CONAGRA FOODS



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COMPANY BACKGROUND

ConAgra Foods® is proud to make the food people love, manufacturing and marketing leading branded and specialty food products to retail and foodservice customers in the United States and internationally. The company's consumer foods are found in 97 percent of America's households, and 25 of them are ranked first or second in their category. The Council Bluffs plant manufactures exclusively frozen foods brands, including Marie Callender's®, Banquet®, and Healthy Choice® meals. The plant is built on a 17-acre plot of land and employs more than 850 people.

PROJECT BACKGROUND

ConAgra Foods operates a frozen meal assembly plant located in the business district of Council Bluffs, lowa. ConAgra Foods maintains a comprehensive safety, health, and environmental management program at the plant. The program includes engineering, education, and enforcement provisions for hazard communication, spill preventions and response, hazardous waste, universal waste and oil management, wastewater, and storm water management.

INCENTIVES TO CHANGE

In 2009, ConAgra Foods outlined five long-term sustainable development goals to work toward becoming a more environmentally friendly company. One of these goals is to divert at least 75 percent of the company's solid waste from landfills. Achieving these goals will not only benefit the environment, but may also result in significant cost savings to the company as well.





RESULTS

Plant-Wide Recycling: To track the amount of recycling the plant was undertaking, the intern compiled and summarized data to create a baseline of current and historical landfill and solid waste disposal costs. The landfilled and diverted waste tonnages, as well as the associated revenue and costs, are now compiled monthly in ConAgra's Sustainable Development Reporting Tool (SDRT). An estimation was made of the types and tonnage of uncollected recyclable waste coming through the plant annually, along with total savings that could be accrued if these waste streams were recycled. If a recycling program were started, 232 tons could be diverted from the landfill, saving the plant up to \$24,380 annually.

Environmental Pillar: An "Environmental Pillar" was constructed to create awareness of the plant's current status environmentally, and to lay out what needs to be done to reach the company's sustainability goals. The pillar has four subset workstreams: solid waste diversion, water use reduction, greenhouse gas emission reduction, and environmental education and awareness. Breaking down the current status of each workstream allowed the intern to pinpoint areas of highest opportunity and brainstorm projects to target areas with the highest potential for improvement.

Wastewater Reduction: The flooding during the summer of 2011 caused a heightened awareness concerning the company's wastewater handling, and provided the opportunity to handle the liquid waste and the solids removed from wastewater in a more economical and ecological manner. The intern researched alternative disposal methods, including dewatering the wastewater sludge, rendering the liquids for animal feed, or directly land applying the liquids. Direct land application was determined to be the best option both economically and ecologically. With no capital investment, the plant would save more than \$190,000 annually by directly land applying the sludge at a nearby farm, in addition to the indirect environmental benefits of reduced vehicle emissions (due to larger load sizes and less loads transported) and elimination of the additional chemical, energy, and water usage at the municipal facility in Omaha.

CONVENTIONAL AIR POLLUTANTS AND GREENHOUSE GASES DIVERTED IN STANDARD TONS

Total for all sectors						
CO ₂	SO ₂	CH ₄	N ₂ O	CFC	PM ₁₀	
135.31	0.25	893.14	467.65	1.32	0.02	

PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
PLANT-WIDE RECYCLING	\$24,380	232 TONS	RECOMMENDED
ENVIRONMENTAL PILLAR	\$3,750		IN PROGRESS
WASTEWATER REDUCTION	\$191,662		IN PROGRESS

