RCM NEWS

RCM News for May 2015

A newsletter for Resource Conservation Managers in the Northwest

In this issue:

Energy Efficient Exteriors Energy Recovery Ventilators Lighting Persistent Energy Performance Water Efficiency Upcoming Events & Training Opportunities Resources for You

While every URL in RCM News is checked for accuracy prior to distribution, URLs may change, and servers may temporarily fail to connect to working URLs.

Thank you to all who contributed to the online survey to gauge interest on a building commissioning webinar. Keep your eyes open to this listserv for the webinar, occurring in late June or July.

Energy Efficient Exteriors

The June 2015 issue of *Building Operating Management* has a three-part article on Energy Efficient Exteriors written by John D'Annunzio. High performance buildings must account for heat loss at the building envelope – windows, walls, and roofs. Infrared thermography can identify where and how much heat loss is occurring. Replacing windows with new energy-efficient ones is not always cost-effective. Other ways to decrease heat loss at windows include installing storm windows, weather stripping, and using window coverings such as films and shades. Materials can be added to roofs that allow for reflectivity and emissivity.

Part 1: <u>Weather-Proofed Windows and Energy Efficiency</u>

Part 2: Target Heat Loss at Walls, Roofs to Boost Building Performance

Part 3: Materials on Roof Surface Can Build Energy Efficiency

Energy Recovery Ventilators

"<u>How Energy Recovery Impacts IEQ</u>" is published in the May 2015 issue of Buildings, and written by Janelle Penny. Fresh air is crucial for indoor environmental quality (IEQ) and energy recovery ventilators (ERVs) are a common choice to exchange fresh air for indoor air in buildings. Understanding how ERVs work and how to take care of them will ensure that they continue to work efficiently while contributing to a healthy indoor environment.

Lighting

"<u>OLED Lighting: Switch Now or Wait?</u>", written by Janelle Penny in the May 2015 issue of Buldings, compares organic light-emitting diode (OLED) technology with LEDs. A concise description of the differences illuminates the appeal of OLEDs, although the technology lags behind LEDs by years. If interested in switching to the newer technology, best practices such as examining the driver behind the fixture and evaluating OLEDs must be taken into account.

A three-part article on Lighting, published in the May 2015 issue of *Facility Maintenance Decisions*, and written by James Piper, P.E., looks at various considerations for lighting retrofits. Although there are many efficient lighting products on the market, planning is key to select the appropriate products for your facilities. To make sure that lighting quality, effects of glare and color, occupant satisfaction, and ease of using new lighting controls, for example, give the desired results, a field test at the facility is recommended.

Part 1: Focusing on Lighting System Upgrades

Part 2: Field Testing an Important Step in Lighting Upgrade Process

Part 3: Standards Emerge to Monitor Lighting Industry

Persistent Energy Performance

A four-part article on Energy Efficiency in the May 2015 issue of *Building Operating Management*, written by Ronald Kovach, Managing Editor, looks at the reasons that energy efficiency of buildings decrease over time and how that can be turned around. Inadequate training of facility staff on new building automation systems, turnover of experienced staff, new building ownership or management, reactive maintenance, aging systems, and lack of energy data can lead to a drop in as-designed energy performance. Getting to know a building's systems through night and day walk-around audits, tracking and measuring energy use against other buildings, and predictive maintenance are important to regain ideal energy performance. The article ends with a small list of recommended operational checks.

Part 1: 2 Ways Building Energy Performance Deteriorates

- Part 2: Role of Staff, Training, Building Data in Loss of Energy Efficiency
- Part 3: Maintenance Plan, 'Walk-Around' Audits Can Help Restore Energy Efficiency
- Part 4: Comparative Data, Coil Cleaning Can Help Restore Energy Efficiency

Water Efficiency

A four-part article on Water Efficiency, written by Naomi Millan, Senior Editor, appears in the June 2015 issue of *Building Operating Management*. Drought and economics are impelling facility managers to understand and optimize their buildings' water use. Water in commercial buildings are generally used in cooling towers, irrigation, and fixtures. Tracking water use in programs such as Portfolio Manager, walking the property to understand how water is being used, and submetering or simple monitoring can increase awareness of how to reduce water consumption. Treating and reusing wastewater for toilets or irrigation is increasingly being used to improve water efficiency.

