

[Solid waste management folks, please take a bow](#)

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Sustainability Desk

By Renae Hesselink
VP of Sustainability
Nichols Paper & Supply

For all of you Solid Waste Management people out there, now more than ever you need to keep up the hard work you've been doing for many years. We are at a tipping point. Take a bow for your persistence in educating people on the importance of reducing waste, recycling, and for promoting this cause when it wasn't so popular.

Early in 2008, numbers released by the Michigan Department of Environmental Quality estimated that current Michigan landfills had an average of 22 years of remaining disposal capacity, and that 19 percent of our landfill waste comes from Canada. We *must* do something about reducing the amount of solid waste we generate, and LEED (Leadership in Energy and Environmental Design) certification addresses this issue through the various credits that can be earned.

Certifications for both LEED for New Construction (NC) and LEED for Existing Buildings (EB) have prerequisites that include a recycling program and credits available for the purchase of materials made from recycled content, sustainable materials or materials reuse.

Both also address construction waste management. A typical commercial construction project generates 2.5 pounds of solid waste per square foot of floor space. For example, a 100,000-square-foot new construction project produces approximately 250,000 pounds (125 tons) of waste.

Managing and reducing site waste has become a competitive advantage for construction companies. A LEED credit is available for diverting 50 percent of construction and demolition debris from the landfill and incinerator, and an added credit is available if that figure reaches 75 percent. For LEED for New Construction certification, an Exemplary Performance Innovation in Design credit can be earned if 95 percent or more of waste is diverted from landfill.

There is of course a cost to an organization to spend time managing construction waste. In order to maximize savings, first, a recycling infrastructure and second, a market for recycled materials needs to exist. Recyclable materials will have different market values depending on these two

factors, along with the cost and availability of virgin materials. Regardless, there is a great opportunity to achieve cost savings by avoiding landfill tipping fees.

LEED NC credits also may be earned in the categories of Building Reuse (MR1.2 and 1.3) and Material Reuse (MR 3.1 and 3.2), which were designed with the intent of diverting construction materials from the landfill.

Both LEED NC and LEED EB address recycling programs initiated by building occupants. All they need to start is an easily accessible area dedicated to collecting and storing non-hazardous recyclables. At minimum, occupants should address paper, corrugated cardboard, glass, plastics and metals. LEED guidelines identify the minimum area for recycling based on a building's square footage.

A waste stream audit (or what some call "dumpster diving") will provide the data to establish a baseline and identify the types and amount of waste being generated. LEED requires a collection space; a waste reduction policy based on source reduction; purchasing strategies; and recycling and occupant education. Implementing sustainable purchasing strategies helps close the loop and increase the demand for products with recycled content.

As I travel across Michigan working with many types of organizations, I'm continually surprised by the complacency displayed by many companies working with waste haulers, and internal resistance to recycling programs. How many of us sign waste removal contracts for daily pick-up without knowing the volume of waste we generate each day? How many don't recycle simple things like paper, corrugated cardboard or metals?

Two years ago, our company started to focus on our waste stream. By doing so we reduced our pick-up fees by more than 50 percent from 2007 to 2008. Today, we have successfully reduced our waste hauler pick-ups from five days a week to once every two weeks, with the majority of refuse now going to a recycling facility. We purchased two pieces of equipment to bale and compact materials for recycling; the return on that investment was less than one year.

Meet with your waste hauler to identify how they can assist you. Set goals and challenge them to help you and measure your results. Make it a continuous process. If everyone does this, we will raise the bar in Michigan for recycling.

The U.S. Green Building Council is a coalition of leaders from across the building industry working to promote environmentally responsible, profitable and healthy places to live and work. The West Michigan Chapter provides and develops leadership through affiliations and education at all levels. Please send comments and column proposals to chuck.otto1@gmail.com.