



Green Newsletter  
February 2009

In this Issue:

IAPMO Participates in Roundtable Discussion of California's Green Building Code

Two TIA's Proposed

WaterSense Releases Draft Specification for HEU's

Energy Star Water Heaters to Save Americans Up to \$823 Million in the Next Five Years

Fix a Leak, Save Some Green

CIPH & CWWA Partner to Promote Water Demand Reduction

Colorado, Utah Look to Legalize Rainwater Collection

ARCSA Announces Spring Workshop Schedule

ASHRAE's 2009 Satellite Broadcast Focuses on IAQ for Sustainable Buildings

Google Launches PowerMeter

World's Largest Solar Deal

Calendar



5001 E. Philadelphia St.  
Ontario, CA 91761 USA

1-909-472-4100

Fax: 909-472-4150

E-mail: [iapmo@iapmo.org](mailto:iapmo@iapmo.org)  
Website: [www.iapmo.org](http://www.iapmo.org)

## IAPMO Participates in Roundtable Discussion of California's Green Building Code

The California Building Standards Commission (CBSC) held its first Green Building Stakeholder meeting on January 14 to discuss the state's voluntary California Green Building Standards Code.

Adopted last July by the CBSC, the code sets targets for energy efficiency, water consumption, dual plumbing systems for potable and recyclable water, diversion of construction waste from landfills and use of environmentally sensitive materials in construction and design.

Secretary Rosario Marin led off the stakeholder roundtable discussion with congratulatory remarks to all who contributed to the nation's first green building standards code. She introduced the state agency representatives who adopt the current, primarily voluntary California Green Building Standards Code.

CBSC's Executive Director, Dave Walls, gave the background of the code, citing vetoed legislation and direction from the Governor in the initial planning for green building standards. He described the collaborative process of state agencies with statutory authorities for building and environmental standards and other stakeholders, such as local governments, building industry leaders, codes and standards writers, and environmental advocates in developing the current code.

Department of Housing and Community Development, Office of Statewide Health Planning and Development, and Division of the State Architect outlined their plans for further development of the code in the upcoming building code adoption cycle. They will continue the collaborative process as primarily voluntary standards become minimum mandatory standards with the effective date of the 2010 edition of the codes, currently projected for January 1, 2011. Their goals are residential and nonresidential green building standards that are reasonable, attainable, and enforceable and represent the interests of all stakeholders.

The agencies took questions on a wide range of topics from anticipated code changes to the adoption process itself from audience participants eager to be engaged as California's green building code moves forward this year.

Dwight Perkins, IAPMO Director of Field Operations participated in the roundtable discussion. IAPMO has been providing its expertise to help the state develop and maintain the standard, contributing to the various Green Focus Groups, Stakeholder and CBSC meetings regarding the development of the Green Building Standard.

[\[return to top\]](#)

## Two Tentative Interim Amendments Proposed

Comment Deadline for both: **Friday, February 27, 2009**

The following Tentative Interim Amendment to the *Uniform Mechanical Code*, UMC 1-2006, is available for public review:

**TIA UMC 021-06** adds new section 1106.4 for Unauthorized Access to Refrigerant Ports.

The following Tentative Interim Amendment to the *Uniform Mechanical Code*, UMC 1-2009, is available for public review:

**TIA UMC 003-09** adds new section 1106.4 for Unauthorized Access to Refrigerant Ports.

Copies may be obtained from Lynne Simnick, Director of Code Development, IAPMO, 5001 E. Philadelphia, Ontario, CA 91761; Phone: (909) 472-4110; E-mail: [lynne.simnick@iapmo.org](mailto:lynne.simnick@iapmo.org)

[\[return to top\]](#)

Looking for the perfect job?



It's fast and easy with the

**IAPMO CareerCenter**

Click to post or find a job

2007 California Plumbing & Mechanical Codes Online



only from



Earn 12.0 AIA Environmental Sustainability Learning Units

purchase the Emerging Technologies Webinar



### WaterSense Announces Draft Specifications for High-Efficiency Urinals

WaterSense has announced a draft Specification for High-Efficiency Flushing Urinals that outlines the criteria needed to earn the WaterSense label. The specification is designed to ensure not only sustainable, efficient water use but also a high level of user performance satisfaction. To meet the draft specification, the maximum flush volume of flushing urinal fixtures and their pressurized flushing devices (flushometer valves) cannot exceed 0.5 gallons per flush (gpf). By installing these high-efficiency flushing urinals, facilities will be able to save more than 2,300 gallons of water per fixture each year!

