Monroe Correctional Complex Saves Top Dollar in Sustainable Practices

By Phil Partington, Consortium staff

With an increasing need for resources and waste reduction, more than just futurists are discussing how to keep facilities sustainable these days. The biggest challenges include how to make waste reduction and materials reuse cost effective. The Monroe Correctional Complex (MCC) appears to be ahead of the curve in resolving these tough issues with its innovative and collaborative food composting practices.

In 2003, the Washington State Department of Corrections’ (DOC) sustainability plan stated that a primary goal was to increase recycling of all possible materials and convert waste materials to beneficial products. MCC has responded by steadily developing and expanding its recycling and reuse programs. Since 2004, MCC has recycled over 1,900 tons of materials and saved $331,000 in direct costs.

“It’s our responsibility to make MCC as self-sustaining as possible,” said Paddy Hescock, plant manager of MCC. “We figure we’re about 90% sustainable right now on solid waste materials. Our goal is to get as close to 100% as possible.”

Each day, twenty inmates separate materials for recycling and reuse. Cardboard is sent to a baler. Newspapers, office paper and mixed and shredded paper are recycled. Metals are divided into steel, copper, tin, aluminum and mixed bins, and wood is used to warm the facilities in the winter.

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Shop Talk

By Bob MacKenzie, Consortium Manager

In the event you hadn’t heard, your Consortium’s new charter was signed into law by Governor Chris Gregoire on March 12, 2010. This is a milestone for the program, validating its past success, realizing its potential, and ensuring its continuity well into the new decade. A number of members signaled their support of the bill through their elected officials, and we’re deeply grateful. We certainly received wonderful support from our colleagues at the WSU Extension Energy Program. Assistant Directors Todd Currier and Sheila Riggs were standouts, and our director, Jake Fey, capped off the team success.

The enhanced charter of the Consortium – now in the Revised Code of Washington (RCW) – reads in part:

“The Washington State University extension energy program shall provide information, technical assistance, and consultation on physical plant operation, maintenance, and construction issues to state and local governments, tribal governments, and nonprofit organizations through its plant operations support program…”

The new law takes effect July 1, 2010, and provides support for all the services members have enjoyed the past 14 years. In the interim, there will be no break in Consortium services and the transition should be transparent to members. Members now have, as part of their membership,

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There are few industries as all-encompassing as the $150-$200 billion janitorial industry, which is apparent when considering that every building in the country requires routine cleaning. Whether that cleaning is covered by a building service contractor, or done by in-house staff, cleaning is one of the biggest costs in any maintenance and operations budget.

The janitorial industry has started to change its focus in the philosophy of cleaning, with the idea that if an organization cleans for health versus appearance, then it has an opportunity to develop a more functional, sustainable operation. However, products are often misused or wasted because of a lack of knowledge about how the product should be utilized. Basic training for both managers and workers on the use of cleaning products is often a missing ingredient in the custodial operations recipe.

Pattie Williams has assessed numerous cleaning operations throughout her career with the Washington State Cleaning Industry Professionals Group, which she co-founded. The one commonality she has found throughout her work is that there are no standards for work processes.

“Most organizations have management and workers with good hearts,” said Pattie. “They are truly trying to do a good job, but they lack the basic knowledge of the tools needed to accomplish that.” Williams adds that this lack of knowledge “leads to wasted time and materials, as well as a compromise of the health and safety of the building occupants and workers.”

Fortunately, help is available in undertaking this challenge. The Plant Operations Support Consortium is uniquely poised to assist members with their custodial needs. The Consortium’s custodial assessment team takes a non-threatening, yet effective approach. First, the team and the member establish a list of needs. This allows the assessment report to be tailored to the member, so that it is most relevant and useful in their operations.

For example, one member may be most interested in achieving a more effective and efficient custodial operation, while another member may simply want the opinion of an outside source to help justify adding more staff in a time of tight budgets. These are just some of the issues that have been addressed by the Consortium’s custodial assessment team.

