



Turning Brownfields into Goldfields

By Denise Kalette

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Across from the Manhattan skyline showcasing the nation's premier properties, for more than 30 years a sprawling parcel of land sat neglected and overgrown with weeds in the shadow of the George Washington Bridge. Once, silent film star Mary Pickford posed for close-ups in a film studio on the site. Nearly a century later, where others saw blight, developer John Johnson, president of Centuria Corp., saw possibility.

Now, the 16-acre parcel in Fort Lee, N.J., one of more than 450,000 brownfields languishing across the country, is expected to be worth \$1 billion in three years. Johnson plans to build high-rise condos and offices, shops, and a Westin hotel on the site, where chemicals from a dry cleaner contaminated underground rock and groundwater.

"It's definitely a rare find. It's really a diamond, up on the Gold Coast," says Johnson, who plans 850 condos priced from \$900,000 to \$2.5 million. The condo dwellers will be able to commute to New York City by ferry, bus or car.

Redeveloping the brownfield may pay off royally. Johnson anticipates returns on his investment of 40% annually over five years. "I think we have a profit potential here of close to \$300 million."

Across the country, as the amount of available land in and near cities shrinks, many developers are turning to the riskier business of converting brownfields — vacant and often contaminated properties — to lucrative projects, frequently prodded by municipal leaders tired of the eyesores and depressed values of nearby properties. But many developers have encountered legal and environmental pitfalls as they clean up contaminated sites, although regulators and environmental watchdogs agree that the goal of cleanup is important. Still, some environmentalists are turning to the courts to make sure the conversion job is done right.

Currently, about 70,000 brownfields are undergoing state voluntary cleanup programs. Some get federal or state funds or loans to help with the expenses.

The results of transforming a brownfield can be dramatic. In Arizona, Vestar Development's executive vice president, David Larcher, took a desert landfill and junkyard, an eyesore so badly polluted with hazardous waste that the EPA had classified it a Superfund site, and turned it into a shopping mecca and entertainment center.

In Dallas, Ross Perot Jr. replaced a hulking coal-fired power plant with the 72-acre Victory center, home of American Airlines, and the \$420 million arena where the Dallas Mavericks and Dallas Stars ignite basketball and hockey fans.

And in Massachusetts, two miles from Harvard University and MIT, developer Brian O'Neill paid \$20 million for the Watertown Arsenal, a munitions plant and research lab that once housed a nuclear reactor. O'Neill spent \$111.4 million building more than 700,000 sq. ft. of office and retail space, as well as a daycare center, theater and museum. He sold the property to Harvard for \$168 million, making a profit of \$36.6 million.

New generation of uses

Many brownfields can be bought cheaply and are ideally located near downtowns, subway stops or along stretches of waterfront where factories once employed hundreds of workers. The sites vary from abandoned gas stations with leaking underground storage tanks, to old naval hospitals and deserted military bases. Developers have also converted steel mills, oil fields, and textile plants, as well as coal plants, landfills and furniture factories.

In many cases, the government has helped with assessment, cleanup or redevelopment costs. The federal Department of Housing and Urban Development has guaranteed loans, and its Brownfields Economic Development Initiative grants aided in transforming countless sites to new uses. The programs expanded emergency rooms, built housing for the elderly, bus stations, and industrial parks to help cities develop jobs. They also paid part of the costs to create shopping centers, hotels and conference centers to draw travelers and spark interest in the depressed downtowns of many American cities.

In 2007, the Environmental Protection Agency is spending about \$70 million on community grants to assess and help revitalize sites, and another \$50 million for state cleanup programs. Often, EPA awards about \$200,000 to assess hazardous substance damage, before states, communities and developers tackle an improvement project.

While some officials say the federal brownfields program was not designed for properties so full of deadly contaminants that the EPA classified them Superfund or national priority sites, a number of developers, including Vestar, report they have converted Superfund sites to new uses.

Lawyers warn of liabilities

But legal analysts warn that despite recent laws easing developers' liabilities, such as the Small Business Liability Relief and Brownfields Revitalization Act, brownfield sellers and buyers may face expensive pitfalls over lingering contamination.

"The seller gets some relief of liability, but not completely," says Atlanta environmental attorney Martin Shelton. Buyers and sellers who eliminate a source of contamination still may face legal hurdles, although they can buy insurance to cover contingencies, Shelton says.