Once the specification is finalized, manufacturers of these products can apply for product certification. Pressurized flushing devices, urinal fixtures, or complete urinal systems meeting the final specification will bear the WaterSense label. This will help purchasers and specifiers to easily identify flushing urinals that perform well while still saving water.

A fact sheet can be reviewed at <http://www.epa.gov/watersense/pubs/flush-urinal.htm>

The specification will be open for review and comment through March 9, 2009. Questions about the specification can be directed to the WaterSense Helpline at (866) WTR-SENS (987-7367) or by e-mail: [watersense@epa.gov](mailto:watersense@epa.gov).

[\[return to top\]](#)

### ENERGY STAR Residential Water Heaters to Save Americans Up to \$823 Million in the Next Five Years

The U.S. Department of Energy (DOE) has announced the availability of ENERGY STAR® residential water heaters. With the announcement, the ENERGY STAR® program now addresses every major residential appliance found in most American homes. Introduction of this product provides significant potential savings to consumers. Water heating represents up to 15.5 percent of national residential energy consumption, the second largest end use of energy in homes, following heating and cooling. Using one of five specified water heating technologies, ENERGY STAR® qualified water heaters can reduce water heating bills from 7.5 percent to as much as 55 percent.

"The ENERGY STAR program empowers consumers to make smart energy choices that will save money, and energy, and reduce carbon emissions," DOE Deputy Assistant Secretary for Energy Efficiency and Renewable Energy David Rodgers said. "Expansion of the ENERGY STAR® program to include water heaters will give Americans yet another way to use energy more efficiently in their homes and help the country increase energy security and address climate change."

In five years, the new water heater criteria are expected to save Americans consumers \$823 million in utility costs, avoid 4.2 million tons of carbon dioxide emissions, and achieve cumulative energy savings of more than 3.9 billion kilowatt-hours and 270 million therms of natural gas — enough energy to power more than 375,000 homes for a year.

Five water heating technologies are eligible to use the ENERGY STAR® label:

- High-efficiency gas storage water heaters employ the same technologies as standard gas storage water heaters: a glass-lined steel tank is heated by a burner located at the bottom of the tank. ENERGY STAR® labeled models increase efficiency by incorporating better insulation, heat traps, and more efficient burners.
- Gas condensing water heaters work much like regular gas water heaters. However, instead of venting the combustion gases directly outside, heat from those gases is further transferred to the water thus increasing efficiency.
- Whole-home gas tankless water heaters apply the same principle to heat water as standard gas water heaters, but without a storage tank. They save energy by heating water only when needed, eliminating energy lost during standby operation.
- Heat Pump Water Heater (HPWH) technology uses electricity to move heat from one place to another instead of generating heat directly. Much like a refrigerator working in reverse, a HPWH uses liquid refrigerant to take the heat from surrounding air and transfer it to water in an enclosed tank.
- Solar water heaters come in a wide variety of designs, all using the sun's thermal energy to heat water.

Performance criteria were announced on April 1, 2008, to allow manufacturers nine months to partner with ENERGY STAR® and submit qualifying models to earn the label once the criteria took effect. ENERGY STAR® qualified gas storage, whole home gas tankless, and solar water heaters

will be available immediately on January 1, 2009. Qualified gas condensing and heat pump models are expected to be available later in 2009. These emerging technologies will initially be available through plumbers and large retailers.

Plumbers and builders interested in ENERGY STAR® qualified hot water heaters are encouraged to review ENERGY STAR®'s Water Heater Criteria Development to learn more and find qualified models. Plumbers interested in offering customers advanced water heating technologies should check with manufacturers, for available training opportunities and tutorials on installation techniques.

[\[return to top\]](#)

---

### **"Fix a Leak, Save Some Green"**

March 16 to 20, 2009, marks the WaterSense program's first "Fix a Leak Week," a time to remind Americans to attack leaks in their household fixtures and irrigation systems. While leaks might sometimes seem like small problems, over time they waste both valuable water resources and money. On average, a U.S. household wastes more than 11,000 gallons of water per year—enough to fill a backyard swimming pool!

