HORMEL FOODS

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COMPANY BACKGROUND

Hormel Foods produces the top selling brand of pepperoni in the nation, including both classic *Hormel*® brand pepperoni in a variety of different packaging options, as well as specialty-recipe pepperoni. The Algona, Iowa, plant is approximately 166,000 square feet with a workforce of 195 employees. Pork and spices are mixed, cured, sliced and packaged to the desired specifications at this location.

PROJECT BACKGROUND

Currently, the Algona Plant has high-energy-use lighting primarily in rarely occupied areas, as well as some ineffectively placed fixtures. Recycling is also a focus in the Algona Plant, with approximately 80 percent of the landfill waste coming from casings and various plastics.

INCENTIVES TO CHANGE

Hormel Foods is conscious of their rising energy costs. A major factor in the rising cost of electricity is peak demand charge. The company has previously identified lighting and compressed air as potential areas to cut costs. Hormel Foods also has a long-standing interest in diversions of solid waste from the landfill. By finding an alternative to landfilling for certain items, the company will reduce costs and could potentially generate new revenue from responsible waste management.

RESULTS

Lighting Replacement: By analyzing lighting of freezers and refrigerated rooms of the plant, the intern identified methods to reduce annual energy consumption by more than 233,500 kWh. While this would result in a significant savings, the capital cost of the new fixtures is too high to make the investment financially feasible at this time. As technology improves, the cost of higher-efficiency lights will decrease. It is recommended that the Algona Plant revisit the project in a few years as capital costs decrease and/or lighting efficiencies improve.

Solid Waste-Recycling: The Algona Plant has been paying to transport recyclable materials to a facility in Mason City, Iowa. With the incentive to get as much weight as possible onto the trailer, recycling lightweight items such as plastics has been difficult. The intern identified a new recycling vendor who will provide transportation to their facility at no cost. This vendor also takes all types of plastics, and would pay for certain types of plastic and the company's cardboard. This system incentivized all forms of recycling for the plant.

Solid Waste-Casings: The new recycling vendor also helped the Algona Plant find an alternative for pepperoni casings that would otherwise be landfilled. The alternative vendor would incinerate the casings and recover the energy. This opportunity would reduce the plant's landfill waste by more than 50 percent, resulting in substantial savings.

Reduced Waste Hauling: The current company that transports waste to the landfill for the Algona Plant drives from Mason City and back. A local company provides the same service at a lower cost and the close proximity to the plant would reduce transportation emissions.

Solid Waste-Plastic Baling: Baled film plastics can be sold for $200 per ton. Adopting this method of collection could also reduce transportation emissions by decreasing the number of trips needed for recycling.

CONVENTIONAL AIR POLLUTANTS AND GREENHOUSE GASES DIVERTED IN METRIC TONS

TOTAL FOR ALL SECTORS							
CO_2	SO_2	CH_4	N_2O	CFC	NO_x	VOC	PM_{10}
713.70	0.59	4.09	0.20	1.33	0.33	0.07	0.02

PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
LIGHTING REPLACEMENT	$10,903	233,597 KWH	RECOMMENDED
SOLID WASTE-RECYCLING	$72,292	86 TONS	IMPLEMENTED
SOLID WASTE-CASINGS	$53,990	429 TONS	IN PROGRESS
REDUCED WASTE HAULING	$6,095	1,700 GALLONS DIESEL	RECOMMENDED
SOLID WASTE-PLASTIC BALING	$20,760	-	RECOMMENDED