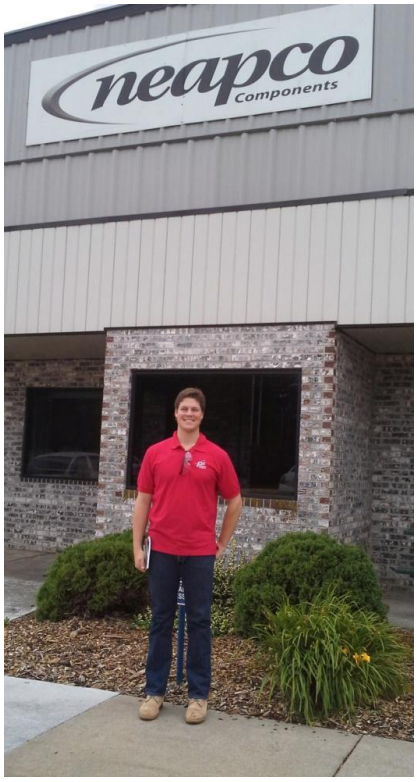
Industrial Assessment Team Intern: Tanner Gosda
Major: Chemical Engineering
School: University of Nebraska- Lincoln

Company Background:
During the summer of 2015, Tanner Gosda led the Industrial Assessment Team's (IAT) engineering analysis of a Tyson beef production facility. During the rest of the summer, Tanner also assisted in the analysis of many other projects lead by the P3 team. These businesses ranged from manufacturers of F-150 drive shafts to makers of church pews. Waste assessments performed at these locations focused on lighting, solid waste, and electrical usage. Based on the findings during the assessments, technical assistance reports were provided to each organization to identify pollution prevention opportunities.



Project Description:
The three waste assessments were conducted at a variety of businesses including: Tyson beef production in Lexington, NE; NEAPCO manufacturing facility in Beatrice, NE; and Hughes Brothers in Seward, NE. The projects focused on the following: water use and consumption, lighting structure and electricity use, and fiberglass rebar waste respectively.

Pollution Prevention Benefits and Results:
Throughout the summer, various pollution prevention opportunities were identified for the businesses. The following table summarizes the quantifiable potential pollution prevention benefits.

Table 1. Summary of Potential Benefits

Facility	Annual Cost Savings per year	Energy Savings (kwh/yr)	Nat. Gas Savings (MMBtu/yr)	Solid Waste Diverted (lbs/yr)	Water Conserved (gal/yr)	GHG Reductions (MT CO_2e/yr)
Tyson Beef Production	$61,100	-	9,600	-	48,100,000	655
NEAPCO	$60,000-$70,000	900,000-1,000,000	-	-	-	700-750
Hughes Brothers	$300	-	-	13,000	-	-
Total (max)	**$131,400**	**1,000,000**	**9,600**	**13,000**	**48,100,000**	**1405**

Other benefits include:

- Reduce consumption of antimicrobial acids (PAA) and neutralizing agents (NaOH)
- Brighter lighting and environment for assembly and floor manufacturing workers
- Creating new relationships with potential business partners for future endeavors