Encouraging Environmental Excellence Achievement Level Recognition

October 19, 2016

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 four-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 demonstrate significant progress in one of eight environmental stewardship criteria: Impact to the environment; pollution prevention; energy efficiency; renewable energy; renewable, recovered or recycled materials; green building; recycling programs or organics diversion. 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 the following organizations that successfully met the criteria for the Achievement Level of the Encouraging Environmental Excellence Program. Below is a summary of their efforts.

City of Athens: The City of Athens has long held environmental stewardship as an important public policy goal. Historically, they have focused on solid waste and recycling, and wellhead protection but have also recently focused on topics such as fleet vehicle efficiency, green stormwater infrastructure, and sustainability planning.

Athens City Council passed legislation in 2007 to add Title 39, Wellhead Protection Plan (WPP) to Athens City Code to protect the city's public water supply from harmful contaminants. The WPP is managed by the city's wellhead protection team which includes health department and city officials that review proposed developments within the wellhead protection zone and enforce the ordinance to minimize risks. The ordinance has been a successful model to protect their water supply, provide information to citizens regarding our water supply, and to permit private development within the zone. The ordinance is reviewed and updated as needed with recent amendments occurring in 2012 and 2016.

The 2013-2016 City of Athens Wastewater Treatment Plant Upgrade project, at nearly $18,000,000, was the largest single infrastructure project in the City of Athens in a generation. The project completely replaced the front end screening in the plant, with completely new influent pumping, 21st century mechanical bar screens, vortex grit removal, new primary and final clarifiers, state-of-the-art odor control, full backup power generation, new supervisory control and data acquisition (SCADA) system, and UV disinfection to replace the previous chemical system, as well as numerous maintenance and other upgrades. The project allows the city to produce higher-quality effluent, be postured for future

nutrient removal requirements if needed, and greatly decrease nuisance odors to the surrounding community. The project received the Southeast Section of the Ohio Water Environment Association's 2016 image award for improving the image of wastewater treatment in a community.

The City of Athens has worked closely with their solid waste district and recycling center to better serve city residents and was the first community in Ohio to offer curbside recycling service in 1984. Recent improvements include shifting to single-stream recycling collection, curbside organic waste collection to be converted to compost, and the opening of a new materials recovery facility (MRF) that separates the resource and houses the compost site. The MRF project was completed by Athens Hocking Recycling Centers, Inc. in partnership with the city, Athens County, Ohio University, Hocking County, and others. Expanded services also include an annual hazardous waste recycling drive for Athens city and Athens township residents.

The city also partners with the Rural Action Zero Waste Initiative, Ohio University, and several local non-profits and volunteers to recover unwanted food, clothing, furniture, appliances, mattresses that are the result of the annual move-out when Ohio University's spring semester ends. The 2016 move out drive estimated over 100 truckloads of materials that were diverted from the landfill. City administrators and elected officials were active with the creation on the Zero Waste Action Plan that was completed in late 2013 and was adopted by Athens City Council in 2014. The city has used the Zero Waste Action Plan as their guiding document to determine how best to move forward with solid waste collection and diversion.

In 2010, the Athens Soil and Water Conservation District (ASWCD), in partnership with the City of Athens, received a Surface Water Improvement (SWIF) Grant, to design and construct two rain gardens at City facilities. Two more rain gardens are currently planned and a new location has been selected for an additional garden. Additional public education occurs through an on-going storm drain stenciling program started in 2015, resulting in the marking of more than 50 storm drains involving nearly 36 community volunteers. Plans are currently underway to include other neighborhoods.

In 2011 the City of Athens passed Ordinance 0-52-11, amending Athens City Code Title 5 to add Section 5.07 - Storm Water Regulations and moved proactively to establish a storm water management program. In 2012, the City worked with the ASWCD to develop a storm sewer map, a storm sewer sampling program, a permit process requiring storm water pollution prevention plans for construction projects, a construction site inspection program, and illegal discharge detection and elimination program. The ASWCD has also provided storm water education and outreach programs for the City. The City has also partnered with Ohio University to address storm water issues and encourage green infrastructure such as the West Union Street Storm Water Improvement Project, the bioswale at the newly constructed SurgCenter, and a bioswale and green roof installed on Ohio University's McCracken Hall Renovation project. The ASWCD also coordinates the annual Backyard Conservation Series to better address environmental topics that urban landowners encounter with soil quality, erosion, wildlife attraction and determent, water use, and storm water quantity and quality.

