

PROJECT OVERVIEW

Industrial Assessment Team Leader & WasteCap Engineering Intern Manager:

Christian New

Major: Civil (Environmental) Engineering

School: University of Nebraska-Lincoln



SUMMER PROJECTS

WasteCap Nebraska is a non-profit organization dedicated to helping businesses design and implement waste reduction programs that impact their bottom line through education, technical assistance, and recycling market development. In 1997, WasteCap joined with the Partners in Pollution Prevention (P3) Program to expand its technical offering and leverage the synergy that exists between the two organizations. During the summer of 2008, Engineering Intern Manager at WasteCap served as the industrial assessment team leader and provided pollution prevention technical assistance to two businesses, Lindsay Manufacturing, a manufacturer of center pivot irrigation systems in Lindsay, NE and Proctor and Gamble's Iams pet food facility in Aurora, NE.

PROJECT DESCRIPTIONS

The project at Lindsay Manufacturing focused on energy usage particularly in the areas of HVAC (heating, ventilation and air conditioning), boiler operation and wastewater evaporation. It was suggested that a wastewater evaporator could save money and natural gas. At Proctor and Gamble (Iams), a general waste assessment was performed. Key recommendations included employee training, expansion of the recycling program and installation of motion detectors for energy efficiency.

POLLUTION PREVENTION BENEFITS/RESULTS

The Table 1 summarizes environmental impact of the the work Accomplished:

Table 1. Summary of Pollution Prevention Benefits and Savings

Company	Investment	Annual Savings	Annual Cost Savings	Simple pay back (yr)
Lindsay	\$175,164	162,300 Therms of natural gas 1,300,000 kWh of electricity	\$100,684	1.7
Iams	\$6,000	1,100,000 lb solid waste 12,300 kWh of electricity	\$30,600	0.2
Total	\$181,164	162,300 Therms of natural gas 1,300,000 kWh of electricity 1,100,000 lb solid waste	\$131,284	