

**ANALYSIS OF
PENNSYLVANIA'S BROWNFIELDS PROGRAM**

**Prepared by
Charles Bartsch
Northeast Midwest Institute
cbartsch@nemw.org**

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AN ANALYSIS OF PENNSYLVANIA'S BROWNFIELDS PROGRAM

This paper provides an overview of the brownfields challenge in Pennsylvania and makes a series of recommendations to build upon the success of the state's Land Recycling Program to ensure further redevelopment and reinvestment in vacant and contaminated land in the state's older communities.

FRAMING THE ISSUE

Site Reuse in Pennsylvania -- A Critical Economic Development Issue

Most cities and towns within Pennsylvania can point to a declining or closed industrial site, dying shopping center, gas station, or dry cleaner within their boundaries. These facilities must be returned to productive use. Communities experiencing growth are converting close-in sites to living or working space. Those trying to pull out of decline need a magnet for possibilities. Returning these sites to productive use does more than create jobs and tax revenues; it produces social, environmental, and aesthetic benefits.

Despite the potential of these sites and the interest in their revitalization, serious obstacles impede progress. Chief among these is contamination affecting the land and buildings on these sites, even if it exists only at small levels. In some situations, owners have decided to "mothball" their facilities, letting them sit idle rather than grappling with the reuse challenges they face. In other cases, private owners have simply given up on their properties, allowing them to revert to the public domain. This means that local governments, often pressed for cash, are being forced to deal with the problems of contamination and decay themselves in order to see these facilities returned to productive—and tax generating—uses.

The obstacles, while daunting, are being gradually confronted by federal agencies, state and local governments, development organizations, and private interests. In spite of difficulties, the problems of reuse usually do not outweigh the benefits of returning the structures and properties to productive use. Older structures in inner-cities can provide affordable space for new and small enterprises that cannot pay for space in newly constructed suburban business parks or high-rent commercial areas. Large, often architecturally significant structures can become anchors for new redevelopment efforts.

The lack of large tracts of empty land and the inability to annex adjacent areas is forcing some

cities to look closely at reusing old factory complexes and abandoned shopping centers. Older industrial buildings have the advantage of location in areas already developed, often close to town centers. Their reuse helps reduce suburban sprawl, with its land use and environmental impacts. Building on previously developed land rather than greenfield tracts reduces the potential for spoiling groundwater and wetlands. Site reuse takes advantage of existing infrastructure and avoids costly new public investments. In larger cities, old industrial complexes often are served by mass transportation; central city sites are often more accessible to economically disadvantaged persons, who have a greater need for public transportation to get to and from work.

The Brownfields Issue in Context -- Nationally and in Pennsylvania

1. *How Many Brownfields?*

The brownfield issue is plagued by a lack of quantitative data, but there is no question that the problem is significant and pervasive; countless sites are impacted by the overlay of environmental concerns on the economic development process. Much of this statistical vagueness is due to the definition of a "brownfield." Prior to the passage of the federal brownfield authorizing statute in January of 2002, EPA's working definition focused on abandoned or underutilized sites where contamination, or the perception that contamination exists, impeded redevelopment potential. The new law broadened that even further, to "real property" with even the potential for contamination by a hazardous substance. Such a definition defies consistency in counting; "perception" and "potential" are virtually impassible to quantify.

Nevertheless, some experts have estimated that more than 500,000 sites nationwide show evidence of at least some contamination which could trigger regulatory concerns and ultimately inhibit their owners from selling the site, securing financing, or proceeding with reuse. This figure includes former industrial sites, abandoned gas stations, dry cleaners, and commercial operations. And, since the new law brought petroleum contamination under the brownfields umbrella, some observers have pushed this figure up to 1 million or more, a figure which EPA staff have cited in public statements -- an increase due to all those abandoned gas stations now eligible for brownfield assistance being included into the count. However, no one knows for sure how many brownfields are in each state, what percentage are rural and urban, how much brownfields make local economies suffer, or how much their redevelopment boosts those economies.

