

***Congratulations to the
2011 Pollution Prevention
Award Recipients!***

2011 Award Recipients

Eaton Corporation - Hutchinson Hydraulics Division

John Deere Coffeyville Works, Inc.

Collins Bus Corporation

Honorable Mention

Water District #1 of Johnson County

***Eaton Corporation
Hydraulics Division Hutchinson***

Eaton Corporation's Hutchinson facility is an internal supplier of machined components for PVE and medium duty piston pumps and gear pumps. Eaton Corporation is being awarded for its efforts in water and energy conservation.

The water reduction project consisted of: 1) installing and providing reverse osmosis (RO) permeate as boiler feedwater makeup; 2) the use of RO concentrate for the cooling towers makeup; 3) increasing the cycles of concentration in the cooling towers; and 4) changing overflow systems in the processing areas.



Ron Kaufman, Eaton Corporation; Dominic Severt, Eaton Corporation; John Mitchell, KDHE Division of Environment Director; and Tony Niese, Eaton Corporation.

The environmental advantage of the water reduction project allowed for a “greener” treatment of the water used in the boilers and cooling towers. Using RO in the boilers and cooling towers means a low Ph level which makes it easier to maintain Ph in a condensate system. These projects reduced water consumption by 8,921,396 gallons in 2010. This project also provided a fuel savings of approximately 406 MM BTUs because there is no need to pre-treat the water before using it in the boilers and coolant towers.

The energy conservation project was a lighting change that involved changing out the old 400W high pressure sodium lights to T5 and T8 energy efficient lights. The change in lighting not only reduces the company's energy use but provides brighter white light which enables the employees to view their work better. The initial cost to replace the old lighting source with the new was \$280,000, but the company will see a payback return of \$127,000 a year for a 2.2 year full return on investment.

John Deere Coffeyville Works, Inc.

John Deere Coffeyville Works, Inc, a manufacturer of pump drives, transmissions and gear related products for construction/forestry/agriculture components, is being awarded for its efforts in reduction of air emissions, waste, energy usage and water conservation.

Automated controls for tempering ovens, a factory lighting upgrade and use of high-efficiency electric motors were part of several projects taken to reduce electrical consumption by over 249,000 kWh per month.



Gary Davis, John Deere Coffeyville Works; John Mitchell, KDHE Division of Environment Director; and Alvie Hornburger, John Deere Coffeyville Works.

Filters for transmissions were received individually boxed within a large cardboard box. By working with the vendor to use a returnable shipping crate with dividers, the over packaging was eliminated. This project helped to reduce waste generation by 51 tons per year.

To reduce water usage, the condensate from roof top HVAC units was routed to cooling towers to utilize the water as make up water. This action has resulted in a savings of 36,720 gallons of water used annually.

Transmission testing is conducted utilizing diesel engines, which NOx emissions are regulated per an air permit. By replacing several diesel engines with electric motors for testing, a reduction of over 400 lbs of NOx per month was achieved resulting in lower air emissions.

In addition to these projects, a goal to reduce the use of aerosol products was established in 2007 with an average use of 140 cans a month. As of November 2010, usage was averaging 9 cans a month. In order to accomplish this, spray painting was cut out and less toxic non-aerosol products were found.

Collins Bus Corporation

Hutchinson based Collins Bus Corporation, the leading manufacturer of Type-A buses in North America, is being awarded for its efforts in water conservation and solid waste reduction.

As part of the Collins Bus quality control process, each completed bus is subjected to a water deluge that duplicates a heavy rainfall event. This process takes place in a large drive-in water test booth and is performed to insure that all buses are free of leaks before they are delivered to the customers. The water test booth contained filters to collect dirt, grit, and debris. These filters needed to be cleaned every day. The filters were located deep in the reservoir, so the water had to be drained daily in order for the filters to be cleaned.

Collins determined that the filters would work just as effectively if they were shortened. The shorter filters would allow them to be removed without the need to drain the water every day. Since the filters have been modified, the water can be re-circulated in the water test system for a week before it needs to be changed. This reduction in reservoir change outs has resulted in a savings of 421,856 gallons of water used annually and a savings of over \$1,000 in water costs and reduced personnel time.

In addition to the water conservation project, Collins implemented a reusable shipping frame for its windows. The windows used in the buses were shipped in wooden frames. All of the frames were broken down and thrown away. Collins worked with the vendor to have the windows sent in reusable metal frames. This project helped Collins reduce its solid waste generation by 340 tons per year.



John Mitchell, KDHE Division of Environment Director and Mike Strickland, Collins Bus.

Honorable Mention

Water District #1 of Johnson County (aka WaterOne)



Colleen Browne, WaterOne; John Mitchell, KDHE Division of Environment Director; Michelle Duprey, WaterOne; and John Fennell, WaterOne.

WaterOne is receiving an honorable mention for its P2 efforts in the Fleet and Building Services section. WaterOne has taken initial steps to implement source reduction projects such as reducing the amount of disposable cups and plates, reducing the amount of copy paper being used, and reducing the amount of trash receptacle liners by centralizing fewer receptacles. The facility also implemented a Green Driver Program to monitor and improve driver behaviors to reduce fuel consumption for the water district fleet vehicles.