The City of Athens Sustainability Commission was established by Athens City Council in 2012 and is comprised of seven volunteer citizens as well as one city council representative and an appointee from the Mayor's office. The commission is currently completing the city's first sustainability plan. A Green Fleets committee was established by the city in 2009 in order to review the vehicle fleet and identify fuel efficiency options. The city also partners with Ohio University to track the mileage on each vehicle

in their fleet and report on the carbon emissions associated with our vehicle use. The city is partnering with Nissan America to install its first electric vehicle charging station. The public can use the charger for a fee and a full charge will take about 30 minutes.

The Community Energy Savers Program was established by AEP Ohio to implement energy efficiency programs throughout Ohio. Athens County participated in 2015-2016 with a partnership led by of the Athens County Commissioners, the mayors of Athens and Amesville, and Upgrade Athens. The Athens leadership also wanted Columbia Gas to be involved. This was the first time AEP and Columbia Gas collaborated on an energy efficiency program. The CES distributed 48,000 LED lightbulbs to Athens County AEP customers, provided discounted energy audits, and awarded rebates for Energy Star appliance purchases. Athens County met the goals of the CES and was awarded $85,000 in March of 2016. Those funds will be used for energy efficiency improvements at Athens County Public Library branches.

Several city administrators and elected officials are working with the Athens Famers Market vendors and the Athens Foundation, a local philanthropy, to find a permanent home for the Market. Through their planning on this topic in the last 1.5 years, a piece of real estate owned by city has been identified as a possible location for a permanent home. Planning and funding opportunities for this site are ongoing. The current market has about 100 vendors and is the primary sales generator for dozens of local farmers and food producers.

The annual *Waterfest* program for Athens County third graders was initially developed through a partnership with the Athens Soil and Water Conservation District and the Science and Environmental Studies program at Athens High School. It has been an area institution for more than 20 years with the purpose of educating students on all aspects of water. It is an all-day field day with 25 stations; with each station presenting information about water and the environment. For many years, the Athens City/County Health Department and the City of Athens Water Department have played a part by presenting a station on clean drinking water that utilizes a ground source water model. In recent years, the City has played a greater part with the addition of a storm water station to the event. This event averages an attendance of 550 third grade students and teachers each year. In addition, Athens High School science students, teachers, and Administrators have a participating roll in the success of this event. Annually this event brings together more than 18 different agencies to promote natural resource conservation and sustainability.

Ohio University – Athens: Ohio University was chartered by the state of Ohio in 1804 and is the oldest university in the Northwest Territory. It has 8 regional campuses in addition to its main campus located in Athens, Ohio, with more than 39,000 students. Online programs further advance the University's commitment to providing educational access and opportunity. Ohio University's main campus has more than 23,000 students annually in a city with a population of approximately 25,000 residents resulting in highly collaborative relationship. The institution employs a total of 5,177 employees at all of its campuses.

In 2005, Ohio University became the first public institution in the state of Ohio to employ a full-time staff member dedicated to sustainability, thus creating the Office of Resource Conservation (now called the Office of Sustainability). In 2007 the institution signed the American College and University Presidents' Climate Commitment (now called the Carbon Commitment), which committed Ohio University to become carbon neutral by the year 2075 or earlier. These actions catapulted the University

forward as a leader in sustainability within higher education. Ohio University then developed an internal Sustainability Plan and Climate Action Plan, which has served as the platform for sustainability implementation efforts on campus. The University is constantly assessing its progress toward sustainable infrastructure and programming by benchmarking with other institutions and with its own internal data. The University believes strongly that sustainability requires the support and collaboration of all members of a community and, therefore, works to offer a platform of support to the remainder of the campus and, in some cases, the community.

Ohio University has made great strides toward meeting the benchmarks (BM) in our Sustainability and Climate Action Plans. Estimates for the first 6 months of FY16 show a 28% decrease in CO2 emissions compared to the first six months of FY15, due to fuel switching and energy efficiency initiatives, and further reductions are expected in the second half of FY16. In FY16, they made particular progress toward BM3 (renewable energy) and BM2 (energy efficiency) through: the completion of a major infrastructure maintenance project which resulted in institutional energy and water savings of 19% and 30%, respectively; the development of a comprehensive Utility Master Plan (final plan due at end of year); the hiring of two key energy administrators (Director of Utilities and Building Systems Integration Manager); signing a contract for provision of 50% of campus purchased electricity from Green-e certified renewable energy credits (RECs), and; Ohio University met its commitment to stop burning coal by the end of 2015.

The Office of Sustainability has a Sustainability Awards ceremony each year around Earth Day to recognize employees and students who have contributed to the advancement of sustainability on our campus. Seven different award categories exist in an effort to encourage environmental stewardship behaviors of various campus constituents.

