Project Overview

Industrial Assessment Team Intern: Michael Florek **Major**: Civil Engineering **College**: University of Nebraska-Lincoln



Project Description

Over the summer of 2011, Mike Florek worked with a four-person Industrial Assessment Team conducting reassessments of past projects and providing new technical assistance. The team provided service to clients from various industries including medical, sporting equipment manufacturing, insurance, waste water treatment, and airport maintenance. Projects were located in Lincoln, Omaha, Aurora, and Louisville, Nebraska.

Mike Florek was lead consultant for four projects. The first project had several components, including oil management, water use, parts washers, and aerosol cans. Recommendations included recycling used oil filters and installing a timer in a vehicle wash bay. The second projected was assisting a manufacturer with writing an industrial storm water release permit. The last two projects were solar power feasibility analyses for two waste water treatment facilities.

Pollution Prevention Benefits and Results

Select impact data from those pollution prevention projects are reflected below in Table 1. These represent the recommendations which are most likely to be accepted by the clients assisted.

P2 Opportunity	Annual Savings / Reduction	Other Intangible Benefits
Eliminate one parts washer	- \$600 - 208 lb. hazardous waste 5 MT CO ₂ e	- Removal of flammable, volatile solvents
Recycle used oil filters	 800 lb. steel solid waste 1 MT CO₂e	- Trapped oil can be reclaimed and reused
Install countdown timer in vehicle wash bay	- 25,000 gallons water - 4.29 MT CO ₂ e	- May also save time spent washing vehicles
Implement storm water pollution prevention plan		 Meet NDEQ requirements Cleaner, safer workplace
Run administration buildings with solar power	- \$1,700 - 32,200 kWh - 30.8 MT CO ₂ e	- Lead other small facilities in sustainable energy practices

Table 1: Select Potential Impact Data from Pollution Prevention Projects