



ENCOURAGING
Environmental
EXCELLENCE

Encouraging Environmental Excellence Achievement Level Recognition

October 13, 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.

Kleen Test Products Corporation – Strasburg: Kleen Test Products (KTP) has 140 employees and is a subsidiary of Meridian Industries. They contract manufacture various bleach, hydrogen peroxide, or quaternary (ammonia-based) wipes. KTP processes the dry wipe material, adds solution to them, packages, and ships the finished products. Their primary product lines are a major brand wipe product and packaging wipes for the healthcare sector. In 2012, KTP initiated a push to operate more efficiently and in 2015 they established a goal to not dispose any wastes in landfills by 2017.

KTP created a sustainability “plant team” at the facility that meets once per month to help implement its manufacturing strategic plan and establish facility priorities. The team shares information and discusses opportunities with other companies in the Meridian Industries corporation. Facility targets are reviewed daily and tracked by spreadsheet. Their continuous improvement program uses cards that employees can fill out and turn in to suggest improved efficiencies and safety measures. If the activities recommended are implemented, the suggesting employee receives an end of the year monetary bonus. Staff may also receive “AVI bucks” for the vending machines for some of their recommendations. Employees participate on LEAN teams to implement suggestions and derive new ideas. A “Huddle Topic” is discussed during daily meetings where employees stand in a circle to identify opportunities for improvement. KTP has identified several projects as Bottom Line Impact Projects (BLIPs) and sustainability projects. Posters in the facility outline Sustainability achievements.

Prior to 2012, KTP sent most waste materials including strapping, paper, plastic and fabric waste to the landfill. In 2012 they implemented a recycling program and used one recycler for all of their waste

material. They now recycle 6 to 7 trailer loads of material every month. The materials recycled include plastic, caps, heavy cardboard cores, and paper. They perform a dumpster pull monthly to help characterize the material to continuously improve their recycling efforts. Polyester cloth scrap is sent to a recycler and we are working them to help identify recyclers for their other scrap cloth materials. They recognize they save resources by not having to pay for disposal of polyester and other fabric materials.

KTP sends 146 plastic drums, 7 steel drums and 32 totes to its drum recycler annually. They increased the use of totes to cut down on their drum use and reuse the totes inside the facility to store lotion. KTP is also installing 3,000-gallon mix tanks for lotion to reduce the use of totes and drums as well. They will feed the lotion from the tanks to totes and then transport the totes to the line. Used totes will be returned to the suppliers. They are also reviewing the ability to use a tensile test of the dry feedstock in order to reduce the generation of scrap material.

KTP works with their customers to reduce the need for add-on labels. Before the project was initiated, products had 3 labels that were affixed at their facility. They worked with their customers so labels could be printed directly onto bags resulting in a significant reduction of label waste scrap. This project reduced the use of silicon paper and label matrix resulting in a cost savings for the customer. It also enabled the product bags to be more easily recycled.

A number of energy efficiency projects have also been pursued by KTP. They are currently updating lighting to LED lamps across their facility. Their office areas were re-lamped in 2013. The production area is primarily T8s, with some 4 inch LED replacement lamps. Light sensors are available in some parts of the building. Several air pumps are being replaced with magnetic drive pumps resulting in compressed air use reduction, energy savings, and reduced maintenance.

Tech II – Springfield: Tech II is a family owned business founded in 1969 that manufactures plastic lids and containers for the food industry and a wide variety of other companies. They have two manufacturing plants in Springfield with approximately 350 employees that perform plastic injection molding, extrusion, thermoforming, in-mold labeling and printing.

Tech II has recycling programs for paper, cardboard, aluminum cans and plastic bottles. Production employees coordinate one of Tech II's recycling programs where plastic from rejected parts is recycled back into the manufacturing process. Plastic from rejected parts that cannot be recycled in this manner is sold to other companies. In addition, certain plastic bottles are saved for use in a new process that is being tested by their research and development department. Their in-mold labeling process cuts out the need for printing by incorporating the label into the actual bowl or lid of the product. This process uses a plastic label that can be ground with other plastic materials that enables it to be recycled.

