



ENCOURAGING  
Environmental  
EXCELLENCE

## Encouraging Environmental Excellence Achievement Level Recognition

*October 15, 2015*

The Ohio EPA Encouraging Environmental Excellence Program targets those who reduce waste, improve efficiency and work to continuously improve as an environmental steward. The program has a three-level approach to provide recognition to Ohio businesses and other organizations completing environmentally beneficial activities. Higher levels of recognition are for those who exceed regulatory requirements or commit to future environmental stewardship efforts. The Achievement Level recognizes any applicants completing environmentally beneficial activities. Any business, trade association, professional organization or local government in Ohio may apply. Achievement Level participants must have demonstrated significant progress in one of the following main criteria: Impact to the Environment (Toxics and/or Waste Reduction); and/or Resource Conservation. Achievement Level participants must also demonstrate some level of progress in at least six additional environmental stewardship criteria and indicate they are in compliance with environmental laws and regulations.

Ohio EPA is recognizing three organizations that successfully met the criteria for the Achievement Level of the Encouraging Environmental Excellence Program. Below is a summary of their efforts.

**Otterbein University – Westerville:** Otterbein University is a private, four-year liberal arts college in Westerville. In 2005 – 2009 Otterbein expanded campus square footage by 338,545 square feet yet maintained and even lowered energy use from pre-construction levels while reducing CO<sub>2</sub> produced to 2007 levels. Otterbein has tracked utility use since 2005 and invested in sub-metering so they can now determine the impacts of their energy reduction activities. Cost savings, electric and natural gas use are tracked using an online system that demonstrates expenses incurred, reductions in utility costs and decreases in energy use. Otterbein has realized a \$628,427 savings in energy related expenses since 2007.

An innovative example of their energy reduction efforts was the retrofitting of a four lamp fluorescent fixture to LED lighting. Two LED lamps replaced four florescent tubes and the ballast in 93 fixtures with no noticeable lumen loss. These tubes have a 50,000 hour lamp life so tube changes are significantly reduced and there is no mercury in the lamp. This \$9,000 investment has a return on investment of less than two years.

Otterbein conscientiously strives to purchase materials that are recycled, recyclable or have recycled content. Carpet purchases have been transferred to Interface which has a high recycled content. Otterbein has had a recycling program in place since 2008. Fluorescent lamps and tubes are collected and processed through a Universal Waste hauler for recycling. All batteries and ballasts are handled the same way. Used and outdated computers and electronic hardware are collected by a recycling vendor. Dumpsters are set up for metal collection for recycling. Recycled cardboard, paper and aluminum cans are separated from the waste stream into two different colored trash dumpsters—red for recycling and

tan for normal trash. Annual expenditures for recycling are \$11,892 with 984 cubic yards of waste recycled.

Another example of Otterbein's environmental stewardship efforts is to buy locally to minimize environmental impacts associated with transportation. In 2011 Otterbein replaced the roofing on Towers Hall with a tile manufactured in New Lexington, Ohio. Otterbein recently received furniture from another local university instead of allowing it to be disposed. Otterbein contracts its food service operations with Bon Appetit, which has a policy of purchasing food locally. Otterbein grows its own hay for the Equine Facility to minimize the environmental impacts associated with transporting hay from more distant sources.

Otterbein has a standing Sustainability Committee comprised of the Sustainability Department Chairperson, a Representative from the Economics Department, the Director of Physical Plant, Chair of the Humanities Department, students, the Director of Housing, and the Director of Sustainability. The VP of Business Affairs has set up a budget line for Utility Improvements, which is used to fund some energy reduction and related sustainability activities. Otterbein is committing \$4.6 million to improving energy efficiency in 2014 and 2015.

Otterbein has constructed a rain garden to minimize runoff at one of its campus buildings, completed a campus energy assessment that identified a number of future energy efficiency related projects, and continues to work with students to complete various environmentally related projects in the communities throughout central Ohio.

**Visual Marking Systems Inc. – Twinsburg:** Visual Marking Systems (VMS) is a high performance printer in the custom graphic design services and printing industry located in Twinsburg that produces pressure sensitive labels, decals, nameplates, overlays, four-color process labels, embossed keypads, static cling, displays and related items. VMS is a key provider of graphic solutions for vehicle wraps, fleet graphics, and point of purchase displays, signs, and custom specialty applications for industrial and consumable designs.

In 2011 VMS began its sustainability efforts and became the 37th certified green printer in the US in 2012. VMS was the second certified *Sustainable Green Printing Partnership* (SGPP) facility in Ohio. VMS achieved the only whole facility certification known for the SGPP demonstrating environmental stewardship in all areas of product, process, and envelope. A formal environmental management system (EMS); written procedures; voluntary environmental, health and safety audits; sustainability policy; and third party verification are all part of VMS's efforts to reduce the environmental impact of its operations. VMS's *Sustainability Policy* demonstrates senior management, support, commitment and approval through the annual management review process.

