

**Project Overview:** Reassessment of LES



**Intern:** David Mabie

**Placement:** Class Only

**Major:** Biological Systems Engineering

**School:** University of Nebraska-Lincoln

**Project Description**

During the summer of 2008, David Mabie conducted a follow up reassessment on work done by the University of Nebraska-Lincoln Partners in Pollution Prevention (P3) class students. The 2006 class assessment of the Lincoln Electric System (LES) facility was focused on identifying and providing pollution prevention suggestions for the vehicle maintenance garage and material storage area. The purpose of the reassessment was to evaluate the status of implementation of each recommendation made in 2006.

**Pollution Prevention Benefits**

Participating in the Partners in Pollution Prevention (P3) program demonstrates LES' work towards pollution prevention and its commitment towards environmental stewardship. Further implementation of recommendations within the facility is planned and encouraged. The original recommendations have helped to instill increased awareness about pollution prevention opportunities within the facility. The general recommendations such as, creating a pollution prevention policy, promoting "cause champions", suggesting employee input and establishing goals will also help to promote this awareness.

**Results:**

In total 12 of the 20 pollution prevention suggestions made in 2006 have been implemented as suggested or with modification, with two more likely to follow soon. The recommendations implemented have diverted solid waste from the landfill, reduced water and electricity use, and increased awareness of safety. The total results can be seen in Table 1, below.

**Table 1. Summary of Total Impact**

<b>Opportunity Implemented</b>	<b>Solid Waste Diverted</b>	<b>Other</b>
Use natural light instead of metal halide lamps		Energy reduction quantified
Implement an aerosol can recycling system	72 lbs/yr	
Decrease water usage in vehicle washing area		Water savings not quantified
Move outdoor oil storage to shaded area		Provides safety benefit and reduces risk of spills
Decrease or eliminate outdoor storage		Provides safety benefit and reduces risk of spills
Recycle wooden pallets	13,125 lbs/yr	
Utilize wooden cable reel cycling program	140,000 lbs/yr	
Adjust sprinkler system		Water savings not quantified
<b>Total savings</b>	<b>153,197 lbs/yr</b>	