Even attempts to survey cities have run into difficulty; only three Pennsylvania jurisdictions responded to the most recent annual survey by the US conference of Mayors:

- Lehigh Valley, which reported 35 sites covering 150 acres;
- New Castle estimated that it had six sites, totaling 75 acres; and
- Philadelphia, which noted it had brownfield tracts but wouldn't even hazard a guess as to their magnitude. [source: "Recycling America's Land: A Report on Brownfields Redevelopment, Volume IV", issued by the US Conference of Mayors, June 2003]

2. *Difficulties in Quantification*

The problems that typically plague these facilities, such as structural deterioration and environmental contamination, are virtually impossible to tally reliably beyond the community level. "Perception of contamination" complicates any efforts at consistent counting; methodologies may vary. The fact that brownfields straddle both the environmental and economic development arenas, and that these programs may be interpreted and operated by officials by either sector, similarly dilutes efforts to be consistent in brownfield site identification.

Public officials and private leaders can give examples of specific properties and describe the problems, but few are able to offer an overall estimate of their extent. Listings of vacant industrial and commercial space are readily available, including those on Pennsylvania's nationally recognized "Site Finder" program. However, such listings are typically compiled from lists of properties for sale or lease, not property withdrawn from the market, because no reporting requirement exists for brownfields. Vacancy rates do not reveal the importance of a particular site to the local economy; neither do they convey its social or historical significance. Unless a property has been inspected, it is impossible to know if it is contaminated -- although if the facility housed an industrial operation prior to 1980, when the federal Superfund law put tough new rules in place, the likelihood is very high, given that "perception" plays a role in their determination, as provided in federal law.

3. *Impacts of Limited Capacity and Contamination*

Large metropolitan areas such as Pittsburgh or Philadelphia have considerable difficulty in grappling with brownfield situations; small cities such as Meadville -- which have had to cope with significant brownfield problems -- often fare much worse, having few resources and little local staff capacity available to deal with them. Industrial towns such as those in the Scranton-Wilkes Barre area grew up around the factory and have few businesses independent of it. Small towns can be economically devastated when a plant shuts down. The local labor force may lack transferable skills, limiting community efforts to attract a different business to the site.

Moreover, the abandoned facility becomes a constant reminder of bad times and can spawn blight in adjoining areas. Many brownfields are caught in a vicious cycle of decline, which only exacerbates the problems local officials face.

- Older industrial properties--even those with just small amounts of environmental contamination that could easily be remediated--are placed at a considerable disadvantage in the real estate market, compared to clean greenfield locations.
- A property owner--unable to sell a contaminated property--simply abandons it, undermining the local tax base.
- Vacant facilities deteriorate and invite abuse--unsupervised stripping of parts or material, vandalism or arson, and "midnight" dumping.
- Untended pollution may worsen and spread, further diminishing the property value and adding to its cleanup cost, as well as threaten the economic viability of adjoining properties.
- The site becomes an unwanted legal, regulatory, and financial burden on the community and its taxpayers.

4. *Barriers to Revitalization*

The notion of addressing brownfield contamination has been embraced by all stakeholders -- support crosses party and ideological lines, and is expressed by officials in both the public and private sectors. Everyone recognizes that this goal is both desirable and laudable, but doing so is not easy. The complicated procedural and legal steps of testing, acquiring, cleaning, and reusing older industrial sites can be expensive and time-consuming. In practice, the reuse issue boils down to one of simple dollars and cents. On the one hand, a prospective purchaser or developer can acquire an untouched greenfield site, probably in a new industrial or office park, or shopping mall far from the central city, and build a facility to suit with minimal fuss. In many cases, that developer will be able to take advantage of less stringent enforcement of wetlands protection statutes and other land use laws that make development of farm land and other rural sites easy and cheap.

