Case Study of Happy Hollow Landfill Redevelopment Project

Keys to Success

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

In 1962, the City of Middlesboro granted a household garbage franchise to Roy Shoffner and Sam Mars to operate a landfill in Happy Hollow, a narrow valley of 14 acres. Though the city made garbage pickup mandatory, illegal burning and dumping were constant problems at Happy Hollow. Bulldozers covered garbage and burned materials, but vegetation grew until trees were 20 feet tall. By 1974, the two business partners decided to sell the franchise and garbage trucks back to the city and close the landfill.

Though it was closed and posed no immediate threat to human health and the environment, Happy Hollow was still on the state's list of uncontrolled landfills and considered to be a brownfield. Brownfields are abandoned or underutilized sites that are contaminated or perceived to be. In 2007, Shoffner & Mars, LLC voluntarily began the appropriate regulatory landfill closure process.

"There was never a threat to the water supply and no methane was ever detected," says Sammy Mars, son of one of the original owners of Happy Hollow. "We contacted Linebach Funkhouser Inc. for assistance in proceeding with the remediation of the landfill and bringing the site into compliance for closing. We wanted to protect the environment and later chose to develop the site."

> "For Middlesboro, this project has the Wow! Factor," says Mars. "The landfill is gone, and a hotel is on-site. The community has taken pride in it.

Phase I consisted of adding 20 more feet of soil cap, implementing a passive vapor barrier and constructing a landfill cap. A monitoring well extends to the bedrock in the hollow and is checked every six months, though it has been problem-free. Phase II entailed removing 150,000 yards of dirt from a hillside to raise the property level and create flat areas for business. A communal asphalt parking lot for the hotels sits on a portion of the site.

Being a privately held company, Shoffner and Mars, LLC is ineligible for U.S. Environmental Protection Agency brownfield cleanup grants. However, the company recognized the

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potential and spent its own money for the project. The earth-moving cost alone for Phases I and II was $1.2 million.

The property had a 60-room Holiday Inn-Express that stayed at capacity and could not be expanded. But at the project's end in 2010, a second hotel, a 50-room Sleep Inn, opened on the site. The property is located on the border of Middlesboro's central business district at the town's main stoplight. Between the two hotels, they now generate 60 percent of tourist tax revenue for the area.

Middlesboro is in a flood-prone area. Before the project, the hilly land was valued at $10,000 per acre. After moving dirt to create level areas higher than the flood zone, the land's value is $200,000 per acre.

This is Happy Hollow Landfill before it was cleaned and redeveloped.

"There were project challenges, such as with the leachate collection system, which had to be re-engineered," says Charles Leachman, senior geologist from Linebach Funkhouser. "The state wanted us to use a specific type of stone, which was difficult to find, to set around lines to improve drainage. Also, we encountered waste further down the hill than we anticipated and had to be careful to keep it from rolling down the hill."

In redevelopment cases such as this, Leachman recommends bringing a good conceptual project plan to the regulatory agency and asking for advice in case something has been overlooked. Working proactively in this manner makes a project go more smoothly and often prevents delays in the redevelopment process.

Middlesboro is an economic hub for the Tri-State region of northeast Tennessee, southwestern Virginia and eastern Kentucky. The new hotel and parking lot fill a need for the area, which is near the Cumberland Gap Tunnel. With a shortage of hotel rooms before the Sleep Inn was built, the community's response has been positive.

More than $1.2 million was spent to move dirt in Phases I and II.

"For Middlesboro, this project has the Wow! Factor," says Mars. "The landfill is gone, and a new hotel is on-site. The community has pride in the results of the project, which is a prime example of the state working with private industry."

Though no chemicals or hazardous wastes were ever known to have been accepted at the property, Shoffner & Mars went beyond what was required by law to protect the environment. The community has benefited from the revitalization of the area and creation of jobs.

Helpful Hint: **Cleaning and redeveloping brownfields can instill community pride, revitalize an area, provide extra tax incentives and remove property eyesores.**