digital copies of the ASSE International *Plumbing Dictionary (Sixth Edition)* on the "Plumbing Term of the

Day" blog. Join the plumbers, architects, engineers, attorneys, and students throughout the country who use the Plumbing Dictionary for plumbing terminology, abbreviations, cross-references, and illustrations.

Visit the "Plumbing Term of the Day" blog at [www.plumbingtermoftheday.wordpress.com](http://www.plumbingtermoftheday.wordpress.com).

Have the Plumbing Term of the Day displayed in your social media newsfeed by following ASSE International on Twitter ([@ASSE\\_Intl](https://twitter.com/ASSE_Intl)), Facebook, and LinkedIn, and following Plumbers Without Borders on Twitter ([@plumbing4all](https://twitter.com/plumbing4all)) and Facebook.

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## **Dodge Momentum Index Moves Higher in October**

The Dodge Momentum Index grew 4.1% in October to 133.6 from its revised September reading of 128.3 (2000=100). The Momentum Index is a monthly measure of the first (or initial) report for nonresidential building projects in planning, which have been shown to lead construction spending for nonresidential buildings by a full year. October's gain nearly reversed the loss in September, and returns the Momentum Index to the rising trend that began earlier in the year. The commercial component of the Momentum Index rose 6.1% in October, and is 20% above last year. This suggests that despite being in a more mature phase of the building cycle, commercial construction has room for further growth in the coming months. The institutional component of the Momentum Index increased 1.4% in the month, and is now 10% higher than one year ago.

In October, 12 projects entered planning each with a value that exceeded \$100 million. For the commercial building sector, the leading projects were a \$270 million office building in Jersey City NJ and a \$250 million office tower in Somerville MA. The leading institutional projects were a \$250 million hospital in New York NY and a \$140 million high school in Upper Arlington OH.

Read the full release: <http://www.construction.com/about-us/press/Dodge-Momentum-Index-Moves-Higher-in-October.asp>

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## **Salesforce Tower Becomes the Tallest Building in San Francisco**

Boston Properties, Inc., a real estate investment trust, and co-development partner, Hines, announced that on Friday, October 14, 2016, Salesforce Tower will officially be the tallest building in San Francisco. Soaring to new heights - Salesforce Tower surpasses the famous Transamerica Pyramid at 853 feet when it reaches 867 feet on Friday. The building will continue to grow another 200 feet until it reaches 1,070 feet, at which time it will be the tallest office building west of Chicago. Located in the Transbay District at 415 Mission Street, between Fremont and First Streets, the 61-story Salesforce Tower occupies a full city block and marks the new center of San Francisco.

Construction for the Salesforce Tower began in 2013. Salesforce Tower boasts 1.4 million square feet of beautifully designed space. The building features approximately 7,000 square feet of rentable retail space on both the ground and fifth floors. The dramatic fifth floor space opens onto the Transbay Transit Center's 5.4 acre rooftop park. The project is being co-developed by Boston Properties and Hines, with Boston Properties owning a 95% interest in the project and Hines owning a 5% interest. The architectural team is led by design architect, Pelli Clarke Pelli and Kendall Heaton as the architect of record.

Salesforce Tower is engineered with enhanced seismic safety and high performance design features in mind. Salesforce Tower boasts 42 5 foot by 10 foot steel reinforced concrete load bearing elements extending from the foundation down all the way into bedrock, 14 foot 9 inch slab to slab heights that allow for approximately 13 foot unfinished ceilings, 10 foot drop ceilings and 10 foot high continuous clear glass windows. This frames a column-free interior providing maximum natural light to the work space. The top 150 feet of the tower will feature the highest public art light installation in the United States.

Boston Properties and Hines remain true to their environmental commitments. Salesforce Tower is a pre-certified LEED Platinum project.

The building features an HVAC system which will distribute outdoor air to each floor. The unique, under floor air delivery system circulates air directly to tenants' spaces and features individual control capability. This system provides enhanced indoor air quality and operates an HVAC system that is designed to be up to 40 percent more energy efficient than those used in standard office buildings.

"We are extremely proud of the quality of construction and innovative attributes of this project," commented Bob Pester, Executive Vice President and Regional Manager, San Francisco Region for Boston Properties. "The building offers everything for our tenants – safety, beauty, functionality and a great location. It is very rewarding to have this outcome on such a high profile project."

