

Project Overview

Industrial Assessment Team Intern: John Ward

Major: Civil Engineering

School: University of Nebraska-Lincoln

Project Description

The 2010 summer project included conducting technical assistance as a member of the Industrial Assessment (IA) team, and public educational activities through the Lancaster County Extension Office. John worked with the IA team to compile the class practice assessment for the Nebraska Department of Roads (NDOR) Operation Division headquarters in Lincoln, Nebraska. He had a leading role in the waste assessments of three businesses in Lincoln, Nebraska: Ameritas Group, Hofeling Enterprises and Celerion. He also performed reassessments at Celerion and at Travelers Lodge in Beatrice, Nebraska. John worked with the Extension Office to promote pollution prevention through community education. He also prepared two articles for the monthly Neblina newspaper and assisted with the Clover College 4-H Camp and Lancaster County Fair.



Other Opportunities

Additional community education opportunities included giving a presentation at the UNL Bright Lights engineering youth camp and volunteering for the 2010 USA National Special Olympics. During the Bright Lights camp, John gave a presentation to middle school students about life-cycle assessments and how proper planning and design can reduce or prevent pollution. At the Special Olympic Games in Lincoln, Nebraska, he worked with the green team to facilitate recycling and encourage people to participate in recycling at the events.

Impact

Various pollution prevention opportunities were identified for the businesses assessed. These opportunities had the potential to save money, reduce energy and water consumption, divert solid waste from the landfill, and reduce greenhouse gas emissions. Table 1 below reflects the potential annual results of the pollution prevention assessments performed.

Table 1: Summary of Potential Annual Impact

	Cost Savings \$/yr	Water Savings Gal/yr	Electricity Savings kWh/yr	Natural Gas Savings Therms/yr	Solid Waste Savings Lbs/yr	Hazardous Waste Savings Lbs/yr	Greenhouse Gas Savings MT CO2E/yr
NDOR Administration Building Compiled Report	\$35,200	252,750	12,700	70,000	50	-	368
Ameritas Group	\$25,500	-	900	-	34,000	-	72
Hofeling Enterprises	-	-	-	-	150,000	-	10
Celerion	Not quantified	-	-	-	-	Not quantified	-
Total	\$60,700	252,750	13,600	70,000	184,000	Not quantified	450