

## **Project Overview**

Behlen Mfg. Co.  
Columbus, NE

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Major: Chemical Engineering  
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### **Behlen Mfg. Co.**

Behlen Mfg. Co. is an employee-owned company that is involved in the metal machining and finishing industry. Behlen's products include agricultural gates, grain bins, fence panels, metal buildings, dog kennels and stock tanks. Most of these products are either galvanized or painted on site. Behlen has about 800 employees at the Columbus, NE location. The facility's main building covers 842,000 square feet and contains a wastewater treatment plant, storage buildings, a large parking lot, and uncovered outdoor storage.

### **Project Description**

Throughout the summer of 2005, a waste assessment of Behlen Mfg. Co. was conducted. From this waste assessment, it was found that Behlen has already implemented many pollution prevention strategies including: 1) scrap metal recycling 2) paper recycling 3) beta crystal recycling from galvanizing and 4) puncturing and recycling of aerosol paint cans. Nevertheless, other opportunities for waste reduction as well as cost savings, were identified at Behlen. These areas include:

- Paint-line adhesion/chemicals
- Scrap wood
- Paint soaked floor dry

### **Pollution Prevention Benefits**

Implementation of the recommendations will result in a financial benefit for Behlen Mfg. Co. from reducing the amount of solid waste sent to the landfill, raw materials purchased, and treatment of waste. Intangible benefits such as maintaining a good company reputation of quality through improved products is priceless.

### **Results**

Table 1 below lists the opportunities identified during the waste assessment, and shows the possible benefits from implementing these recommendations.

**Table 1. P2 Opportunities and Benefits**

<b>P2 Opportunities</b>	<b>Benefits and Savings</b>
Changing substrates for Behlen Buildings painted products	Intangible benefits such as company reputation for quality and extended warranty
Changing chemical in paint-line pretreatment	\$141,515/year
Buying truck for scrap wood Waste Exchange	\$10,210/year
Implementing application and clean up program for paint soaked floor dry	\$5,495/year
Changing landfill for paint soaked floor dry	\$1,664/year
<b>Total Possible Savings</b>	<b>\$158,884/year</b>