Maytag

CASE SUMMARY 13

MAYTAG APPLIANCES

Newton Laundry Products
Newton, Iowa
Jasper County

Intern: Mathew Saur
Major: Civil Engineering
School: Iowa State University

The Company

Maytag Appliances designs, manufactures, and markets Maytag, Amana, Jenn-Air, Magic Chef, Admiral and Dynasty brand home appliances. Newton Laundry Products is a division of Maytag Appliances. Newton Laundry Products (NLP) manufactures Maytag washers and dryers for home and commercial use. There are 2,749 employees working for Newton Laundry Products in Newton, Iowa.

Project Background

The purpose of the Pollution Prevention Intern project was to reduce the generation and subsequent release of hazardous solvents and solvent contaminated rags. A reduction of non-hazardous wastes going to the Newton Landfill was also a priority of the intern.

Incentives to Change

One of the 3 major strategic initiatives at Maytag for the 2002-year was to reduce costs. Pollution Prevention was seen as a way to reduce operating and compliance costs and, at the same time, improve worker safety, increase environmental protections and reduce the possibility of future liability costs.

Results

Significant environmental benefits and cost savings can be achieved at Maytag Appliances - Newton Laundry Products. Five pollution prevention and waste reduction options were explored. These options and their annual savings are:

A solvent is used in the paint-finishing department at NLP to flush the paint lines and bells during production. This solvent flush is collected and sent off-site for distillation. An on-site solvent reclamation unit was recommended as a cost saving opportunity. The still could save money by eliminating the $21,000 annual cost of off-site reclamation and with 20% more of the solvent being reclaimed, NLP would save $12,890 annually on make-up solvent. After labor and operating costs are taken out, it is estimated that the reclamation until could save NLP $20,600 per year and have a payback period of less than 1.5 years if implemented.

Hazardous solvents are used on the assembly lines at NLP to remove oil and grease from washers and dryers. The solvents are also used as a surface cleaner before touch-up paint is applied. These rags are collected and incinerated as hazardous solvent contaminated rags. An alternative solvent was recommended that is non-hazardous and could be laundered. Testing of the alternative solvent needs to be done to see if it will perform as well as the current solvents.

Savings would come from eliminating hazardous waste costs and eliminating the purchases of new rags. A decrease in hazardous waste training and reporting would be another cost benefit.

As a cost savings opportunity, it was recommended that NLP bale their cardboard instead of compacting it. Baled cardboard has a much higher market value than compacted cardboard. It was recommended to place multiple balers at points of cardboard generation to decrease transportation within the plant. A recycling company offered balers to NLP at a lease price and will collect the bales without hauling fees. By educating employees on cardboard recycling procedures, it is believed that an additional 220 tons of cardboard could be diverted from the landfill each year.

It was recommended that NLP divert the 138 tons of stretch wrap that it sends to the landfill each year and bale it, as an environmental and cost savings opportunity. Baling stretch wrap would represent cost savings by eliminating landfill tipping and hauling fees as well as earning money for the baled stretch wrap.

It was recommended that NLP divert the 185 tons of plastic washer and dryer parts that it sends to the landfill each year and sell it as a recyclable product. Almost all of the plastic scrap parts are reground and reused at NLP. The few parts that are not reground could be baled and sold to a recycling company.

Newton Laundry Products include 1,086,000 pounds of solid waste diverted from the landfill each year and the elimination of 560 pounds of hazardous wastes. If all opportunities are implemented, cost savings could reach $167,000 per year.