Developing Brownfields, Not Greenfields

by Craig Kasper & Mark Aumen

The twentieth century has marked astounding industrial and technological changes and advances. An unfortunate by-product, however, has been the amount of industrialized land left unused or underused, often because of the presence of environmental contaminants. "Brownfields" is the term that has come to be applied to such lands — in contrast to "greenfields," the term used to describe previously undeveloped properties on the urban fringe, often farmland.

A tour of the United States' more industrialized cities reveals stretches of abandoned land once boasting significant industrial activity. Indeed, the General Accounting Office in its 1996 report, *Barriers to Brownfield Redevelopment*, noted that "sites that could be classified as brownfields probably number in the tens of thousands, totalling hundreds of thousands of acres."

While demographic shifts and the overall trend away from heavy industry have contributed to this problem, another important factor hindering redevelopment has been environmental liabilities, both real and perceived, stemming from soil contamination and groundwater pollution.

Business owners and developers usually choose to build on greenfields, rather than brownfields — despite the fact that brownfields sites are typically served by existing roads, public transportation, utilities, and other infrastructure.

The choice to develop greenfields over brownfields is largely based on combined factors of expense and liability. Business, industry, and banks are often reluctant to consider brownfield sites for redevelopment because of the high cost to achieve stringent cleanup standards (which can often exceed the market value of the property) combined with the potential liabilities imposed under traditional federal and state environmental law.

Yet these abandoned properties, once "remediated" (i.e., cleaned up), can provide viable spaces for sustainable industries, commercial uses, and even parkland or open-spaces.

AT THE CORE OF MANY STATE PROGRAMS IS THE USE OF "RISK-BASED" CLEANUP STANDARDS.

Brownfields History

Nearly two decades ago the United States passed the most sweeping piece of environmental legislation in its history, establishing a framework for cleaning up environmentally-contaminated sites. The Comprehensive Environmental Recovery Compensation Liability Act, commonly referred to as CERCLA or Superfund, went into effect in 1980. It was passed somewhat hastily, in part, in response to one of the country's most publicized environmental catastrophes, the Love Canal in Niagara Falls, New York. The aim of CERCLA was to address the nation's most contaminated sites.

Ironically, many now feel that CERCLA created as many problems as it solved by making it difficult to remediate even moderately contaminated sites. Far-reaching liability and unrealistic cleanup standards based on insufficient scientific data that did not address true risks led to years of neglect of some of the nation's most contaminated sites.

Instead of rewarding those interested in cleaning up contaminated sites, CERCLA exposed them to substantial risks of liability. The result: a general sense of fear and uncertainty among property owners, potential purchasers, lenders, and many others who might be involved in any way with the contaminated property or its attempted cleanup. After nearly 20 years, too much of the money spent on Superfund continues to go toward litigation, instead of actual cleanup. While various legislative initiatives are periodically introduced to reform Superfund, it remains to be seen if the program will ever operate in an effective manner.

In an effort to entice developers, business owners, and investors to redevelop brownfields, the federal government and a number of state governments have instituted various brownfields redevelopment programs. These programs are not meant to replace Superfund, but rather to promote cleanup of properties which would not likely be addressed by Superfund in the foreseeable future. They allow communities, property owners, and developers of brownfield properties to voluntarily assess and remediate environmentally contaminated sites. Many states also provide that sites which successfully participate in these programs are released from future state environmental liability, eliminating one of the chief barriers to private investment and site redevelopment.

Risk-Based Cleanup & Incentives to Redevelopment

At the core of many state programs is the use of "risk-based" cleanup standards. What this means is that the targeted level of cleanup is based on the intended future use of the property. For example, brownfield properties proposed for residential use must be cleaned up to a higher level than those proposed for commercial use; while proposed commercial use requires more stringent cleanup than industrial use.

As we noted, many state programs offer a release from future legal liability contingent upon successful completion of remediation to the determined risk-based standard.