Sue Brown, a Consortium staff member for the past four years, is a recent graduate of Janitor University training. Contact Sue, 360-956-2058, or e-mail browns@energy.wsu.edu, for more information about the program.
Energy/Facilities Connections Expands to Video and Webinar Trainings

By Phil Partington, Consortium staff

Skills and leadership training for facilities professionals has never been more crucial, which is why the Plant Operations Support Consortium continues to take advantage of every opportunity to link members to training opportunities around the Northwest. It is also the reason for continued enhancement of the program’s 2010 Energy/Facilities Connections Conference.

One advantage of the Consortium’s merge with the Washington State University Extension Energy Program is access to innovative approaches to training, with the technology and flexible parameters to be able to put those approaches into effect. It was this sort of creative thinking that prompted the first Energy/Facilities Connections webinar.

The one-hour webinar training took place April 1, 2010, and was free to participate. It featured The Dollars and Sense of Energy Efficiency. The following presenters volunteered their time and expertise to discuss four approaches to energy efficiency:

- Todd McGuire from Glumac, and Jessica Green from Brightworks: “Sustainable Building Upgrades: LEED for Existing Buildings”

The webinar was recorded to video, which can be accessed on the Consortium website – www.energy.wsu.edu/apps/PlantOperations/VideosAndWebinars.aspx. While a training video can’t replace face-to-face networking opportunities at a conference, it is a viable and practical alternative for folks to receive invaluable training from their desk with a click of the mouse. Keep your eyes peeled for future training webinars and videos on a variety of topics. Send topic suggestions and feedback to your Consortium staff.

Training and other types of professional videos are accessible on the Consortium website.
Sometimes the simplest solutions aren’t so simple. The Washington State Department of Ecology (DOE) building in Lacey, Washington (originally completed in 1994) was due for an upgrade. The building had water intrusion and corrosion to structural steel elements. Water broke through the stucco finish – penetrating through the wall – and the membrane behind the stucco failed.

The 315,000 square-foot office building serves as headquarters for 1,200 department personnel. The steel frame and precise concrete structure includes the office building as well as a complete cafeteria/dining area, workout facility, public library, and 500-car parking garage. An extensive atrium area through the center of the building is used for public circulation.

Design requirements included the state-of-the-art indoor air quality HVAC system. A focus for the project was to minimize impact on the 27-acre Woodland Creek site and to preserve as many of the existing trees as possible. Site design also used pervious materials for paving, achieving 100% on-site stormwater retention.

The building is LEED Silver EB (Existing Building) certified, and the project included energy and environmental components to be consistent with the goal of sustainability. Air locks were added to doors to save energy, exterior lighting was swapped with LED lights, and the insulation of the wall was upgraded. In addition, used materials were recycled.

Tom Aura, Project Manager with Mortenson Construction, noted that “we recycled 97% percent of demolition materials and construction waste.” The construction company also worked night shifts to avoid impacting tenants during work hours.

Mortenson coordinated its design efforts with the recommendations of the local electric utility, Puget Sound Energy – ultimately resulting in over $400,000 in grants from the utility to the Department of Ecology to assist in funding energy conservation measures.

“Ecology looks through a sustainability and environmental lens with everything we do,” said Stephen Fry, architect with the Department of Ecology.

“Thinking outside the box

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“Given the size of the facility, it makes sense for us to recycle extensively,” said Sherman Smith, environmental specialist at MCC. “The cost savings from these programs are a bonus.”

The facility’s Twin Rivers Unit and Recycling Center started recycling food scraps in May 2009, diverting over 14 tons of compostable materials in the first month to Cedar Grove Composting (the region’s largest processor of compost). In October 2009 – after saving almost $6,000 in waste disposal costs by recycling 130 tons of food scraps – this program was expanded to all five of MCC’s prison units.