Or, that same developer can acquire a previously used site in an old, largely abandoned central city industrial district. The latter site, almost assuredly saddled with real or perceived

contamination, is probably available at little or no cost. However, the prospective purchaser will then spend time and money having it tested to find out exactly what substances it contains, spend considerable time and money cleaning it up and getting it ready to build on, likely spend more months pleading with a banker to lend on it, spend more time and money to provide additional documentation and monitoring, and spend the rest of his ownership tenure worrying if some as-yet-undetected contamination will surface, undermining the value of the property. In many areas, in fact, site preparation costs per acre for long-time industrial sites in inner city areas can be quadruple those of a site of the same size in a new far suburban setting.

5. *Financial Barriers to Redeveloping Sites*

The complicated procedural and legal steps of testing, acquiring, cleaning, and reusing older industrial sites can be expensive and time consuming. Even if an old industrial or commercial facility has only small amounts of contamination, site assessment and cleanup activities can add to the cost of a redevelopment project

Many developers have trouble putting a complete financing package together – especially the capital needed for three specific activities:

- early stage site assessment;
- defining a site remediation plan (which is necessary if the owner wants to take the site through a VCP in order to get some finality on liability concerns, or to be able to use institutional controls); and
- implementing the actual cleanup itself.

In addition, prospective brownfield reusers will almost certainly have to give a higher rate of return to their investors or lenders to persuade them to take on a project with greater perceived risk – in some cases, this "brownfield premium" has translated into an extra 10 or 15 percent return on investment, or an additional point or two on a loan rate. And reuse projects on contaminated sites often are more expensive in terms of planning, design, and community outreach activities.

And brownfield projects have their own types of underwriting costs – environmental data collection and analysis, additional testing, or providing additional independent corroboration on collateral value to the lender. All of this adds to loan processing and review procedures. Some banking analysts have estimated that these transaction costs have tripled since the emergence of the brownfield issue 10 years ago.

So brownfields are characterized by several financial constraints which lead to shortages of capital at critical points in the reuse process. This financing gap is where the most common – and most needed – public investments are required. Money for these activities is often not available from private lenders. Therefore, the public sector often must step up to the plate to kick off such projects, and reduce the risk to a level that the private sector will accept.

States and local initiatives in Pennsylvania and elsewhere have worked most effectively when public-sector initiatives can meet one of several broad goals.

- **Reduce the lender's risk.** Capital can be made more available by providing incentives such as loan guarantees or companion loans which ensure a minimum return, or through support such as environmental insurance, which can limit the borrower's exposure due to unforeseen problems that affect the value of collateral or the borrower's ability to pay, or help transfer risk. Technical assistance programs can do things like identify new, cheaper cleanup technologies or connect lenders with performance data that may make institutional controls more acceptable.
- **Reduce the borrower's cost of financing.** Capital can be made more affordable by subsidizing the interest costs on project loans (for example, with tax-exempt financing or low-interest loans), or by reducing loan underwriting and documentation costs. Some communities have done this by offering loan packaging assistance or technical support that might be available through CDCs and other local institutions. In some cases, local governments have helped cut borrowing costs by partnering with site users to prepare records and help maintain institutional controls.
- **Offer terms or incentives to ease the borrower's financial situation.** Tools like tax abatements, tax credits, or grace periods can help improve the project's cash flow, and make it easier for the project numbers to work. Similarly, training and technical assistance services can offset project costs and reduce a site reuser's need for cash. These services often form the basis on which redevelopment partnerships are structured.
- **Provide direct financing help.** When contamination is suspected, money for site assessment and cleanup is the hardest piece of the financing puzzle to solve. Therefore, more and more states are fronting money for this purpose, as grants or forgivable loans.

This is how the public sector can drive brownfield reuse. But public investments can also

stimulate additional private investment by helping to demonstrate the economic viability of an area. In essence, this is putting a brownfield spin on a traditional public sector financing and economic development function — helping to get an anchor development off the ground is the classic economic development catalyst role of government. It helps bring comfort to private lenders and investors.