State brownfield programs can protect developers by limiting third-party lawsuits, but that has not been tested in court, Shelton explains. Also, companies that voluntarily clean up after defunct gas stations or dry cleaners may think they're too small to be affected by environmental laws, but that's not the case, he adds.

In New York, environmental groups recently sued the state Department of Environmental Conservation, claiming that state regulations for brownfield cleanup are too lenient. One issue involves contaminated vapors from old industrial sites that entered private homes, giving rise to environmental and health issues.

The groups contend that migrating vapors from underground water may have triggered clusters of illness in some New York communities, although medical researchers have had difficulty identifying brownfield chemicals as the precise cause.

"I believe the State of New York has reopened virtually every cleanup across the state to determine whether it was actually cleaned up to a level sufficient to protect against vapor intrusion," says Keri Powell, an attorney for Earthjustice, who prepared the DEC suit.

When a blighted property is redeveloped, private companies and communities can benefit when jobs are created and property values rise, and various kinds of taxes are generated. Here are some examples from across the country:

- **Arizona**

On a conspicuous swath of land near the gateway to Tempe, Vestar encountered “an extreme blight,” says Larcher. Dangerous gases roiled at the landfill, and the site was littered with wrecked cars and ramshackle buildings.

“There had been several explosions on the property because of the hazardous waste,” Larcher says. Even assembling the land for development proved a daunting task. With Miravista Holdings LLC, Vestar contacted some 52 property owners and assembled a 117-acre package. The company then spent \$40 million on what Larcher calls the largest brownfield cleanup in Arizona history.

The cleanup cost about \$25 million more than Vestar anticipated. Now the company is putting the finishing touches on the \$250 million, 1.3 million sq. ft. Tempe Marketplace, a shopping and entertainment center opening in August, with a ceremony scheduled for Sept. 28.

A \$1 million grant from HUD's Brownfield initiative helped with cleanup costs, and the Department of Housing and Urban Development gave Vestar a \$7 million loan, which will be repaid from the shopping center's sales taxes.

- **Ohio**

Along Lake Erie in Ohio, Hemisphere Development LLC, based in Cleveland, waded into a decades-long legal dispute over an old industrial property contaminated by chromium.

Hemisphere negotiated with landowner Tierra Solutions to redevelop the site of the former Diamond Shamrock Painesville Works, which produced soda ash for use in glass manufacturing.

“It was a mess,” says Hemisphere CEO Todd S. Davis, attorney and author of a book on brownfield redevelopment. The Ohio EPA sued to force Diamond Shamrock to clean up the site, and in an effort to spread the expenses, Diamond Shamrock and companies with ownership or management interests pelted one another with some 25 suits seeking payment for the cleanup.

Hemisphere spent millions reassembling the property, buying chunks of land that had been sold off over the years, paying \$1 million for a coke fuel plant sold at a tax sale. The firm spent another \$20 million to clean up the plant site.

Hemisphere plans to transform 1,100 scenic acres into a sports training resort, vineyard, winery and golf course. “Harvard University is doing a case study with this as the model for how to do brownfield development,” says Davis.

- **Colorado**

EPA got a chance to practice what it preaches in Denver. There the Opus Group, a \$2.1 billion real estate development company based in Minneapolis, took a former Denver post office terminal annex with a Cold War-era basement bomb shelter, and removed up

to 1,000 cubic yards of soil contaminated when the property was part of a lower downtown rail yard.

The new 292,000 sq. ft. building, valued at \$96 million and completed in December 2006, became EPA's Region 8 headquarters. EPA is "stepping up and being an example, making a commitment to the brownfield site," says Marshall Burton, vice president and general manager of Opus Northwest. Opus retained ownership and leased the building to the federal government's General Services Administration.

Supreme Court allows cost recovery

In June, the Supreme Court boosted the brownfield recovery movement when it ruled unanimously that the federal Superfund law permitted lawsuits to recover the costs of voluntary cleanups. The federal government had opposed the suits, arguing that the law restricted companies from suing unless regulators already targeted the companies in an enforcement action or suit.

The case involved Atlantic Research Corp., which voluntarily removed prior contamination from rocket propellant in soil and groundwater, after the U.S. government hired the firm to retrofit rocket motors. Atlantic sued the government to recover some of its cleanup costs. The federal government is one of the nation's largest polluters, with environmental liability of more than \$300 billion, according to *The Associated Press*.

