

Project Overview

Small Business & Industrial Assessment

Intern: Jason Thoendel

Major: Mechanical Engineering

School: University of Nebraska – Lincoln



Summer Project

The 2007 summer project included conducting two new waste assessments and four reassessments of small businesses in eastern Nebraska and assisting with industrial assessments in northeast and southeast Nebraska. Reassessments were performed for the Lancaster County Extension Office, a Lincoln campground and RV Park, a lighting shop, and an equipment manufacturer. A public education presentation was given and two pollution prevention articles were written for public education. Part of the project consisted of working at several events for the Extension office. Finally, a part of the summer project consisted of assistance with an annual dry weather and storm water runoff monitoring project for the City of Lincoln.

Waste Assessments

Waste assessments were conducted with three businesses, including a recreational vehicle campground, a manufacturer of electrical components, and several city swimming pools and golf courses. These waste assessments focused on reducing natural gas consumption and Hydrochloric acid use, and solid waste disposal, but recycling and heating cost reductions were also investigated.

Education

The 2007 summer project included giving one public presentation and writing two articles for the Lancaster County Extension NebLine newspaper. The presentation was given at the Bright Lights youth camp to middle school-aged children to introduce the concept of sustainability. Approximately 30 people learned about pollution prevention through this presentation.

Results

Various pollution prevention opportunities were identified for the businesses assessed. These opportunities have the potential to save the businesses money by reducing energy consumption, reducing waste disposal costs, and diverting waste from landfill through recycling. One opportunity was identified to prevent 360 therms of natural gas from being consumed per year, and another to reduce employee exposure to hazardous chemicals. Combined results of the other pollution prevention opportunities are presented in Table 1 below.

Table 1 – Summary of Pollution Prevention Benefits

Cost Savings	Solid Waste Diverted from Landfills (lbs)	Hazardous materials Reduced (lbs)
\$12,790	354,400	79,664