6. *The Need for Brownfields Reform*

We do know -- from examining scores of case studies, from Pennsylvania and nationally -- that strategic brownfield redevelopment can clean up environmental hazards, remove neighborhood eyesores, create jobs, boost tax revenue, provide housing, and promote general economic health in local communities of all sizes. Redevelopment can produce win-win scenarios for both the economy and the environment. EPA has awarded dozens of grants to Pennsylvania cities to help them cope with the problems of contamination; in its most recent funding round, announced on June 20, 2003, EPA made awards to nine entities within the state. These ranged from the city of Allentown to the Urban Redevelopment Authority of Pittsburgh to the Earth Conservancy in Hanover Township.

The convergence of the needs, issues, and opportunities of economic development and environmental improvement comes at a critical time for local officials struggling to craft community revitalization strategies targeted to old industrial areas. This timing is especially crucial for states like Pennsylvania, with a long-time legacy of industrial activity that is rapidly diminishing in response to broader shifts in the nation's economic base.

OVERVIEW OF FEDERAL AND STATE BROWNFIELDS PROGRAMS

Voluntary Cleanup Programs

Shortly after the brownfield issue emerged, following several court cases which clouded the applicability of CERCLA liability, older cities with an extensive industrial legacy found themselves at a considerable competitive disadvantage because of the uncertainties over contamination and its potential legal impacts. Therefore, several states -- with encouragement from federal EPA, began to formulate what came to be known as voluntary cleanup programs (or VCPs). VCPs are state-level initiatives that have been put into place to encourage the voluntary cleanup of contaminated sites, and they carry various types of liability relief with them. The earliest recognized successful programs were found in New Jersey and Minnesota; Pennsylvania was not far behind, in 1995, when it enacted a package of laws to establish its Land Recycling Program.

No federal legislation requires the creation of these state programs; states have enacted them, with USEPA encouragement, to expedite the site reuse process. VCPs address the sites that do not meet federal EPA's criteria for placement on the National Priorities Superfund List, or federal criteria for emergency removal of contamination or fall under RCRA regulations.

Voluntary programs differ from other environmental programs because they provide a way for owners or developers of a site to approach a state *voluntarily* to cooperatively work out a process by which the site can be cleaned up appropriately, incorporate innovative and more cost-efficient cleanup technologies or engineering controls to contain contamination, and made ready for new uses. As of the beginning of 2003, 49 states operate VCPs. (Only North Dakota does not have either an administrative or statutory program in place.) Many are very new; only five of the programs existed before 1991, and more than two-thirds have been put in place since Pennsylvania adopted its program.

State VCPs are particularly popular because they allow private parties to initiate cleanups and work with state agencies to avoid some of the costs and delays that would likely occur if the sites were subject to enforcement-driven programs. Since the early 1990s, federal EPA has done much to encourage state activity in this area. EPA has chosen to take a "hands off" approach in terms of brownfield sites, deferring final decision-making to the states, and this approach was recently codified in the new Brownfields Environmental Restoration Act, signed into law by President Bush on January 11, 2002. Now, federal EPA can only over-rule states under several clearly defined situations (i.e., the site is federally owned, contamination straddles state lines, etc.).

Pennsylvania's Land Recycling Program

The Pennsylvania legislature passed a package of laws in 1995, with broad bi-partisan support, which collectively comprised the Pennsylvania Land Recycling Program. These laws, which were strongly pushed by then-Governor Tom Ridge as one of his earliest economic development initiatives upon taking office, included the Land Recycling and Environmental Remediation Standards Act (Act 2 of 1995), the Economic Development Agency, Fiduciary and Lender Environmental Liability Protection Act (Act 3 of 1995), and the Industrial Sites Assessment Act (Act 4 of 1995).

Pennsylvania's approach to its voluntary cleanup efforts, characterized by tiered cleanup standards that focus on intended re-use of sites combined with financial incentives designed to meet some of the thorny aspects of site reuse finance, has been recognized almost since its inception as one of the nation's leading brownfield revitalization efforts. Several states have modeled some of their own program provisions after Pennsylvania's; a delegation from Puerto Rico traveled to Pennsylvania in 2001 to study the Land Recycling Program as the foundation for the Commonwealth's new program. Perhaps as a recognition of the success Pennsylvania's efforts, the White House chose a facility in Connschocken, which was the 1,000th site to obtain sign-off under the Land Recycling Program, as the location for President Bush to sign the brownfield bill into law in January, 2002.