Among legal issues, migrating vapor from brownfields is a major one. "Vapor intrusion has been documented to be a huge problem in New York State," says Powell. "I suspect a similar problem is happening across the country." To its credit, New York is aggressively investigating the problem, Powell adds.

A plan to build four schools on contaminated property in the South Bronx prompted yet another lawsuit. New York Lawyers for the Public Interest filed the lawsuit in April, saying the group was dissatisfied with maintenance and monitoring plans for the site, where mercury, lead and the suspected carcinogen benzene, among others, had been found.

"The main two issues were how they were going to deal with some so-called 'hotspots,' areas where there were really high levels of contamination outside the footprint of the school, and how and whether they were capable of monitoring the engineering controls they were putting in place," says David Palmer, an attorney with the public interest group.

The remediation plan did not call for removing all the soil, but rather treating some of it on site, a trend in brownfield redevelopment, says Palmer. "I question the wisdom of building schools on contaminated properties," particularly when long-term risks are unknown, he adds.

A developer who buys contaminated property needs an environmental consultant and a deal-oriented environmental lawyer, says Jon Schuyler Brooks, a partner at Phillips Nizer LLP in New York, and a member of the American Bar Association's brownfields committee. Due diligence, including consulting maps showing a site's prior use, is essential, he cautions. And conditions for a deal should be written into the contract, rather than calling an attorney after the fact.

Tough questions

Communities and regulatory agencies that encourage the cleanup of brownfields face the issue of "How clean is clean?" and the question of whether different standards imposed on sites according to their intended use are adequate.

For instance, if a site is intended for redevelopment as a warehouse, should it be required to meet the same standard as a location intended for residences?

Many states impose a lesser standard for non-residential uses. Cleaning a site for residential use can be extremely costly. Many government agencies try to balance developers' cost burdens and the aim of improving an area's economic vitality with the goal of public safety.

David Lloyd, head of EPA's brownfields program in Washington, D.C., says states, not the federal government, set the standards for acceptable risk levels, largely based on the property's ultimate use.

"Because these sites by their definition are intended to be overseen and cleaned through voluntary cleanup programs, those are state-supervised, so federal supervision of the activity is very limited," Lloyd says.

Brownfields languish in every community in the country, with a higher concentration in the Northeast and upper Midwest, where heavy manufacturing formerly took place, Lloyd says.

But the federal brownfields budget has not increased significantly, despite growing interest in the program.

The proposed 2008 budget calls for \$162.2 million, essentially the same funding level as 2007. The Brownfields Economic Development Initiative, funded through HUD, has helped many developers pay for their projects.

But that program's funding dropped from roughly \$25 million in 2000 to \$9.9 million in 2007, and no funding is proposed in the 2008 budget.

Nor is funding requested in 2008 for the HUD 108 Community Development Loan Guarantee Program, through which Vestar earned the \$7 million loan that helped clean and convert the Arizona landfill to the showcase Tempe Marketplace.

Transforming the hazardous landfill brought Larcher great satisfaction. "It was very challenging, all along the way," he says. But the results were worth it for the company and the region. "For Arizona, it's a milestone."

The science of converting a brownfield

When fish began dying in a creek near Richmond, Va., more than a decade ago, deadly toxins were traced to a broken pipe at an old electronics manufacturing plant across Interstate-64. A migrating plume of contaminated groundwater had traveled under the highway to the creek bed, investigators found.

Now, Cleveland-based developer Forest City Enterprises, with partner Pruitt Associates, has stepped in to transform the vacated industrial brownfield into a 900,000 sq. ft. retail center, The Shops at White Oak Village, scheduled to open in October 2008.

The developers' preparation mirrors the problem-solving approach other companies have taken to overcome environmental obstacles before building anew on a site with contamination issues.

Instructed by the Environmental Protection Agency to clean the site, a previous owner installed a treatment facility and built an intricate system of 18 extraction wells. Forest City, which bought the

property in 2006, left the wells in place, but moved the treatment building to open the site for development.

The company found evidence of pollution in pipes that once carried hazardous chemicals, and exposed industrial “bathtubs,” bricked enclosures that earlier held chemical baths and still contained polluted residue, says Jim Richardson, vice president of development at Forest City. Rainwater picks up the residue and can carry it into the nearby water flow, unless steps are taken, he says.

