

Project Overview



Tyson Foods, Inc.

Industrial Placement Intern: Chad Abernathy

Major: Biological Sciences

School: Missouri University of Science and Technology



Company Background

Tyson Foods, Inc. in Omaha, NE processes and packages hog bellies into various bacon products, such as hickory smoked bacon, bacon bits, pizza toppings, precooked bacon and a number of other private-label items. The plant employs approximately 900 people on two shifts five-days per week with an occasional need for the employees to work on Saturdays and/or Sundays.

Project Description

The plant's environmental manager sought assistance from the Partners in Pollution Prevention (P3) program with the facility's recycling program. A waste analysis was conducted and baseline data collected to identify waste streams and the processes contributing to waste generation. The main goal for the summer was to begin to track waste and implement a recycling program. This included finding an appropriate and effective location for a recycling center within the plant and evaluating the purchase of a baler for recycling materials. Several source reduction opportunities were also recommended such as changing the packaging to reduce the cardboard and plastic content.

Pollution Prevention Benefits

Benefits of an expanded recycling program and packaging changes include increased revenue, disposal cost savings, and reduced waste sent to the landfill. Indirect or intangible benefits include

- eliminating 28 metric tons CO₂ equivalents from the atmosphere annually, and
- decreasing the demand for landfill space to dispose of waste.

Results

The pollution prevention (P2) results are presented in Table 1.

Table 1: Pollution Prevention Results

P2 Opportunities	Potential Added Revenue	Annual Cost Savings	Reduced Landfill Waste
Source reduction opportunities from changes in packaging		\$54,000	11 tons/yr
Hire full time trash collector at current recycling levels	\$64,000		1,300 tons/yr
Increase and expand recycling program	\$3,500	\$8,000	181 tons/yr
Change recycling vendor	\$27,000		
Total	\$94,500	\$62,000	1,492 tons/yr