Common types of leaks found in the home are leaking toilet flappers, dripping faucets, and other leaking valves. These types of leaks are easily correctable, in many cases requiring only a few tools and hardware, such as a wrench and drops of food coloring, which will easily pay for themselves in water savings. If you discover a significant leak that merits the replacement of an older toilet or bathroom sink faucet, consider a new WaterSense labeled product that will not only put an end to your leak, but also increase water efficiency. For instance, WaterSense labeled faucets use 30 percent less water without a noticeable difference in flow.

While some leaks are obvious, others are more difficult to detect. To be sure that your household is leak-free, check your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, you probably have a leak—and an opportunity to save water and some extra cash.

Learn more tips and information about [Fix a Leak Week](#).

[\[return to top\]](#)

---

### **CIPH & CWWA Partner to Promote Water Demand Reduction**

The Canadian Institute of Plumbing & Heating (CIPH) and the Canadian Water and Wastewater Association (CWWA) have joined forces to promote water demand reduction programs among Canadian municipalities.

The Board of Directors of both associations have supported a joint position statement to encourage the promotion and use of fixtures and supply fittings that have been certified by an accredited certification organization to both Canadian standards and the U.S. EPA sponsored WaterSense program. Specifically, municipalities are encouraged to reference such products in all educational and awareness materials on water conservation and efficiency.

"The CIPH Board of Directors views this collaboration with CWWA as an opportunity for the Institute to respond tangibly to environmental and water conservation concerns at the municipal, provincial and federal level. Enhancing the Institute's ability to lead and respond to needed regulatory changes is critical to meet future demand for water," reports CIPH Chairman of the Board Cliff Sarjeant (NCI Marketing).

Duncan Ellison, Executive Director of the CWWA notes that "many Canadian water utilities have been promoting the use of water efficient fixtures and appliances as a means of managing the demand for water. WaterSense product tests are based on a toilet testing protocol developed by CWWA's Water Efficiency Committee and its utility partners in the USA."

Products that meet the intent of the joint position statement will hold both a WaterSense Label and the mark by the associated certification organization that has tested it to meet Canadian standards.

[\[return to top\]](#)

---

### **Colorado, Utah Look to Legalize Rainwater Collection**

Current laws in Colorado and Utah make it illegal to collect rain that falls on your roof or in your yard unless you own the water rights for it. Both states are proposing legislation to change the law to legalize rainwater collection for landscaping and irrigation purposes.

In Colorado, two bills are making their way through the legislature. Senate Bill 80 allows people in rural areas who are not hooked up to a municipal water supply to apply for a rainwater-capture permit.

House Bill 1129 would establish up to 10 pilot projects in new residential developments to collect rainwater, to determine whether rainwater collection systems can be a sustainable water source without infringing on downstream water rights of farmers and ranchers. During the test, the developers would be required to monitor how much is collected and to replenish an equal amount to the appropriate stream.

"We have to be cautious, because we're up against 120 years of water law. There are those naysayers that are saying this is going to affect the stream system," said Rep. Marsha Looper, R-Calhan, author of the bill. According to her, a recent study by the board found that only 3 percent of rainwater makes it to the river. The other 97 percent evaporates or is absorbed by plants.

In Utah, Senate Bill 128, sponsored by Sen. Scott Jenkins, R-Plain City, would allow individuals to collect and store up to 2,500 gallons of rainwater at one time. The tank limit is meant to alleviate the concerns of the agricultural industry regarding impact to groundwater sources.

Boyd Clayton, deputy engineer for the Utah Division of Water Rights, is concerned that SB 128 could raise issues regarding other types of water use and water officials would have a hard time enforcing the limit.

"We're caught in a dilemma," he told the Standard-Examiner. "On one side, we don't want to be in the business of regulating rainwater harvesting. On the other side, as we open this door, we're likely to have some offshoot issues we'll have to deal with."

The bill has moved to the Senate for debate.

[\[return to top\]](#)

---

### **ARCSA Announces Spring Workshop Schedule**

The American Rainwater Catchment Systems Association (ARCSA) has announced a schedule of spring workshops around the country. The workshops are for the general public and for people seeking accreditation as professional installers of rainwater harvesting systems.

