

## Project Overview

**Industrial Assessment Team Intern:** Katie Clear

**Major:** Environmental Studies

**School:** University of Nebraska-Lincoln



## Project Background

During the summer of 2010, several projects were completed including four waste assessments, one reassessment of a past intern's work, and initial work in the hospitality industry. The waste assessments were conducted at a variety of industries, from fuel oil additives manufacturing to ethanol production and trophies assembly. Based on the waste assessments, technical assistance was provided to the businesses in an effort to reduce pollution at the source and minimize waste.

## Project Description

One reassessment was conducted at Nemaha County Hospital in Auburn, Nebraska where an intern completed a waste assessment in 2008 to identify progress made on implementing previous recommendations and to encourage subsequent action. The four waste assessments were conducted for a government agency in Lincoln, a fuel oil additives manufacturer in Omaha, an ethanol plant in Fairmont, and trophy and awards shop in Lincoln. The intern also visited 37 hotels/bed and breakfast establishments to inform management about technical assistance available through the P3 program.

## Pollution Prevention Benefits and Results

Benefits that can potentially be derived from implementing the recommendations made during the four waste assessments are summarized in Table 1 below.

**Table 1. Summary of Potential Benefits**

| Facility     | Cost Savings (\$/yr) | Energy Savings (kWh/yr) | Solid Waste Diverted (lb/yr) | Hazardous Materials/Waste Avoided (lb/yr) | Water Conserved (gal/yr) |
|--------------|----------------------|-------------------------|------------------------------|-------------------------------------------|--------------------------|
| A            | \$22,410             | 25,260                  | 7,810                        | 9,700                                     | -                        |
| B            | \$23,500             | -                       | -                            | 16,500                                    | 1,600                    |
| C            | \$1,800              | 28,000                  | 1,550                        |                                           | 28,000,000               |
| D            | \$1,710              | 24,350                  | 420                          |                                           | -                        |
| <b>Total</b> | <b>\$49,420</b>      | <b>77,610</b>           | <b>9,780</b>                 | <b>26,200</b>                             | <b>28,001,600</b>        |

Indirect or non-quantifiable potential benefits from the projects completed included the following:

- Companies continue actively pursuing pollution prevention activities
- Use of product(s) labeled as Design for the Environment (DfE)
- Reduced employee exposure to hazardous materials
- Reduced regulatory burden related to hazardous materials and waste use
- Reduced mercury sent to landfill
- Reduced greenhouse gas emissions by approximately 270 metric tons of carbon dioxide equivalents per year
- Capturing/sale of 748 million pounds/year of carbon dioxide emissions