Pennsylvania's Land Recycling Program, according to the program fact sheet, "encourages the recycling and redevelopment of old industrial sites." Established in 1965, the program is built on four components:

- uniform cleanup standards based on health and environmental risks -- but which consider future land use;
- standardized review procedures;
- release from liability; and
- financial assistance.

The program offers clients release from liability for approved cleanups. Unlike many states, Pennsylvania PRPs may participate. The program identifies risk-based standards for cleanup, simplifies the approval process, and limits future liability when standards are attained. Unlike most states, Pennsylvania law contains special provisions which encourage the redevelopment of "special industrial areas." These focus on properties -- to be used for industrial activities -- where no financially viable responsible party can be found to clean up contamination. They also include land located within

a state-designated enterprise zone or Keystone Opportunity Zone.

One of the strongest feature of Pennsylvania's effort is the variety of financing programs targeted to brownfield situations. They include:

- Industrial Sites Reuse Program - provides loans and grants to municipalities and private entities for site assessment and remediation; maximum of \$200,000 for site assessment, or \$1 million for remediation per year; all require a 25% match; loans carry a 2% rate for terms up to 5 years (for assessments) or 15 years (for remediation).
- Infrastructure Development Program - provides public and private developers with grants and loans for site remediation, clearance, and new construction, up to \$1.25 million per project at 3% interest for 15 years.
- Brownfield Inventory Grant (BIG) program - grants up to \$50,000 to cities and development authorities to carry out brownfield inventories.

Pennsylvania also offers a blend of other incentives which have made it one of the nation's leading states to promote site reuse. The Key Sites Initiative, for municipalities and economic development agencies, uses state-funded contractors to conduct site assessments and prepare cost estimates and remediation plans to promote reuse of abandoned industrial properties. In Keystone Opportunity Zones, all taxes maybe forgiven for up to 12 years. A job creation tax credit program offers a tax credit of \$1000 per new job created, for firms who increase employment by 25 jobs or 20% within three years from the date they start with the program.

Finally, the Pennsylvania Site Finder is a web site for marketing previously used commercial and industrial properties available for redevelopment in Pennsylvania; a person can list a site for sale or lease and also search for one to purchase or lease. PaSiteFinder can be searched by property location, acreage, building square foot, or cost. Once a potential site is identified, additional information can be retrieved including: county, municipality, property size, zoning, buildings and conditions, and utility access. SiteFinder has been recognized by the National Association of Environmental Professionals with its National Environmental Excellence Award and by the International Association of Business Communicators as an "outstanding example of communications excellence." To date, over 360 sites have been listed on PA SiteFinder, with over 40 sites having been leased or sold from this listing. PA SiteFinder entertains over 7,000 user sessions per month.

1. *What concepts have guided the Pennsylvania program?*

In looking at the Pennsylvania Land Recycling Program, several underlying premises become clear. This effort recognizes that the state needs to make better use of its existing public investments. Resources are too scarce to disregard existing housing, commercial, and infrastructure investments, to start from scratch in greenfield areas when suitable sites sit vacant.

Moreover, these reuses must be carried out with site histories -- and the health and environmental legacies of those histories -- in mind. In Pennsylvania, given its manufacturing history, many of these sites are former industrial facilities that have at least some degree of contamination, or perception of contamination, that causes eyebrows to raise when reuse is considered – especially in the context of the new law's definition. This complicates the reuse process. Still other previously used areas are located in commercial areas, such as repair shops, dry cleaners, and gas stations – these are the small, neighborhood brownfield locations which are similarly affected by contamination concerns and the barriers that they raise.

To best take advantage of formerly used sites, Pennsylvania's brownfield reuse strategies are starting to acknowledge the changes that have taken place in land use patterns and the jobs and economic base of traditional industrial cities and towns. A growing number of cities and towns within the state are working with the state programs, and not trying to reinvent the past, but building on new opportunities for future economic growth.