To achieve SGPP certification, extensive ongoing training is required not only of VMS employees, but contractors as well. VMS has instituted a general awareness training program designed to introduce our sustainability program to new and existing employees. Additionally, upon adoption of our continuous improvement programs, VMS is required to identify and train employees in responsibilities impacted by our chosen program. Likewise, contractors that might be impacted by VMS's sustainably efforts are trained on their roles and responsibilities.

All VMS employees are formally trained in LEAN principles and more than 70 percent have earned the LEAN Master designation, signifying they have actively participated in a Kaizen event. VMS runs Kaizen events that are focused on both the front office and manufacturing areas of the organization. LEAN and EMS activities have resulted in a 5.4 percent savings in raw materials, a 15.6 percent reduction in water usage, a 14.9 percent reduction in electricity usage and a 2.1 percent reduction in natural gas usage. VMS continually evaluates input materials and substrates to determine if additional source reduction strategies can be implemented as part of these efforts.

VMS has developed and continues to implement its community outreach program. VMS was highlighted in local news WKYC Cleveland, VMS's CEO delivered a speech on sustainable business practices in 2013 to Penn State Business Students, VMS regularly attends the American Public Transportation Associations' sustainability workshops, VMS speaks at national events and conferences on implementing EMS into manufacturing businesses, and VMS regularly speaks at printing industry tradeshow and helps other printers adopt the SGPP criteria.

VMS also supports local government programs, charities, Chambers of Commerce, and Sustainability Programs in the Cleveland and Akron areas. VMS was awarded the *Summit of Sustainability Award* by Keep Akron Beautiful in 2013. VMS also received the first ever American Public Transportation Association business recognition for the *Sustainability Signatory*, which publically demonstrates VMS' commitment to environmental excellence.

**PSC - Cousins Waste Control, LLC – Toledo:** PSC – Cousins Waste Control, LLC (a subsidiary of PSC Industrial Outsourcing, LP) is located in Toledo. Its operations include transfer, consolidation and/or treatment of non-hazardous waste; transport and transfer of hazardous and non-hazardous waste; and off-site industrial cleaning.

PSC's environmental stewardship efforts are based on the Fresh Start Environmental Management System (EMS). This EMS is used to continually improve both their environmental compliance and environmental stewardship efforts. The components of this approach are being used to pursue ISO 14001 certification in the near future. This would make PSC's Toledo facility one of the first ISO 14001 certified waste treatment facilities in the world. In accordance with its EMS, PSC has demonstrated upper management commitment for both its compliance and environmental stewardship activities and has an active employee involvement program to educate employees and make them aware of environmental accomplishments.

PSC's primary environmental stewardship activity was the conversion of an onsite boiler from fuel oil to natural gas. A \$15,000 investment was made to complete this conversion that reduces fuel costs by 73 percent and saves \$7,455 annually. Emissions were reduced by approximately 30 percent and this conversion allowed for the removal of two 8,000 gallon above ground storage tanks. This boiler gives PSC the added capability to recycle used oil to approximately 98 percent or around 135,000 gallons annually, with the remaining constituents being particulates and water.

In 2013 PSC committed to be a U.S. EPA Waste Wise Endorser. Endorsers agree to recruit organizations to become Waste Wise partners or endorsers and provide both with promotional, educational, or technical information. This effort requires PSC to encourage organizations that use their services to complete solid waste reduction activities by participating in Waste Wise. Recruitment goals to get PSC's suppliers to participate in the Waste Wise program were exceeded by 300 percent. In addition, 2013

goals for the number of attendees to participate in Waste Wise presentations were exceeded by 150 percent.

Mercury reduction has also been a focus of PSC's environmental stewardship efforts. PSC was one of the first to research and submit a draft Mercury BMP Plan under the new Discharge Orders for the Toledo area. PSC's Mercury BMP Plan was used by the City of Toledo in 2014 to develop a template to assist other significant industrial users (SIUs) in the development of their plans. A checklist used to complete a mercury inventory was also shared with all other SIU's in the Industrial Pretreatment Program to help other facilities reduce mercury. These efforts resulted in a 95 percent mercury reduction for the PSC facility.

PSC has an environmentally preferable purchasing program based on a chemical inventory review program. This effort allows PSC to select chemicals that have reduced environmental impacts. Part of this effort includes audits of all contractors and disposal vendors. In addition, PSC diverted more than 5,300 tons of wastes from landfills in 2013. These materials were sent offsite to be used as alternative fuels as part of their ongoing efforts to reduce the amount of processed materials they dispose and increase their recycling efforts.

For more information about the Encouraging Environmental Excellence Program and the three levels of recognition, visit [www.epa.ohio.gov/ohioE3.aspx](http://www.epa.ohio.gov/ohioE3.aspx) or call (800) 329-7518.