"Seeing this complex project reach a major milestone in the San Francisco skyline is a proud moment for our team," added Hines Senior Managing Director Paul Paradis. "Still, the best is yet to come, as we move closer to delivering this cutting-edge technology and engineering to our city."

The next phases of the project scheduled for 2016 include topping off core walls in early November and topping structural steel in March 2017. The base core and shell work will be completed in the second quarter of 2017 with plans for tenants to take occupancy in fourth quarter of 2017.

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## **\$30 Million Joint Effort to Improve Solar Module Materials**

The Department of Energy's (DOE's) Lawrence Berkeley National Lab (Berkeley Lab) will work with four other DOE national labs in a new effort designed to accelerate the development and deployment of innovative, high-performance materials for photovoltaic modules to lower the cost of electricity generated by solar power while increasing field lifetime.

A total of \$1.36 million over the next five years will be managed by Berkeley Lab's Anubhav Jain, a scientist focusing on new materials discovery using high-throughput computations. The research team will develop DuraMat (Durable Module Materials National Lab Consortium), led by the National Renewable Energy Laboratory and co-led by Sandia National Laboratories. Along with Berkeley Lab, SLAC National Accelerator Laboratory is a core partner. DuraMat is a new Energy Materials Network (EMN) consortium.

The Energy Department's SunShot Initiative will provide DuraMat with an estimated \$30 million over five years, subject to appropriations. DuraMat will utilize the expertise and capabilities of the national laboratories to develop innovative new materials for module components.

"With DuraMat, we are going to leverage 'materials genome' approaches to making

solar power even more reliable and therefore more cost-competitive over the long term," said Jain, a researcher in Berkeley Lab's Energy Technologies Area (ETA). "We are going to focus on data management and analytics. This entails integrating information from materials and solar module datasets measured at multiple length and time scales—all the way from quantum simulations to real-world solar module performance in the field.

"Next, we will use statistical analysis and machine-learning techniques to form a cohesive story as to why modules fail and what we can do to improve their dependability and lifetime. It's a completely new approach that will bring together academia, industry, and the national labs as well as fundamental science, real-world measurements, and informatics."

Read the full release at: <http://newscenter.lbl.gov/2016/10/27/30-million-joint-effort-improve-solar-module-materials/>

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## **EPA Publishes Technology Review on Preventing Legionella**

The EPA has released a technology review on effective strategies to prevent outbreaks of *Legionella* in large buildings such as hotels, hospitals and schools.

From the Executive Summary:

The U. S. Environmental Protection Agency (EPA) developed this document because it recognizes that many species of the genus *Legionella* are a public health threat. EPA recognizes that many facility managers are choosing to install treatment systems to prevent or mitigate *Legionella* growth in their premise plumbing systems. The target audience for this document includes, but is not limited to, primacy agencies, facility operators, facility owners, technology developers and vendors.

This document summarizes peer-reviewed scientific literature, reports from nationally and/or internationally recognized research organizations, and guidelines and standards from nationally and/or internationally recognized organizations. The reviewed literature characterizes the effectiveness of different technologies that may be used to control *Legionella* growth in premise plumbing systems. Particularly, it focuses on premise plumbing systems of large buildings, such as hotels, hospitals, schools and other buildings with complex plumbing infrastructure. EPA expects this document will improve public health protection by helping the target audience make better informed science-based risk management decisions to control *Legionella* growth in buildings.

Download [Technologies for Legionella Control in Premise Plumbing Systems: Scientific Literature Review \(PDF\)](#)

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## **U.S. EPA Issues New Refrigerant Leak Management Rules**

EPA is updating the safe handling requirements under Section 608 that currently apply to ozone depleting refrigerants and extending them to substitutes like hydrofluorocarbons (HFCs). These changes strengthen the existing program, in particular by requiring a number of industry best practices. This action reduces climate-damaging emissions from air conditioning and refrigeration equipment. EPA estimates that the annual emissions reductions from this rule will be approximately 7.3 million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>eq) and 114 ozone-depletion weighted metric tons (ODP tons).

This rule makes the following changes to the existing requirements under Section 608.

1) Extends the requirements of the Refrigerant Management Program to cover substitute refrigerants, such as HFCs. Note that EPA has previously exempted some substitutes from the Section 608 venting prohibition through previous rules. Such substitutes are also exempt from the requirements of this rule.

- [This fact sheet describes the requirements of the existing Section 608 Refrigerant Management Program.](#) Fact sheets on how the rule affects the Program are found at the bottom of this page.

