RCM News for December 2018

A Newsletter for Resource Conservation Managers in the Northwest

May you have a healthy and energy-efficient 2019

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**JOB OPPORTUNITIES**

**Resource Conservation Specialist for Seattle Public Schools**

Seattle Public Schools has an opening for an experienced Resource Conservation Specialist to lead strategic conservation initiatives and serve as a technical resource for conservation of energy, water, waste, and more.

Position is open until filled. The job description can be found at [Resource Conservation Specialist](#).

**Sustainability Program Manager for Portland Public Schools**

Portland Public Schools is seeking a full-time Sustainability Program Manager to develop, implement, and evaluate district-wide resource conservation and sustainability programs.

Position is open until filled. Click on [Sustainability Program Manager](#). Once there, click on “Search Jobs Now, then use the keyword: sustainability.
**Articles**

**Energy Management**

“Mapping Energy Management” by Edward Armstrong appears in the December 2018 issue of *Facility Executive*. The Energy Management Guideline from the Energy Management Association (EMA) provides seven energy management process phases, beginning with a project assessment, and ending with continuous energy management. The free tool is useful for all energy managers, although some of the guide is better understood by energy engineers. The EMA has an Energy Management Professional certification that is ANSI-accredited and recognized by the Department of Energy Better Buildings Workforce.

**Existing Buildings Retrofits**

“University Eyes Energy Efficiency in Existing Buildings” is written by Ryan Berlin, managing editor, December 27, 2018 for *Facilities Maintenance Decisions*. An initiative by Harvard’s Center for Green Buildings and Cities called HouseZero focuses on renovating older existing buildings to become ultra-energy efficient. The key is doing so in an affordable manner, which then allows the model to be used to retrofit the large existing building stock in the country.

**HVAC**

“Resilience in HVAC Design” in the December 2018 issue of *Facility Executive* and written by Eric Nyenhuis and Ken Robinson, discusses making HVAC infrastructure resilient so that HVAC continues working even with energy system changes. The Los Angeles Community College District (LACCD) retrofitted HVAC systems at some of their schools to provide flexibility and reliability during peak demand times. They were designed to adapt to California’s renewable energy goals that will change electricity rate structures, making it more cost effective to use energy during “super-off-peak” hours.

**Lighting Upgrades**

The December 2019 issue of *Facility Maintenance Decisions* includes a three-part article by Mark de la Fuente on lighting renovations and retrofits. Lighting upgrades are often needed as the needs of occupants change, or as new more efficient lighting systems make retrofits cost-effective. When planning an upgrade, a life-cycle cost analysis should be made of the lighting products, and include rebates, utility cost structure, and maintenance considerations. Measuring success of a new lighting system or product involves analyzing performance and energy savings properly.

Part 1 – Lighting in the Spotlight
Part 2 – Benefits of Upgrading Emergency Lighting
Part 3 – Lighting Upgrades: Quantifying Results

**Smart Building Controls**

“Gaining Real-Time Building Performance Insights: Q&A with WSP”, published December 17, 2018 in *Energy Manager Today*, written by Alyssa Danigelis, is an interview with two WSP USA staff about performance metrics for real-time building energy use. By integrating different building control systems, they aim to better coordinate actual power usage with actual occupancy of a space.
UPCOMING EVENTS & TRAINING OPPORTUNITIES

ENERGY STAR® and Portfolio Manager® Trainings
All are online webinars.
• Portfolio Manager 101 – Jan 9, 2019
• Portfolio Manager 201 – Jan 16, 2019
• Portfolio Manager 301 – Jan 23, 2019
• Best Practices for Benchmarking your Building – Jan 30, 2019
• Ask the Expert – Most Wednesday at 9:00 AM Pacific time

Click here for more webinars and information

US EPA

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
  o Level I classes
    • April 14, 2019 through October 2019 in Burlington, WA
    • Sept 25, 2019 through March 2020 in Seattle
    • Fall 2019 TBA in Tacoma
  o Level II classes
    • March 12, 2019 through August 2019 in Seattle

Click here for BOC Washington State information
• Oregon
  o Level I classes
    • Sept 2019 TBA in the Portland area
  o Level II classes
    • January 9, 2019 in Portland (Registering Now)

Click here for BOC Oregon information

Building Operators Certification

The Design Maintenance & Operations of Building Systems, Part 1
A BOMI International course
• Six Thursday afternoons starting Feb 21, 2019 – Seattle

Click here for more information

Building Owners and Managers Association (BOMA) Seattle King County

Washington Green Schools Training
Washington State school RCMs and Energy Managers, along with other school staff, can attend a training to organize a green team and get recognition for your school.
• January 24, 2019 – Pierce County
• January 30, 2019 – King County
• February 5, 2019 – Snohomish County
• February 2019 (date TBD) – Clark County
• February 13, 2019 – Spokane County

Click here for more information

Washington Green Schools

2019 Spring Lighting Design Lab Classes
- Introduction to Daylighting Design, 100 Level Class
  - Jan 28, 2019 in Tacoma
  - Jan 29, 2019 in Everett
  - Jan 30, 2019 in Seattle
  - Register for one or both classes, see webpage for times

- Promoting Energy Efficiency, 100 Level Class

- Effective Office Lighting, 200 Level Class
  - Feb 27, 2019 in Seattle
  - Mar 6, 2019 in Everett

- Advanced Lighting Controls LC – 2-day 300 Level Hands-on Workshop
  - Feb 21 & 22, 2019 in Seattle

- Lighting for Schools K-12 Workshop – 4-hour 300 Level Hands-on Workshop
  - Apr 11, 2019 in Seattle

Click here for more information

Lighting Design Lab

Building Operator Certification Technical Webinar Series
- Latest on Lighting, Luminaire Level Lighting Controls – Feb 20, 2019 webinar

Click here for more information

Building Operators Certification

Resources

Toolbox Talk Cards
Test your knowledge, discuss, and learn about commercial energy efficiency with Toolbox Talk Cards from the Northwest Energy Efficiency Alliance (NEEA). Before downloading, note that the PDF file is over 117 MB and is part of the SEM hub resource collection, which aims to help adoption of strategic energy management practices. The “cards” contain a question on one side, with answers and discussion points on the reverse side. There are 130 questions in 14 categories including building envelope, lighting, scheduling, air handling systems, HVAC controls, water heaters, server rooms, and utility billing. System checklists are also included. A sample of the questions are: “What are some symptoms of building envelope leakage?”; “What does it mean if an LED claims L70 after 50,000 hours?”; “What are the three factors that determine fan power?”; “How can a pneumatically controlled building advance and become more energy efficient without a costly and disruptive overhaul?”, and; “What is a data center?”. 
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. Email Karen to share and ask!

Washington RCM Support
The Washington State University Energy Program provides RCM support. Check out the “RCMx” website: http://www.energy.wsu.edu/PublicFacilitiesSupport/ResourceConservation/RCMx.aspx. 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 http://www.energy.wsu.edu/PublicationsandTools.aspx (click on Resource Conservation in the right hand column).
We welcome comments or ideas for articles. Please send to Karen Janowitz - janowitzk@energy.wsu.edu