

2018 Pollution Prevention Award Recipients

Presented at the 2018 Kansas Environmental Conference



Smithfield Packaged Meats Corp., Junction City, Pollution Prevention with Distinction Award

This award recognizes applicants who have gone above and beyond the Pollution Prevention Award additional criteria; and in this case, including P2 projects encompassing multiple processes or media, and projects easily replicated by similar organizations in different locations within the state.

Founded in 1996, the Smithfield plant in Junction City produces more than 100 million pounds of smoked sausages annually. Despite production volume increases, the plant has goals to reduce energy by five percent, water by 10 percent and landfill waste by 10 percent by 2020. Smithfield implemented three different pollution prevention projects documenting significant environmental and cost savings:

1. Food service packaging: Based on market sales, machine packing dies were modified to package bulk sausages, resulting in an annual savings of 89,700 pounds of material avoidance; 7,200 pounds of waste reduced; and a cost savings of \$327,000.
2. Links/food service packaging reduction: By purchasing a new packing machine, package sizes were reduced by 9.81 in², resulting in less material use and a lighter product to transport. Package weight was reduced by 0.00293 lbs. per unit, for a total savings of 71,701 lbs. (35.85 tons) of waste from Jan. 1 to June 9, 2018. The second machine was also replaced with a modified, narrower model, allowing the plant to utilize both machines to package the same products, saving \$56,000 in annual labor. Total annual savings from replacing these two machines resulted in 73.08 fewer tons of solid waste.
3. Pre-shower re-circulation: Installation of a liquid smoke system to improve the color of products cooked in the KSI 1 oven had a secondary effect on the plant's water use. The facility is now able to stop the constant flow of first-pass water to the sewer and save it from coming into contact with concrete, which contaminates it by food safety standards. The installation of the liquid smoke recirculation system has saved the plant 63,000 gal/week or 3.28 MMgal of water, and \$14,280, annually.



Johns Manville, McPherson, Pollution Prevention Award

This award recognizes projects that eliminate or reduce generation of pollutants or wastes at the source, or projects that conserve natural resources.

The Johns Manville facility in McPherson has been manufacturing fiberglass insulation since 1974. By implementing a cold glue elimination project, it was able to address a corporate environmental policy commitment to prevent emissions and continually improve environmental performance. Through material substitution, the cold glue system was replaced with a less-toxic, hot-melt alternative, resulting in the following environmental and worker health benefits:

- Eliminated approximately one ton of hexane emissions.
- Eliminated 1,960 lbs. of hazardous waste, saving \$1,780 annually.
- Reduced employee handling and exposure to cold glue that contained HAPS and VOCs.



Marriott Hotel, Wichita, Pollution Prevention Award

This award recognizes projects that eliminate or reduce the generation of pollutants or wastes at the source, or projects that conserve natural resources.

Nationally, Marriott Hotels has goals to reduce water intensity by 15 percent, carbon intensity by 30 percent, waste to landfills by 45 percent, and food waste by 50 percent; and to achieve a minimum of 30 percent renewable energy use. In the past few years, the Wichita Marriott Hotel has reduced annual energy use by approximately 1.7 million kWh, saving \$133,000 annually, as well as saving 1.2 tons of paper, by taking the following initiatives:

- Replaced most fluorescent lighting with LEDs and plans to be completely LED outfitted by the end of 2018.
- Upgraded the HVAC systems in several sleeping rooms.
- Updated elevators to use less energy.
- Uses durable goods for coffee instead of paper or Styrofoam.
- Provides conference attendees with one sheet of paper instead of a full tablet.
- Diverts excess food to staff or the Kansas Food Bank, instead of to the landfill.



Thank you to all Participants!