

What's prettier: A dump or golf course?

With premier land harder to find, some turn to landfills

BY PETER BLAIS

Richard DeYoung was looking out his office window one recent November day. Several multi-story office buildings and a number of condominium complexes stared back. Smack in the middle of all this mortar and brick was an 80-acre landfill.

"What a great place for a golf course," said the regional landfill manager of Waste Management of Illinois'. "All it would take is a little innovation."

With undeveloped land becoming rarer and increasingly expensive, more and more forward-thinking people are beginning to see a useful and profitable future for the nation's growing numbers of abandoned dumps.

"More and more nowadays we're having to deal with things we've never had to deal with before, because premier, easy-to-build-on land is now taken by houses. What is left is what the golf course is allowed to go on. So we're usually left with a swamp, a hole or a landfill. A golf course is used to cover up a lot of blemishes. We haven't quite gotten into putting golf courses on toxic waste dumps, but it's something that would be an added amenity," said Golf Course Builders of America President Perry Dye.

Waste Management (which incidentally doesn't own the landfill outside DeYoung's Westchester, Ill., window) opened nine holes over a reclaimed landfill last year in Batavia, Ill., about 30 miles west of Chicago. A second nine is scheduled to open next year and plans call for the course to expand to 27 holes in the not-too-distant future.

The company is negotiating a contract with the owners of a Techny, Ill., landfill where Waste Management hopes to build a nine-hole course after the dump closes in the spring of 1992.

Building a golf course over a landfill has several advantages.

First it helps return land to a profitable use.

"The waste industry has been slapped around for taking valuable property out of use and then abandoning it. Building a golf course can change that," said DeYoung.

A second advantage is the chance to turn an actual financial profit on land nobody wants. DeYoung figures it will take five years for the proposed Techny course to make money. Whether it builds a course or not, Waste Management is required to maintain the closed landfill for 30 years. What this boils down to for Waste Management is spending money for 30 years or making money after five.

"And we'll be giving something back to the community. People liv-

ing near a landfill usually complain it drives property values down. We understand that. A new golf course would help property values appreciate," said DeYoung.

A third advantage is that landfill land is relatively cheap compared to prime, undeveloped land and requires little if any clearing. The 160 acres of reclaimed municipal landfill that became California's Santa Clara Golf and Tennis Club in 1986 was free, according to project manager Damian Pascuzzo, a senior associate with the Robert Muir Graves Golf Course Architects.

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"You can't buy one acre of land out here today for less than \$100,000," Pascuzzo said.

But there are disadvantages to building over a dump site.

One of the biggest is figuring out what to do with the methane gas formed by decaying, sub-

face garbage. Methane is lighter than air, so it can rise to the surface, where it will kill any grass. It is also explosive if exposed to heat.

USGA Green Section National Director William Bengueyfield tells a story of his days as director of grounds and maintenance at In-

dusty Hills Golf Club, which was built over a California landfill in the late 1970s.

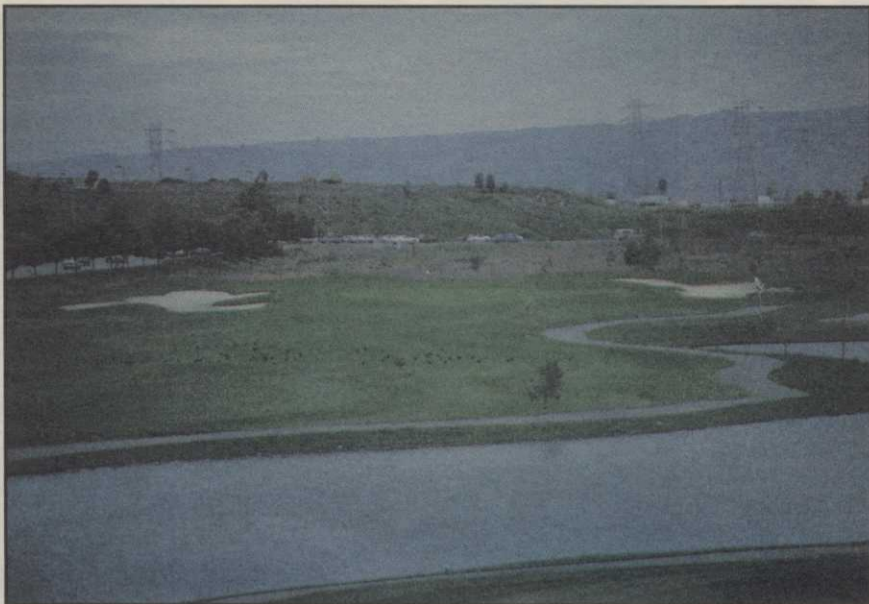
The grass on the 17th green of the Eisenhower course was growing poorly, so one of Bengueyfield's workers decided to dig down a few inches with a post-hole digger to see if he could discover the problem. After digging the hole, the worker lit a match to look inside.

"We had our own little eternal flame in the middle of the 17th green," said Bengueyfield. "We were lucky we were able to put it out in just five minutes. If you get a

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Golf course architect Robert Muir Graves designed this course on 160 acres of reclaimed municipal landfill in Santa Clara, Calif. The land was free. It is now the Santa Clara Golf and Tennis Club.



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large fire going underground, I understand you may never be able to put it out."

Industry Hills installed a methane collector and used the captured gas to heat the hotel and clubhouse during the gasoline shortage of the late 1970s and early 1980s, according to Bengueyfield.

Methane collection systems are standard equipment now in landfill courses, said DeYoung. But they are expensive.

"There are a multitude of lines going into the ground. It can be as elaborate as a sprinkler system

and cost as much as \$1 million on an 18-hole course," said DeYoung.

Then there is the matter of settlement. As the garbage decays and shifts under the ground, so does the land lying above it. Bengueyfield said Industry Hills had to replace a handful of greens within the first three years.

"You have to think of things like 'What are we going to do if this part of the course suddenly sinks five feet?' We've been lucky, though. We expected more problems than we've had at Batavia," said DeYoung.

At Santa Clara, flexible High-Density Polyethylene pipe was laid over most of the course to avoid breakage when parts of the course settled.

"It even hugged the mounds we made for trees perfectly," noted Pascuzzo. "And it's priced fairly competitively with regular PVC pipe. We were able to use it down to two inches in diameter."

There are also state laws stipulating the amount of soil cover over certain portions of a landfill. The cover is necessary to maintain the integrity of the clay cap placed over most closed landfills. Irrigation pipe can't be laid unless more cover is added, an additional expense.

Half of the Santa Clara course was placed over a new part of the landfill and half over an older part.

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The new part was mounded and drained well, explained Pascuzzo. Not so the older part where the original fill varied from one to six feet in depth. Contractors used heavy equipment to actually reconfigure the garbage into slopes and valleys before recovering it with a new clay cap.

The city appealed to area contractors to bring in their extra fill to bring the topsoil cover up to code.

"The city just had to pay to truck it in. We were able to get it for about \$3 a yard compared to the \$10 to \$15 it would normally cost," said Pascuzzo.

"And it's tough to have water holes over a landfill," added DeYoung. "At Batavia we were able to put some water on land adjacent to the landfill. At Techny that would be difficult. So there will be more sand traps."

But despite the difficulties, experts look for more courses to be built over landfills as open land becomes more scarce and more landfills are forced to close.

"It will definitely happen more often," said DeYoung. "We all want to find a use for that property."

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