

Project Overview

Small Business Assistance Intern: Laura Tiehen

Major: Environmental Studies

School: University of Nebraska-Lincoln



Companies Assisted

WasteCap Nebraska is a non-profit recycling organization that works with businesses throughout Nebraska to help implement recycling programs. Their staff of 2.5 FTE provides free, confidential, non-regulatory, waste reduction and recycling services to Nebraska businesses. They offer on-site assessments, employee training, workshops and product recycling research as well as recycling contract management services.

Lincoln Electric System (LES) is the power utility located in Lincoln, Nebraska. LES services approximately 200 square miles within Lancaster County in Nebraska, including the cities of Lincoln, Prairie Home, Waverly, Walton, Cheney and Emerald. Its mission is to provide energy and services of superior value and enhance growth and development of the greater Lincoln area. The primary goal of its 450 employees is to provide an adequate and reliable electric supply at the lowest possible cost to more than 105,000 residential customers and 15,000 commercial/ industrial customers. A waste assessment was conducted for their Walter A. Canney Service Center.

Project Descriptions

Various assistance was provided to WasteCap Nebraska throughout the summer. The primary assistance was research and a written report, entitled Recycling Organics Initiative, documenting the ability to recycle organics at a local grocery store chain. The goal of the project was to create a market for this material/approach, with the end product being usable compost created from organic waste generated by grocery stores. This research will be used to write a grant asking for monetary assistance to start a pilot program. Waste assessments, largely focused on recycling, were also performed.

As part of training for the 2006 class of interns, a waste assessment was conducted for the Lincoln Electric System's Walter A. Canney Service Center. Each student researched and prepared an individual report about one specific process. These 15 reports were compiled into one comprehensive report, with a focus on pollution prevention opportunities that LES may want to consider implementing.

Pollution Prevention Benefits

The Recycling Organics Initiative report introduces the concept of diverting organic food waste from the solid waste stream. Because there is currently no market in Lincoln for the recycling of organics with the intention of creating compost, the benefits will include greater efficiency at local grocery stores and a diversion of 175 tons of solid waste from the landfill each year.

Lincoln Electric System currently uses an environmentally friendly company to service the parts washer, however, with the installation of a distillation recovery unit they can eliminate this service and the hazardous waste that it creates. Other pollution prevention benefits include eliminating the

wooden reels that cables are shipped on by switching to a reeless packaging option and eliminating an outdoor oil storage rack during the summer months when the excess fluid is not needed.

Results

The Recycling Organics Initiative program has the potential to save B&R Stores, Inc. significant amounts of money on their refuse bills. This is the start of a potentially large pilot project in the city of Lincoln that would create a new market for a recyclable material, promote the concept of source separation for waste in all participating stores, and expand an environmental ethic within each store. An estimated 175 tons per year of solid waste would be diverted from the landfill, and savings of up to \$28,500 could be realized.

Alternative methods for washing the Lincoln Electric System vehicles could save 79,000 gallons of water annually and in addition to modifications to the sprinkler system, an estimated 979,000 gallons of water could be saved annually, which would save the company money and increase the efficiency of the facility. Tables 1 and 2 below provide the total annual savings from suggestions.

Table 1: Total P2 Savings for Lincoln Electric System

Solid Waste (lbs)	Water (gal)	Electricity (kWh)	Money (\$)
190,000	979,000	3,808	\$18,100

Table 2: Total P2 Savings for B&R Stores, Inc.

Solid Waste (lbs)	Money (\$)
350,000	\$28,500