

Cost Reduction

» NEWS FEATURE

Three Problems Solved

Icy roads meet sandblasting byproduct and a front-end loader

By Ken Hudson

A small township in unincorporated Will County, Ill., has 25 miles of country roads that become treacherous during winter weather. The township typically spent a good portion of its budget on the salt used to melt the ice and ease driving conditions.

Walker Process Equipment (WPE) of Aurora, Ill., which makes gear drives, rotating biological contactors, digester mixers, and other water and wastewater industry equipment, had a costly sandblasting byproduct disposal problem. WPE was paying more than \$700 per 15-yard dumpster to haul and place its Black Beauty waste into the landfill. Black Beauty is the name of a gritty black substance that replaces silica sand.

An excavating operation needed a place to deposit excess snow. The company was conve-

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—Bob Kulas, EWS affiliate consultant

niently located across the street from WPE.

In 2001, each of these three parties needed something: more money or more salt, less cost for disposing waste, and some land. Although they are located near each other, the chances of these groups realizing that they could help each other were slim.

Cost-saving mediator

Environmental Waste Solutions (EWS), which is headquartered in Baton Rouge, La., focuses on reducing waste disposal and recycling costs. The company started in 1994. It has trained more than 500 affiliates, and Bob Kulas is one of them. Kulas has been an affiliate con-

sultant for 10 years and was instrumental in bringing WPE together with the township and the excavator.

When Kulas was trying to negotiate a contract with WPE's Randy Stevenson, he was taken to a vacant lot behind the company's manufacturing facility where a mountain of the sandblasting waste was stored. It was enough waste to easily fill 21 dump trucks, about 420 tons. Stevenson challenged him to find a solution.

Kulas immediately began studying the sandblasting media made from coal slag. He relied on EWS for industry knowledge and expertise for the project. He found that the waste could be mixed with road salt to increase road coverage without losing effectiveness.

Next, Kulas identified a nearby township that needed help with salting its roads. Kulas brought a five-gallon bucket of the Black Beauty residue to his meeting with the community's road commissioner. After conducting a series of tests on local roads, the commissioner concluded that the residue and salt mixture performed as well as the 100 percent salt product and vastly increased the area of coverage.

To ensure that this solution met applicable laws and regulations, EWS sought approval from the Illinois Environmental Protection Agency. EWS founder and CEO Darwyn Williams said, “As to the use of Black Beauty [residue] to stretch the use of salt on the roads, I can quote you chapter and verse from EPA guidelines proving that we got it right.”

Kulas had negotiated reasonable waste hauling rates for WPE. When the trucking company had trucks available, it transported the waste to the road commission. When that agreement ended in November 2005, he secured an arrangement with the neighboring excavating operation. In exchange for waste loading at no charge, the excavator was permitted to dump excess snow on WPE's six-acre site, leaving the company to only manage a hauling fee.

A worthwhile decision

Over the past seven years, about 1,500 tons of the Black Beauty post-production sandblasting material has been removed, with a 74 percent



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BOB KULAS

Bob Kulas, Environmental Waste Solutions affiliate consultant, uncovered a new use for Black Beauty sandblasting residue. Mixed with salt, the material melts road ice effectively. Using this waste as a resource saved a client considerable disposal costs.

savings on disposal costs. The recycling effort also gave the community safer roads in winter. According to Kulas, EWS shares in all net savings achieved for its clients. If the company is unsuccessful in reducing a client's waste disposal expense, there is no charge.

Many value-added benefits occurred during the course of the contract with EWS. For example, WPE needed to dispose of paint once warehoused for clients. Kulas tapped into the firm's resources and expertise and located a company that had various uses for such paint.

“Often, our job is to find a new home for

the waste other than traditional disposal methods,” observed Kulas. “Usually this dramatically decreases client expense. Occasionally we really hit a home run by finding a receiving company that wants the material so bad, they'll even pay for it.”

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