After the old, 500,000 sq. ft. building was demolished, the developer sold 15-foot mountains of copper, steel, aluminum and other materials to recyclers. Forest City put a six-foot layer of clean fill across the area of suspected contamination and took steps to prevent the spread of volatile compounds.

The \$120 million project will be well worth the investment, Richardson believes. “Environmentally challenged sites are not as scary as they used to be,” he says. “Development is risk and we felt that it was manageable risk, and we think that the returns are there. So far we’ve been correct in our assumptions.”

Pollution cleanup has evolved in the past decade, and now authorities frequently allow a developer to encapsulate a contaminated area with asphalt or different materials, to prevent the spread of volatile compounds, rather than having to remove soil with backhoes. On-site barriers and other methods can capture and dispose of harmful vapors.

Overcoming ‘Love Canal’ fears

“My experience with developers is that liability concerns — being dragged into potential long-term cleanup — is a constant fear,” says Dorothy Crawford, an EPA brownfields specialist in Dallas.

Would-be developers are haunted by the spectre of Love Canal in Niagara Falls, N.Y., where dumped chemicals led to reported severe health issues and years of litigation. “Love Canal is a worst-case scenario,” Crawford says.

EPA has awarded more than 1,000 assessment grants totaling more than \$262 million, and another \$202 million in revolving loan fund grants and \$61 million in cleanup grants. The funds helped evaluate and clean sites converted to golf courses, housing and other uses.

State environmental programs can guide developers through remediation. Later the state signs off, declaring that the site poses no increased risk, says Bill Graves, founding partner of ENSAT Corp., an environmental firm based in Culpepper, Va., which has cleaned mines, landfills, and industrial sites.

Hot topics

Graves outlines current approaches:

- Vapor intrusion is the hot topic. “Everybody ignored it for years,” he says, until gasoline plumes migrated from underground spills and wound up in people’s basements. “Everybody suddenly realizes that, wow, this is an issue.”
- A vapor barrier, with a liner installed under the building, can include a permeable layer under the liner and, if necessary, a vacuum pump to move contaminants up toward the roof and prevent intrusion in the building.

- MTBEs, fuel additives to make gasoline burn cleaner turned out to be bad news for groundwater. The fast-traveling compounds polluted aquifers and wells.
- Contaminants often are treated on site now rather than shipping soil to a specialized landfill, Graves says. "It's just too expensive to dig up large quantities of soil and cart them down Interstate 95."

Steel mill swept away for soccer stadium

When Advance Realty Group decided to turn an old steel mill on the Passaic River in New Jersey into Harrison MetroCentre, a 3.7 million sq. ft. mixed-use village with office space, retail stores, condos, hotels and a 25,000-seat soccer stadium, the brownfield project turned out to be even more challenging than anticipated.

"We are finding that the site has multiple types of chemicals, or contaminants," says Kevin Tartaglione, senior vice president and COO of Advance Realty Development, based in Bedminster, N.J. "Regulations from the state dictate to you how to deal with each one of those contaminants," he says, and Advance has been careful to follow the requirements and get state approval for each step.

"The contamination is more than we expected," Tartaglione says, in sheer quantity of chemicals. But the work is proceeding as scheduled, and Advance hopes to get a "no further action letter" from state environmental officials as liability protection, once the project is done.

Crews are clearing and cleaning the first 35 acres at the 135-acre site, whose finished value is expected to reach \$2 billion to \$3 billion. AEG Developers, a sports and entertainment company, is building a soccer stadium to house the New York Red Bulls.

Commercial developer Advance, which owns the land, is building office, retail and residential units.

The first phase calls for 1,200 mainly two-bedroom units, priced from \$400,000 to \$600,000. Some units will also be available to rent.

The inclusion of residential units drove up remediation costs by an estimated 25%, Tartaglione says, since a higher standard of cleanup is required when the intended use is residential, rather than industrial or commercial.

But Advance anticipates reimbursement of 50% to 75% of its cleanup expenses through state sales tax revenue derived from retail and other enterprises operating on the site, after build-out.

Contamination cleanup costs have so far amounted to \$5 million to \$10 million, and Advance could potentially receive \$2.5 million to \$7.5 million in tax-generated repayments. The company spent \$15 million for the first 35 acres of land being cleaned up in phase one, says Tartaglione.

As for anticipated profit or investment returns, they are difficult to forecast, Tartaglione says. "I do know that if we get 25%, I'll be very happy."

Denise Kalette is senior editor.