“The savings go deeper than what’s on the surface,” said Hescock. “We save about $3,000 per month in tipping fees, while using zero trash liners in the kitchens. By having the inmates presort food and waste, fewer utensils are accidentally thrown away, saving us big dollars on utensil orders. We canceled a

$5,000 order for utensils in the first few months. On top of that, food waste isn’t going into the recycle bins, which reduces the weight. We haven’t had to repair a single dumpster since starting this program.”

MCC has taken reuse to a new level, not stopping at just food waste. For example, inmate shoes, clothing and bedding that are still usable are sent to the DOC Classification Center in Shelton, Washington, for reuse or recycling. Another example is their “second-hand store” where all excess or un-needed office furniture, supplies, and anything else than is usable is collected and redistributed when needed. Clothing that can’t be reused is converted into cleaning rags. They also refurbish bicycles, chairs and medical equipment.

MCC has also impressed many with its green building technology, with three of DOC’s 12 LEED-certified facilities being at MCC. Ninety-nine percent of all construction waste from these three buildings was recycled! The newest building (the Jimmie Evans Training Center) is one of the few LEED Gold-certified correctional buildings in the country. ✭

Contact Paddy Hescock, 360-794-2701, or e-mail phescock@DOC1.wa.gov, for additional information about Monroe Correctional Complex’s innovative approaches to sustainability.
in this way is something we’re used to."

“We anticipate lower heat bills, fewer deicers in the building and parking garage, not to mention the savings of not having water come into the building like it was before,” said Fry. “People are also much happier. They can get in and out of the parking garage without getting wet, thanks to an added access point from the third floor of the parking garage to the third floor of the building."

Contact Stephen Fry, 360-407-6018, or Tom Aura, 425-895-9000, for information about the Department of Ecology’s LEED-certified building.
the augmented resources of the WSU Extension Energy program, including the Energy library and a host of engineering and energy resources! We’re excited about the future and hope you’ll take full advantage of the support services now available. If you would like an on-site update on program services and offerings, just give us a call and we’ll schedule it.

The success of our recent Consortium webinar, “The Dollars and Sense of Energy Efficiency,” premiered a medium that can save time and money, while providing copious amounts of technical and qualitative data. Look for its expanded use in the months ahead. We appreciated the feedback participants provided and we’ll make adjustments based on your recommendations.

The Energy/Facilities Connections Conference takes place May 12-14, 2010, and includes top-of-the-line presenters, such as State Representative Hans Dunshee and Bob Cowan, Director of Facilities Engineering at the Fred Hutchinson Cancer Research Center in Seattle. Breakout sessions are timely and relevant to saving dollars and energy in a tough economy. For example, the Engrossed House Bill 2836 – A $100 Million Investment session enables higher education and school district members to provide input to the agencies charged with developing criteria for receipt of $100 million in grant funds. The “Custodial Connections Training Symposium” is actually a conference within a conference for the same low registration fee, and features Stephen Ashkin, the “Father of Green Cleaning.”

We realize these are tight fiscal times so we greatly appreciate the efforts of our conference sponsors in allowing us to offer scholarships and other subsidies to our members. We’re related to be partnering with these outstanding companies and organizations as sponsors: MacDonald-Miller Facility Solutions (Platinum); Johnson Controls (Gold); McKinstry (Gold); Quantum Engineering and Development, Inc. (Gold); Puget Sound Energy (Silver); Honeywell Building Solutions (Silver); Avista Corporation (Bronze); BetterBricks (Bronze); Northwest Energy Efficiency Council (Bronze); Tyler Rental (Bronze); and Wenatchee School District (Bronze).

Meanwhile, your Consortium staff has received nearly 350 requests for assistance from members and has sought to resolve them within short timeframes. We appreciate the wonderful assistance rendered by many members in this effort. This is what sets the Consortium apart… you all share your expertise and hearts for the benefits of others. You are the best! ☺

Bob