2) Lowers the leak rate thresholds that trigger the duty to repair refrigeration and air-conditioning equipment containing 50 or more pounds of refrigerant.

- Lowers from 35% to 30% for industrial process refrigeration (IPR)
- Lowers from 35% to 20% for commercial refrigeration equipment
- Lowers from 15% to 10% for comfort cooling equipment

3) Requires quarterly/annual leak inspections or continuous monitoring devices for refrigeration and air-conditioning equipment that have exceeded the threshold leak rate

4) Requires owners/operators to submit reports to EPA if systems containing 50 or more pounds of refrigerant leak 125% or more of their full charge in one calendar year.

5) Extends the sales restriction to HFCs and other non-exempt substitutes, with the exception of small cans (containing 2 pounds or less) of non-exempt substitutes (e.g., primarily HFC-134a) for motor vehicle air conditioner servicing. These small cans can continue to be sold without technician certification so long as the small cans have a self-sealing valve to reduce refrigerant releases.

6) Requires technicians to keep a record of refrigerant recovered during system disposal from systems with a charge size from 5–50 lbs.

The new rules take effect Jan. 1, 2017.

More info can be found at <https://www.epa.gov/section608/revised-section-608-refrigerant-management-regulations>

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I-Connection Electronic Newsletter

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## Industry Calendar

**NAHB International Builders' Show**  
January 10 -12, 2017

**The Kitchen & Bath Industry Show (KBIS)**  
January 10 -12, 2017

**2017 AHR Expo**  
Jan. 30 - Feb. 1, 2017  
Las Vegas, NV

**2018 UPC/UMC Technical Committee Meeting**  
May 1 - 4, 2017

## Upcoming Seminars

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<b>ARIZONA SEMINARS</b>		
December 12-16, 2016	Phoenix, AZ	2016 ASSE 5110 Backflow Tester 40 Hour Class and Exam
December 16, 2016	Phoenix, AZ	Cross Connection Control Recertification - 8 hr Course and Exam
January 9-13, 2017	Phoenix, AZ	2016 ASSE 5110 Backflow Tester 40 Hour Class and Exam
January 13, 2017	Phoenix, AZ	Cross Connection Control Recertification - 8 hr Course and Exam
February 13-17, 2017	Phoenix, AZ	2016 ASSE 5110 Backflow Tester 40 Hour Class and Exam
February 17, 2017	Phoenix, AZ	Cross Connection Control Recertification - 8 hr Course and Exam
<b>CALIFORNIA SEMINARS</b>		
December 5-7, 2016	Ontario, CA	ASSE 5120 Cross-Connection Control Surveyor Class
January 23-27, 2017	Ontario, CA	ASSE 5110 Backflow Tester 40 Hour Class and Exam
Feb. 27 - Mar. 3, 2017	Poway, CA	ASSE 5110 Backflow Tester 40 Hour Class and Exam
<b>COLORADO SEMINARS</b>		
January 9-13, 2017	Brighton, CO	ASSE 5110 Backflow Tester 40 Hour Class and Exam
February 8-9, 2017	Lakewood, CO	Cross Connection Control Recertification - 12 hr course and Exam
<b>LOUISIANA SEMINARS</b>		
December 12, 2016	Baton Rouge, LA	ASSE Recertification / LA Conversion - 8 hour Course and Exam
December 13, 2016	Baton Rouge, LA	ASSE Recertification / LA Conversion - 8 hour Course and Exam
December 14, 2016	Baton Rouge, LA	ASSE Recertification / LA Conversion - 8 hour Course and Exam
December 15, 2016	Baton Rouge, LA	ASSE Recertification / LA Conversion - 8 hour Course and Exam
December 16, 2016	Baton Rouge, LA	ASSE Recertification / LA Conversion - 8 hour Course and Exam
<b>MASSACHUSETTS SEMINARS</b>		
<b>Session 9 Training now available - <a href="#">click here for the schedule!</a></b>		
<b>MINNESOTA SEMINARS</b>		
<a href="#">2015 Minnesota Plumbing Code DWV Provisions</a>		
<b>NEW JERSEY SEMINARS</b>		
January 9-13, 2017	Pennsauken, NJ	ASSE 5110 Backflow Tester 40 Hour Class and Exam
January 13, 2017	Pennsauken, NJ	Cross Connection Control Recertification - 8 hr Course and Exam
<b>SOUTH DAKOTA SEMINARS</b>		
<a href="#">Click Here to Find a Class</a>		
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