#### **Dates and locations:**

- Feb. 17-18, San Francisco, California
- Feb. 27-28, Cincinnati, Ohio
- March 5-6, Cumming, Georgia
- March 18-19, Kerrville, Texas
- March 26-27, Marathon, Florida

More information, along with online registration forms, can be found at <http://www.arcsa.org/conferences.html>

[\[return to top\]](#)

---

### **ASHRAE's 2009 Satellite Broadcast Focuses on IAQ for Sustainable Buildings**

What's lean and green and clean all over? Your next sustainable building project and its indoor air quality, thanks to ASHRAE's upcoming satellite broadcast. The program, "Clean, Lean, and Green — IAQ for Sustainable Buildings," will take place April 22 from 1 to 4 p.m. EDT.

The free broadcast, sponsored by ASHRAE's Chapter Technology Transfer Committee with support from the U.S. Environmental Protection Agency, will challenge the building community to use good IAQ practices to create a more sustainable built environment. The program will highlight guidance from the publication IAQ Guide: Best Practices for Design, Construction, and Commissioning, developed collaboratively by ASHRAE, AIA, BOMA, EPA, SMACNA and USGBC.

"Saving energy in buildings is paramount, and everyone in the buildings industry must do all they can to ensure sustainability in their projects," says Dave Shugars, Chair of the Satellite Broadcast

committee. "But sustainability must never come at the expense of good indoor air quality. Proper operation and maintenance of buildings must be combined with enhanced IAQ practices to ensure healthy, productive indoor environments."

Participants who complete the participant reaction form online at [www.ashrae.org/iaqbroadcast](http://www.ashrae.org/iaqbroadcast) the week following the broadcast may be awarded three PDH credits.

The broadcast presenters and their topics are:

- Martha Hewett, Director of Research, Center for Energy & Environment, Minneapolis, MN, *Practical, Proven Strategies to Deliver Better IAQ*
- Hoy Bohanon, P.E., Owner and Manager of Bohanon Engineering, PLLC, Winston-Salem, NC, *Improving Your IAQ and Reducing Your Energy Costs through HVAC Design*
- H.E. Barney Burroughs, Owner and CEO of Building Wellness Consultancy, Inc, Atlanta, GA, *Keeping Buildings Clean: Avoiding and Building Control of Contaminants to Attain and Maintain IAQ Acceptability*
- George DuBose, Certified General Contractor, Liberty Building Forensics Group, Orlando, FL, *Avoiding Costly IAQ Problems in the Building Envelope*
- John McFarland, P.E., Director of Engineered Systems, Working Buildings, LLC, Atlanta, GA, *Integrating Good IAQ into the Design & Construction Process*

For more information about the broadcast, please call (678) 539-1206, visit [www.ashrae.org/iaqbroadcast](http://www.ashrae.org/iaqbroadcast) or e-mail [ashrae-satellitebroadcast@ashrae.org](mailto:ashrae-satellitebroadcast@ashrae.org).

Online registration for satellite site coordinators and Webcast viewers will begin March 2, and viewer registration will begin March 16. There is no fee for registration.

[\[return to top\]](#)

---

#### **Google Launches PowerMeter**

Google is testing prototype software called the PowerMeter, which takes data from "smart meters" and organizes it to show consumers their electricity use in near real-time on a secure iGoogle Gadget.

Real time knowledge of electricity usage is empowering, says Google, quoting the famous phrase of Lord Kelvin: "If you cannot measure it, you cannot improve it." Studies have shown that access to your household's personal energy information is likely to save you between 5 - 15% on your monthly bill. Theoretically, detailed information about usage rates allow customers to make smarter decisions, like when the best time is to run the dryer and to turn off lights when leaving a room.

The product isn't available to the public yet, but is currently being beta tested internally by Google employees. Google says the PowerMeter will be free, and is working with utilities to deliver the product to anyone with a smart meter.

To achieve this, Google is actively trying to build partnerships with utilities and device manufactures, and has asked the California Public utilities Commission to make electricity data "available in a standardized, open format, freely available to third parties with permission from the consumer."

There are currently about 40 million smart meters in use worldwide, and the Obama administration has called for 40 million smart meters to be installed in American homes as part of its economic stimulus proposal. The stimulus bill also includes \$4.5 billion in grants for smart grid-related projects.

More information about PowerMeter can be found at <http://www.google.org/powermeter/index.html>

[\[return to top\]](#)

---

#### **World's Largest Solar Deal**

Southern California Edison (SEC) has signed a deal with BrightSource Energy for seven solar power plants that will provide a total of 1,300 megawatts, enough to serve 845,000 homes.

