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PWGC Fall Newsletter

Hospital Edition



Helping You Make Your Hospital the Best for the Community and the Environment!

"P.W. Grosser Consulting serves our clients, our neighborhoods and our society!"

STRATEGIC ENVIRONMENTAL SOLUTIONS

Happy Fall! PWGC's hospital newsletters are designed to assist Facilities Engineering and other departments within the hospitals to stay updated on ever changing environmental rules, regulations, and other pertinent issues related to the healthcare industry.

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LED Lighting

LED lighting is the newest technology in energy efficient lighting systems, but how can a light source that produces the same lumens per watt as fluorescent, or HID lamps be so efficient? Fluorescent lamps are typically used indoors, and HID lamps (high pressure sodium and metal halide) typically used for roadway and parking lot lighting are omnidirectional light sources – that is they provide light all around the lamp. LED light sources are directional, and therefore their light output (measured in lumens) can be better focused at the area to be lit. Because LEDs are directional, fixtures using LEDs as light sources can be up to twice as efficient as fluorescent fixtures and five to six times as efficient as HID fixtures.

In addition to being more efficient light sources, LEDs also provide better light sources in terms of the visible light they provide. LEDs have a color rendering index (CRI) that is close to natural daylight and therefore we can perceive colors under LEDs as we would outdoors on a sunny day. LEDs have a higher CRI than metal halide lamps and a much higher CRI than high pressure sodium or fluorescent lamps. In terms of maintenance, LEDs are rated for 50,000 hours (5.7 years) of operation – about one and a half times longer than fluorescent lamps and two to eight times longer than HID lamps.

To maximize the benefits of LEDs as light sources when preparing for a new lighting project or fixture replacement project be aware that not all LED fixtures are equal! LED fixtures are only as good as their driver (the power supply that provides the correct power to the LED) and the fixture's ability to dissipate the heat generated by the driver.

PWGC now offers full lighting design services including fixture selection, layout / photometrics, and electrical engineering services. Please feel free to contact us regarding any upcoming project or to find out about any available rebates for energy efficient lighting upgrades.

Industrial, Commercial, and Institutional Boilers National Emission Standards for Hazardous Air Pollutants (NESHAP) for Area Sources- 40 CFR Part 63 Subpart JJJJJJ

February 21, 2011. A copy of the signed final rules can be downloaded at http://www.epa.gov/airquality/combustion/. Updates to the status of the rule will be provided periodically on this site. In July the EPA prepared dockets to assist with major and area sources. A major source is a facility that emits, or has the potential to emit (in the absence of controls), at least 10 tons per year (TPY) of individual hazardous air pollutants (HAP) or 25 TPY of combined HAP. If not a major facility, you will be considered an area source. The following boilers are not affected by this rule: (1) any gas-fired boiler; (2) hot water heaters (<120 U.S. gallons, <160 psig, and <210°F (90°C)); (3) waste heat boilers; (4) boilers used as control devices for other NESHAP standards; (5) boilers subject to other NESHAP standards, Section 129 standards, or hazardous waste boilers; (6) research and development boilers. Boilers that burn coal, oil, biomass, or other solid and liquid non-waste materials and located at area source commercial (e.g., laundries, apartments, hotels), institutional (e.g., schools, churches, medical centers, municipal buildings), or industrial (e.g., manufacturing, refining, processing, mining) facilities are subject to this rule.

If you have boilers, contact PWGC today to find out how to comply with this rule!

PWGC
Strategic Environmental Engineering Solutions

HPRC Healthcare Plastics Recycling Council

HPRC is a private technical coalition of industry peers across healthcare, recycling and waste management industries seeking to improve recyclability of plastic products within healthcare. HPRC is made up of eight brand leading and globally recognized members including BD, Cardinal Health, DuPont, Engineered Plastics, Hospira, Johnson & Johnson, Kimberly Clark and Waste Management. HPRC states they exists in a collaborative effort to be a change agent for sustainable healthcare product and packaging lifecycle with the end goal of increasing the overall recycling of healthcare plastics.

HPRC has conducted multiple pilot studies at select leading hospitals focused on best practices for collection, processing, logistics and value costing of plastics recycling. With over 20,000 pounds of plastics processed to date, the pilot studies have facilitated a better understanding of plastics in the medical waste stream and their transition to recycled products. Visit http://www.hprc.org/#!work for more information.

This coalition is new as of April 2011 and PWGC is excited to keep you informed of pilot study results that could greatly benefit the environment by diverting a large scale produced waste stream from the landfill to a recycling program.

Reminder- Electronics Contain Hazardous Substances

Electronic equipment used in health care facilities more often than not contain hazardous substances such as lead in cathode ray tube (CRT) monitors and, mercury in LCD displays.

Improper disposal of electronic equipment poses a significant threat to public health and the environment. Electronic equipment that gets land filled or incinerated can release heavy metals into the atmosphere and contaminate groundwater.

Purchasing departments have great power as the greening process begins with purchasing. It is encouraged when purchasing computers to use EPEAT, which stands for Electronic Product Environmental Assessment Tool. This is an easy-to-use, on-line tool helping institutional purchasers select and compare computer desktops, laptops and monitors based on their environmental attributes. EPEAT was developed using a grant by EPA and is managed by the Green Electronics Council (GEC). The website is http://www.epeat.net/. This website provides a registry of greener electronic products. EPEAT rates products on a TIER system (bronze, silver and gold). Performance categories include environmentally sensitive materials, material selection, energy conservation, design for end of life, packaging, end of life management and corporate performance.

The Holiday Season Brings Delicious Food!

Hospitals serve a tremendous amount of food and food systems have a large impact on the environment. According to a statistic posted on the Practice Greenheath website and obtained from the Case For Local Food In A Global Market World Watch Institute the average piece of food travels between 1,500 and 2,500 miles from farm to plate. As a separate issue from the environmental concerns, hospitals are also sifting to a more sustainable food source for health reasons.

Many healthcare facilities are focusing on food sources and increasing purchases of local and organically grown foods. Practice Greenhealth has partnered with Health Care Without Harm and the Food Matters Project to provide a range of tools and resources, sample policies and case studies designed specifically for the healthcare sector.

Visit *http://practicegreenhealth.org/topics /sustainable-food#_edn3* for more information on Healthcare without Harm's Healthy Food Systems.

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