

Ohio Printer Reduces Hazardous Waste

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Robin Enterprises Co. is a 40-year old family-owned lithographic printing business in Columbus, Ohio, with 127 employees. A few years ago, as waste generation and management responsibilities increased, they wondered how to improve the company's waste management.

In 2003, the company purchased a blanket wash distillation unit (approximately \$40,000). Blanket wash is a solvent, usually a combination of alcohol and water. It cleans the excess ink from the printing press and plates.

They phased it into operation gradually, carefully monitoring the quality of recycled blanket wash. Today, all blanket wash is recycled.

Cost Savings

Robin Enterprises saves approximately \$34,000 a year in raw materials (\$13,000) and hazardous waste disposal (\$21,000) costs. They purchase less "new" blanket wash and add a "rejuvenator" to the recycled wash before using it to make sure it meets their performance expectations. The unit produces recycled blanket wash, water and "still bottoms." The still bottoms are disposed of as hazardous waste. There are two filters on the unit; one is a reusable metal screen mesh filter where solids are periodically scraped into the drum of still bottoms and the other filter screens water. Water, a by-product of the distillation process, is high quality and is re-used in the printing process. Since they must pre-treat all water used in their printing process, this also saves them money. Their water use has decreased by approximately 20 percent since they now reuse the water from the distillation process.

Reduced Environmental Regulation

Robin Enterprises used to be a large quantity generator (LQG) of hazardous waste. This year the company will probably qualify as a conditionally exempt small quantity generator (CESQG) of hazardous waste. This eliminates many of the regulatory requirements for the company, making compliance with environmental regulations easier. In 2003 they disposed of approximately 105 55-gallon drums of hazardous waste. This year they anticipate generating only four 55-gallon drums of still bottoms for hazardous waste disposal. This is a **96 percent reduction** of hazardous waste disposed.

Other

Robin Enterprises was surprised with the decreased amount of labor required to run the unit. The unit runs for

two shifts, but only one employee is needed for two hours a day to operate it. They estimate the actual payback or break-even point on the unit was about six months.

Robin Enterprises worked closely with the fire department on installation of the unit. And although additional electrical wiring was needed for the unit, the cost of the extra electricity to run the unit is negligible. They feel the money they save on water treatment covers the additional cost of electricity.

Ohio EPA would like to thank Robin Enterprises for sharing their experience with us. If you have any questions about the company featured in this article, please contact Duane Moore at dmoore@robinent.com or (614) 891-0250. You may also visit them at www.robinent.com/.