Ohio University's Office of Sustainability manages a program called Sustainability Tracking and Evaluation Program (STEP). STEP works to encourage offices and departments to engage in environmentally responsible behaviors collaboratively by completing the STEP Checklist. Then, offices and departments that complete the STEP checklist are recognized campus-wide as a leader in environmental sustainability. Offices and Departments are encouraged to participate in STEP annually so as to monitor an ongoing commitment to and growth toward environmental stewardship.

In 2012, Ohio University was reporting that approximately 5% of its total annual food procurement was going toward local/sustainable food. By 2015, that number had increased to 17%. Building energy intensity decreased 19.7% from 2012 to 2015. Greenhouse gas emissions decreased significantly in the decade from FY05 to FY15. Emissions for FY15 were 24.6% lower than FY05. The main reasons for this decline were: various energy efficiency projects ranging from FY12 through FY15; conversion of solid waste from Culinary Services to compost; and offsetting 50% of electricity usage (20% of campus wide energy use) with the purchase of RECs which exceeds the goal set for 2020 for the Athens campus.

In an effort to improve alternative transportation opportunities to members of the campus and community, the University has invested over $300,000 in repairs to the University's portion of the Hockhocking Adena Bikeway, which runs through main campus; installed a bicycle repair station on campus and provided educational workshops to approximately 75 members of the campus and community; installed four electric vehicle charging stations on campus and purchased 3 electric vehicles for the University's fleet; created a pilot program which provides all individuals with a current University identification card free and unlimited rides on Athens Public Transit; and partnered with the Athens City-

County Health Department to improve signage and, in turn, bicycle/pedestrian safety, along the Hockhocking Adena Bikeway.

Campus grounds staff plant both native and adaptive plants throughout the campus which are drought tolerant and low maintenance. Particular emphasis is placed on preservation of canopy cover to mitigate heat island effect, provide carbon sequestration, and to clean and absorb storm water. In locations where exclusive native plantings occur, signage is offered to educate passersby. In the past three years, Campus Grounds has worked to increase the quantity of native plantings and butterfly gardens present on campus. This effort reduces our need to use gas-powered equipment and promotes resource conservation. Additionally, Campus Grounds works to ensure that any trees removed on campus are replaced by at least two new trees in an attempt to balance carbon sequestration of grounds-related efforts.

The per capita waste reduction realized on the Athens Campus between FY12 and FY15 was 1.71% and the FY15 recycling rate was 65.74% (excludes construction and demolition waste). As of 2012, 100% of to-go products offered in University dining halls are made of compostable materials. Facilities Management is in the process of transitioning to a web-based paperless work order system. Staff members receive their work assignments on university-supplied handheld units. This system shows great success in paper reduction and the possibility of increased employee productivity over previous systems, resulting in higher customer satisfaction.

A vehicle usage policy has been approved which gives transportation services additional authority in assisting and approving new vehicle purchases. University fleet was reduced by 48 vehicles in FY12. In 2015, Ohio University added several new Leaf and Volt electric/hybrid vehicles to its campus fleet. Fleet vehicles are tracked for usage across campus and for idling times.

Ohio University makes extensive efforts to engage its employees on its sustainability efforts and has a comprehensive education and outreach program. Seventy-four researchers at Ohio University engage in sustainability research opportunities. Any undergraduate or graduate student may enroll in a course called Environmental Studies 4832/5832: Sustainability Implementation.

Ohio University has a ban on permanent irrigation systems that rely on potable water, thus decreasing our impact on water and energy systems in the region. An estimated 9.08 million gallons of non-potable water was drawn from the golf course storm water pond for irrigation, reducing the usage of potable water by an equivalent amount.

Ohio University employs aggressive recycling requirements of any demolition and construction projects on campus. The most recent construction requirements state that contractors must “reuse, salvage or recycle as much waste as economically feasible” with a minimum requirement of 50%, by weight, of potential landfill trash/waste by recycling and/or salvage. The McCracken Hall Renovation & Addition project, to be completed in January 2017, is currently tracking 85.4% of waste being diverted from landfill. The Boyd Dining and Campus Market project, completed in August 2015, diverted 75.52% of waste from landfill. The Scripps College of Communication project, certified LEED Silver in 2015, diverted 95.74% of waste from landfill.

Ohio University is home to the largest in-vessel composting system at any college or university in the nation. The institution is capable of diverting 100% of its food waste from the landfill by sending it to the

compost facility. In 2015, Ohio University produced 600 tons of compost at the compost facility. The nutrient-rich soil amendment which is created from the process of organics recycling is then used on campus grounds, which reduces the University's need to purchase chemical-based fertilizers and promotes healthy soil development.

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