Part 1: Water Efficiency Is New Focus in High Performance

Part 2: To Boost Water Efficiency, Learn Existing System, Consider Alternative Sources

Part 3: Wastewater Reclamation Gains Ground in Water Efficiency Arena

Part 4: Vancouver Facility Boosts Water Efficiency with Onsite Wastewater Treatment, Re-use

Upcoming Events & Training Opportunities

ENERGY STAR® and Portfolio Manager® Trainings

All are online webinars.

- Ask the Expert: Office Hours on Campuses June 3
- ENERGY STAR and Green Building Rating Systems June 4
- Ask the Expert: Office Hours on Negative Meters June 11
- The Water-Energy Nexus June 16
- Portfolio Manager 101 June 22
- Portfolio Manager 201 June 24
- Portfolio Manager 301 June 25

Click here for more webinars and information US EPA

2015 Portland Lights Trade Show and Educational Classes

The latest in innovative and efficient lighting.

• June 10 in Portland Click here for more information IES Portland Oregon Section, Portland General Electric

E3T Emerging Technologies Showcase: Heat Pump Clothes Dryers - Will Life Ever Be The Same Again?

• June 10 online webinar Click here for registration and information

WSU Energy Program, BPA

E3T Emerging Technologies Showcase: Commercial Lighting – The 10 Year Outlook

June 24 online webinar

Click here to register WSU Energy Program, BPA

Energy Management Certificate

Registration is in full swing for the annual "energy bootcamp" at the Northwest Water & Energy Education Institute. This is an advanced certificate program covering a wide array of energy management topics and requires the student to implement and measure results from an energy-efficiency project. Sign up with a colleague and both receive a \$500 discount!

July 13-24, 2015 in Eugene, OR (please note date change since the previous newsletter) For more information

NWEEI

Building Operators Certification

BOC Level I certification is 74 hours of training and project work in building systems maintenance. Level II certification is 61 hours of training and elective coursework in equipment troubleshooting and maintenance. Classes usually meet one or two full days a month over a period of four to six months. All dates below are for the first class.

- Washington State
 - Level I Sept. 23 in Renton
 - Level II Oct. 21 in Renton

Click for BOC Washington State information

- Oregon
 - Level I Sept 24, 2015 in Portland
 - Level I February 2016 in Hermiston, Pendleton, La Grande area

Click for BOC Oregon information

Building Operators Certification

AEE (Association of Energy Engineers) Real-time Online Seminars

Webinars and live interactive courses you can take from your computer. Programs are generally two to three hours long, over a period of days. Topics include energy auditing, lighting controls, HVAC systems and much more. Visit their website for a complete list:

http://www.aeeprograms.com/realtime/.

Resources for You

New Rating Council

The <u>Attachments Energy Ratings Council</u> (AERC) has been established as a certification and rating program for fenestration (window) attachment products. They are seeking members with appropriate expertise to lend voice to this new process. Over the coming four years, the Council will prioritize product types and performance indices, characterize key properties such as transmittance and emissivity, and develop valid product performance simulation. AERC is a project of the Window Covering Manufacturers Association in collaboration with US Department of Energy.

Reducing Water Use

A statewide drought emergency has been declared for all of Washington State, as well as for other states and regions. The <u>Saving Water Partnership</u> based in Seattle lists incentives and rebates for cutting water use for certain water utility customers. But they also offer suggestions and helpful advice on issues from toilet and urinal fixtures to cooling tower improvements to laundry equipment. For those of you inclined toward maps and graphics, the <u>US Geological Survey</u> publishes daily streamflow conditions for Washington, Oregon, and Idaho, and has links for other drought resources and definitions.

Do you have newsletters, websites and links to share? Do you have RCM questions?

RCM News is always looking for interesting information, tips and resources to share with other resource conservation managers. Our goal is to increase your success by sharing what you and your colleagues are doing – with energy efficiency measures, problem-solving, communication, data tracking, presentations, and more. In addition, WSU Energy Program can help find solutions to your RCM program's technical and programmatic questions. <u>Email Karen J</u> to share and ask!

Energy Events Calendar

http://www.energyexperts.org/TrainingEducationandEmployment/EventsCalendar.aspx

Washington RCM Support

The Washington State University Energy Program provides RCM support. Check out the "RCMx" website: <u>http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx</u>. We appreciate any feedback on this site and would also appreciate items to add to our resources, such as tools, examples of policies and job descriptions.

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Previous issues of RCM News may be viewed at <u>http://www.energy.wsu.edu/PublicationsandTools.aspx</u> (click on Resource Conservation in the right hand column). We welcome comments or ideas for articles. Please send to Karen Janowitz - <u>janowitzk@energy.wsu.edu</u>

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