Oil reclamation allows Tech II to reuse oil in their hydraulic machines. This effort has reduced oil usage by a third. This process also reduces the amount of oil contaminated water that needs picked up and treated by an outside contractor. Cost saving are achieved by purchasing less oil and the reduced number of shipments of oil contaminated water requiring treatment.

A number of continuous improvement projects have been completed to enhance recycling, increase water conservation and improve energy efficiency. One project involved replacing older toilets with modern low-flow units and installing motion activated sink faucets. Their data collection efforts indicate

they are saving an average of 0.005 cents per gallon of water used in energy costs based on reduced pump usage.

Tech II's biggest environmental achievement to date has been the installation and operation of a data collection system to monitor their conservation and waste reduction programs. This system allows them to measure water consumption in various areas of their facilities and the amount being discharged. This system also allows them to measure the amount of waste going to landfill. Data derived from this system helps them identify potential new continuous improvement projects and measure the success of prior projects.

They also conduct monthly checks in accordance with their storm water pollution prevention plan and implemented various BMPs in accordance with the plan. Tech II joined the Adopt-A-Highway program in 2015 and provide a luncheon for participating employees. This event and other activities are featured in their monthly newsletter.

Honda R&D Americas – Raymond: Honda R&D Americas, Inc. (HRA) is an automobile, motorcycle, all-terrain vehicle, lawnmower, boat engine, and jet airplane developer located in North America. HRA is engaged in developing and testing Honda and Acura automobiles, Honda power sports and power equipment products and is also taking a leading role in advancing safety and environmental technologies, in conjunction with other global R&D centers.

HRA works not only toward developing environmentally-friendly products, it also strives to minimize the impact of daily operations to the environment. The HRA Raymond facility was the first Ohio facility designated as Leadership in Energy and Environmental Design (LEED) Gold Certified by the U.S. Green Building Council in 2006. In addition, HRA has a zero waste to landfill policy which is part of a broader goal to reduce the environmental impact of all Honda's operations.

Some of the green building features used at the HRA Raymond facility include use of an ice chilling system that is more efficient and less costly than conventional air conditioning systems. The emergency generator is operated using biodiesel that reduces emissions up to 75 percent. HRA focuses on CO₂ reduction through new technology and innovations such as optimizing lighting in the design floor and throughout the facility. Occupancy sensors installed on the design floor saved 201,925 KW hours per year in energy resulting in an annual 181-ton reduction in CO₂ emissions and a savings of \$14, 639. Additional energy efficiency efforts included installing energy efficient light bulbs and ballasts on the design floor (saving 370,860 KW hours per year), removing 1,400 light bulbs and ballasts from designated areas and using natural outside lighting (saving 242,250 KW hours per year), and switching from gasoline powered mowers to equipment running on propane. These efforts result in a 572.5-ton reduction in CO₂ each year.

HRA considers environmental factors in each Honda and Acura product it designs and develops. HRA takes every opportunity to reduce a product's total environmental footprint from its component design and selection of materials to its impact at the end of its life. Accordingly, HRA engineers also consider dismantling complexity, remanufacturing components, and minimizing substances of concern. HRA encourages its suppliers to reduce packaging waste and adopt more energy-efficient processes. They also come up with new processes that minimize packaging on the manufacturing side. They use close to 95% of the same suppliers as Honda manufacturing, who are under the "Honda Green Purchasing

Guidelines" to promote the reduction of greenhouse gas emissions and other environmental impacts from the 600 OEM parts suppliers used in North America.

Environmental management accounting is fully integrated into HRA operations and occurs on a monthly, quarterly and annual basis. "Environmental" is one of the core business elements reported to plant and senior management along with "Quality", "Delivery" and "Cost". Progress towards monthly targets and activity is reported as well as any countermeasure activities taken if goals were not achieved.

Associates at HRA participate in many philanthropic events and always seek new volunteer opportunities. Associates form groups and donate their time to support community members in need. There is even a day dedicated to service and helping non-profit organizations in the area, such as United Way of Union County. Other efforts include the ODOT Adopt-A-Highway program for a two-mile stretch of highway in Union County, and Hickory Lane Farms Nursery and Landscape that provides an excellent educational opportunity for associates to learn about trees in central Ohio.

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.