KY EXCEL
KENTUCKY EXCELLENCE IN ENVIRONMENTAL LEADERSHIP

Case Study of
Gallatin Steel

Keys to Success

- Project Description
- Economic Value
- Challenges & Advice
- Benefits
- Stewardship Meaning

Overlooking the Ohio River in Gallatin County, Gallatin Steel is spread across almost 1,000 acres and employs 450 people. Massive rolls of steel, each weighing approximately 20 tons, stand in rows outside the mill. A plant of this size creates a lot of waste materials, but Gallatin is not sending all that waste to landfills. The company has reorganized and centralized a recycling area within the laydown yard to make it more convenient, efficient and safer for employees. Some of the recycled materials include wood, copper, stainless steel, mixed metals, plastic bottles, cans, electric motors, aluminum, brass and universal waste. In addition, employees are encouraged to bring materials from home to recycle. Participation by the employees bringing materials from their homes has exceeded the company's expectations, creating a need for a larger area to gather recyclables.

> "Recycling is a change in the culture; it's a responsibility more than a chore and is expected. Our goal is to continue to increase our recycling rate."

Recycling is not limited to the steel mill and yard. Chris Melton, environmental manager, says about the recycling project, "Office areas have tubs to collect paper, cardboard, aluminum cans and plastic bottles. Used balers were purchased for cardboard, shrink wrap and plastic bags, and those baled materials are stored in a semi trailer headed to the recycling company. Sheds to store bagged bottles and cans were placed near the compactor so that employees did not have to walk any further than previously to take out the trash or recycling."

Gallatin recycles 99 percent of the hazardous waste generated at the facility. Their largest hazardous waste stream, electric arc furnace dust, is sent to a facility that recycles the metal oxides found in the dust. Used oil is collected and resold to a refining company. Undamaged pallets are sold and reused in other applications. Gallatin's wood waste is crushed by the landfill and used for slope stabilization.

Not only does recycling affect the company's environmental impact, but it also impacts its bottom

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line. In 2010, Gallatin recycled 21 tons of paper, cardboard and plastic; 234 tons of metal; 13,625 pallets and 39,387 gallons of oil. The combined income from these recyclables was over $75,000. Company officials are convinced that there is definitely an economic value to the project.

Regardless of the value produced, any project presents challenges and offers opportunities to learn from mistakes.

"We have learned a lot of tough lessons regarding recycling," says Melton. "Recycling has to be easy. You have to have good communication and management support. Communicate results in terms familiar to your production process, such as pounds or recyclables per ton of steel produced."

The plant recycling area contains bins for a variety of materials.

Melton and Patrick Underwood, environmental coordinator for Gallatin Steel, learned several key lessons during the start up of their recycling program. Their suggestions are to be flexible because one solution does not work for all areas. A recycling program should not be viewed as a money-making activity, although money will be saved. Employee involvement is a critical aspect to maintaining a sucessful recycling program. This requires creative ways of communicating program changes and successes to employees. The recycling program and the recycling market are constantly changing, so communication is critical to avoid surprises. Visit a successful recycling program to capture ideas that can be successfully implemented at your facility. Verify points of generation and volumes from a material flow study, and identify departments' specific needs and limitations.

For the company's recycling program, Melton and Underwood found that one of the benefits of being a KY EXCEL member is the networking opportunities. Representatives from Gallatin met another member who was happy to accept the electronics that the steel company wanted to recycle.

Recycling bins are also located inside the steel mill for convenience.

Melton says, "Recycling is a change in the culture; it's a responsibility more than a chore and is expected by our management. Our goal is to continue to increase our recycling rate."

Underwood agrees and says, "Our associates have grown to appreciate Gallatin Steel's program, especially the home recycling. Recycling is the right thing to do."

Helpful Hint: **Employee involvement in a recycling program is a critical aspect to being successful. Make it easy and communicate the benefits.**