In the past few years, increased financial incentives have also become available for brownfield sites, helping to make brownfield redevelopment projects more competitive with greenfield developments. The U.S. Environmental Protection Agency, for example, offers pilot grants to local and state governments to test redevelopment models, remove regulatory barriers (without sacrificing environmental protection), and facilitate coordinated site assessment and redevelopment efforts. Many states are also now providing funding for local brownfield projects through grants, low-interest loans, and tax abatements. In Ohio, a Brownfield Finance Partnership has been organized to aid in coordinating public and private resources to finance brownfield projects. The partnership consists of representative of state agencies, local government, and private sector professionals from the fields of finance, law, and environmental sciences.

At the local level, a growing number of communities, such as Cuyahoga County, Ohio, and Worcester, Massachusetts, have organized regional brownfield redevelopment funds, providing a one-stop shop for loans and grants for projects within the regional area. Other local funding projects, such as Springfield, Ohio's, "Pledge Program," target investment in brownfields by providing low interest loans on projects which "revitalize under-utilized or vacant property or create and/or retain jobs."

There are two underlying reasons why attitudes about brownfields have changed and progress is finally being made toward their cleanup. First, many of the problems that prompted enactment of the Superfund law have been addressed and we now have strong federal and state regulations on the books to prevent future environmental contamination problems. Second, with some of the legal risks of redeveloping contaminated brownfield sites being reduced, businesses and developers are recognizing economic value in many of them.

This new view has prompted the federal government, states, and communities to push for programs that incorporate economic development into the cleanup process. No longer are potential buyers and lenders walking away from properties that are contaminated or potentially contaminated. Instead, they are calling on planners, accountants, and environmental professionals to assess the property's value in relation to its environmental impairments.

For communities throughout the United States, the new voluntary cleanup programs, and their associated financial incentives, translate into opportunities for local governments to partner with the private sector to plan for economic redevelopment of abandoned or underutilized industrial areas.

With proper planning and support, brownfields can be returned to active use, providing new jobs for area residents, returning land to active tax rolls, and revitalizing depressed neighborhoods. At the same time, since many brownfield sites are already well-served by existing utilities, roads, and transportation systems, the region's need for new public infrastructure expenditures is reduced, as is the pressure to convert farmland and other open space on the urban fringe. ◆

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Springfield, Ohio's, Brownfields Program

by Matt Kridler, City Manager
Springfield, Ohio

The City of Springfield, Ohio, a post World War II industrial boom town fallen on economically challenging times in the 1950s and 60s, is currently taking aggressive steps to address its many brownfields left behind as industry divested in the city.

The key to the success of the City's brownfield redevelopment initiative hinges on community involvement: everyone from people who want their neighborhoods back, to farmland preservationists who want controlled growth, to developers who need industrial sites with municipal services. Springfield's brownfield program is evolving into a local, ground level initiative to create environmental solutions based on economic good-sense.

In December 1997, the city entered into a public-private partnership with Hull & Associates, Inc. (HAI) to evaluate and promote properties the city has targeted for redevelopment. Through the partnership, ten previously identified properties were evaluated for their suitability for redevelopment under the Ohio EPA's brownfields cleanup program, know as the Voluntary Action Program (VAP). The evaluation process included collecting and reviewing property data, and analyzing the data to determine needed remediation actions to meet state cleanup requirements.

From the City's perspective, the strength of the state VAP is that cleanup actions can be tailored to specific, intended future land uses and risks, ultimately increasing the tax base. From the neighborhood perspective, VAP returns a property to productive use and removes a nuisance that was unable to be addressed in any other way.

Based on the results of the property evaluations, the City applied for and received a U.S. EPA Brownfields Pilot Grant for one of the ten sites. The grant will allow the city to plan cleanup activities on the property; develop a public education program to showcase the property's redevelopment as a model for other properties in the community and around the state; and use redevelopment of the property as a catalyst for other brownfield efforts throughout the City.