The first plant, sized at 100 megawatts and located in Ivanpah, Calif., could be operating in early 2013 and is expected to produce 286,000 megawatt-hours of renewable electricity per year. The others will be built "as quickly as permitting and infrastructure allow," according to the SEC release.

BrightSource Energy's proprietary Luz Power Tower 550 (LPT 550) energy system is built on

proven "power tower" technology. The system uses thousands of small mirrors called heliostats to reflect sunlight onto a boiler atop a tower to produce high temperature steam. The steam is then piped to a conventional turbine which generates electricity. In order to conserve precious desert water, the LPT 550 system uses air-cooling to convert the steam back into water. The water is then returned to the boiler in an environmentally-friendly closed cycle. This fully integrated energy system is designed to offer the highest operating efficiencies and lowest capital costs in the industry.

Southern California Edison, the largest electric utility in California, already has an extensive renewable energy portfolio, including 1,137 megawatts from wind, 906 megawatts from geothermal, megawatts from solar, megawatts from biomass and 332 megawatts from small hydro.

"These contracts represent a significant addition to our renewable portfolio, which is already the nation's largest," said Stuart Hemphill, SCE vice president, Renewable and Alternative Power. "This innovative solar technology helps to further our position as the nation's largest purchaser of solar energy, as well."

Utilities in California are trying to meet the state's renewable portfolio standard requiring 20 percent of electricity from renewable sources. A spokeswoman for Edison said the utility currently has 16 percent coming from renewable energy sources.

The agreement will require the approval of the California Public Utilities Commission.

To read the SEC Press Release: <http://www.sce.com/Feature/solardeal.htm?from=homepage>

[\[return to top\]](#)



#### Events Calendar:

**2009 International Water Conservation & Xeriscape Conf.**

February 26-27, 2009  
Marriott Pyramid Hotel  
Albuquerque, NM  
[www.xeriscapenm.com/](http://www.xeriscapenm.com/)

**Educode 2009**

February 23-27, 2009  
The Orleans Hotel and Casino  
Las Vegas, NV  
[www.educode.us/](http://www.educode.us/)

**ACCA Conference & Indoor Air Expo**

February 24-26, 2009  
Fort Worth Convention Ctr.  
Fort Worth, TX  
[www.acca.org/conference/](http://www.acca.org/conference/)

**2009 MCAA Convention**

March 1-5, 2009  
JW Marriott Desert Ridge Resort & Spa  
Scottsdale, AZ  
[www.mcaa.org/education/](http://www.mcaa.org/education/)

**ISH 50**

March 10-14, 2009  
Frankfurt am Main  
<http://ish.messefrankfurt.com>

**International Water Efficiency Conference**

March 30 - April 2, 2009  
Newport Beach Marriott  
Newport Beach, CA  
<http://www.waterec.net/wec.html>

**PMI Spring Meeting**

April 5-9, 2009  
The Grove Park Inn  
Asheville, NC  
[www.pmihome.org](http://www.pmihome.org)

**PHCC Leadership & Legislative Conference**

April 28 - May 1, 2009  
Arlington, VA  
[www.phccweb.org](http://www.phccweb.org)

**IAPMO Technical Committee Meeting**

May 4-9, 2009  
Hilton at the Ballpark  
St. Louis, MO  
[www.iapmo.org](http://www.iapmo.org)

---

#### Partners and Memberships



---

#### Green Electronic Newsletter

You will continue to receive the Green Newsletter each month until such time as you unsubscribe. To make sure the Green Newsletter is not sent to your bulk or junk mail folders, add [news@iapmo.org](mailto:news@iapmo.org) to your address book. We encourage you to forward the Green Newsletter to your colleagues. Requests for new subscriptions, change of e-mail address, or to have your address removed from our list should be sent to [news@iapmo.org](mailto:news@iapmo.org). IAPMO does not knowingly participate in SPAM. We do not sell, rent or trade the names on our e-mail list; your e-mail address is only used to send messages from IAPMO. If you wish to be removed from this list, follow the link below and enter your e-mail address.

**Unsubscribe** from the Green Electronic Newsletter.

---

© 2009 International Association of Plumbing and Mechanical Officials