

BURKE CORPORATION

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COMPANY BACKGROUND



NEVADA

Burke Corporation, a subsidiary of Hormel Foods, produces and markets fully cooked meat products for businesses. Burke manufactures more than 1,500 different products and produces approximately 90 million pounds of meat annually, which it distributes internationally. Burke produces consistent, convenient and safe products with a forty-year history and commitment to service, quality and product development. Hormel Foods bought Burke in 2007 and has continued Burke's dedication to convenient and safe products.

PROJECT BACKGROUND

After previous success with the Pollution Prevention Intern Program, Burke hosted a 2010 intern to analyze natural gas usage and reduction. During the course of the project a natural gas baseline was created, which assisted in focusing subsequent reduction projects on the largest utility users. The intern examined boiler economizers, insulation, production line steam reduction, oven water reuse, and Light Emitting Diode (LED) lighting.

INCENTIVES TO CHANGE

Adopting sustainable practices will assist Burke with offsetting the rising cost of utilities. The company is continually exploring new and innovative ways to conserve resources and decrease fixed costs.

RESULTS

Boiler Economizer: Burke's boiler system efficiency could be dramatically improved through the installation

of a condensing stack economizer. Installing a boiler economizer system on Burke's largest boiler would result in yearly savings of 174,700 therms of natural gas.

Insulation: Insulation projects in Burke's boiler room, mechanical rooms, and wastewater plant would significantly reduce natural gas usage by the plant's hot water and steam systems. Installing 600 feet of pipe insulation and 100+ removable insulation blankets, and insulating four steam tanks would result in an annual savings of 41,536 therms.

Oven Water Reuse: Water used in an oven cooling system can be reused through a process change. The process change could save the company 575,000 gallons of water and 4,350 therms per year.

Production Line Steam Reduction: Regulating steam flow between production batches could reduce 1.8 million pounds of steam per year. Decreased steam usage would result in the reduction of natural gas by 24,000 therms, water by 225,000 gallons, and an additional reduction in water treatment chemicals used in the wastewater plant.

LED Lighting: Ten LED lamps were installed in one section of the cold storage area, as a test to observe the performance and light value of LEDs in cold conditions. If the test shows the LEDs provide satisfactory light, the remaining lamps in the cold storage area will be converted. The goals of the LED project are to reduce electric usage, improve lighting quality, and reduce cooling demand. Another advantage of using LED technology is that it would allow Burke to turn off the freezer lights, due to the instant on/off capability of LED.



CONVENTIONAL AIR POLLUTANTS AND GREEN HOUSE GASES DIVERTED IN STANDARD TONS

Total for all sectors					
CO ₂	SO ₂	CH ₄	N ₂ O	CFC	PM-10
169.76	0.49	312.66	37.63	2.10	0.04



PROJECT	ANNUAL COST SAVINGS	ENVIRONMENTAL RESULTS	STATUS
BOILER ECONOMIZER	\$113,000	174,700 THERMS	RECOMMENDED
INSULATION	\$27,580	41,536 THERMS	RECOMMENDED
OVEN WATER REUSE	\$11,900	575,000 GALLONS 4,350 THERMS	RECOMMENDED
STEAM CHAMBER STEAM REDUCTION	\$20,400	225,000 GALLONS 24,130 THERMS	RECOMMENDED
LED LIGHTING	\$1,159	14,067 KWH	RECOMMENDED