Pennsylvania, with its industrial standards and encouragement of cleanups determined by a site's end-use, has embraced the concept that brownfield reuse is definitely not a “one-size-fits-all” challenge. Their programs recognize that no single approach fits the financing and technical assistance needs of all brownfield projects, which vary by project situation, type of developer, level and type of contamination, and desired rate of return.

Finally, the state has structured programs and strategies which are widely viewed as realistic. Pennsylvania, though its programs, was one of the first states to realize that brownfield projects are first and foremost real estate deals that happen to have an environmental twist to them. They need to fit community or market situations, and they need to take advantage of the local competitive advantage, whatever it may be. Their numbers still have to pencil out. For most sites, contamination is but one of many problems that the project faces.

Nationally, other states, agencies and professional organizations have taken notice of

Pennsylvania's Land Recycling Program. Leaders from 19 states – California, Connecticut, Florida, Iowa, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, New York, Ohio, Oregon, South Carolina, Texas, Utah, Virginia and West Virginia – have looked to Pennsylvania's three-bill legislative package for guidance in developing their own remediation programs. Puerto Rico and New York City developers and planners also have shown an interest in Pennsylvania's approach to cleanups and redevelopment. Over these eight years, the Land Recycling Program has received many awards for environmental innovation and public outreach.

2. *How has the Pennsylvania Land Recycling Program been viewed by others?*

Pennsylvania's program has garnered a number of national recognitions, as noted below:

- adopted by the American Legislative Exchange Council as the national model for industrial site recycling (October 1996);
- recipient of a "Top Ten Innovations in Government" award from the Ford Foundation and John F. Kennedy School of Government at Harvard University (November 1997, and again in April 2002)
- PA SiteFinder gets a National Environmental Excellence Award for Environmental Management from the National Association of Environmental Professionals (June 2002)
- PA SiteFinder is presented with a Business Facilities 2002 Economic Development Achievement Silver Award(December 2002)

Pennsylvania's Land Recycling Program -- Incentives and Assurances Provided

Land Recycling Program (1995) — offers clients release from liability for approved cleanups and PRPs may participate. The program identifies risk-based standards for cleanup, simplifies the approval process, and limits future liability when standards are attained.

Financial Elements

Financing Programs Targeted to Brownfield Situations

- Industrial Sites Reuse Program — provides loans and grants to municipalities and private entities for site assessment and remediation; maximum of \$200,000 for site assessment, or \$1 million for remediation per year; all require a 25% match; loans carry a 2% rate for terms up to 5 years (for assessments) or 15 years (for remediation).
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- Brownfield Inventory Grant (BIG) program — grants up to \$50,000 to cities and development authorities to carry out brownfield inventories.

Incentives to Attract Private Investment to Brownfields

- Key Sites Initiative — this program, for municipalities and economic development agencies, uses state-funded contractors to conduct site assessments and prepare cost estimates and remediation plans to promote reuse of abandoned industrial properties.
- Keystone Opportunity Zones — in newly designated KOZs, all taxes maybe forgiven for up to 12 years.
- Job Creation Tax Credit Program — a tax credit of \$1000 per new job was created for firms who increase employment by 25 jobs or 20% within three years from start date (with program).
- PaSiteFinder – web site for marketing previously used commercial and industrial properties available for redevelopment in Pennsylvania; a person can list a site for sale or lease and also search for one to purchase or lease. PaSiteFinder can be searched by property location, acreage, building square foot, or cost. Once a potential site is identified, additional information can be retrieved including: county, municipality, property size, zoning, buildings and conditions, and utility access.

Technical Elements

Definition

Pennsylvania defines brownfields as “abandoned, idle, or under-used industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”

Standards

No formal RBCA or comparable/informal process in place; applicant has a choice of background, statewide health, or site-specific standards. “Special industrial area” provisions may apply to VCP cleanups at sites used for industrial purposes prior to enactment of Act 2, in 1995.

Institutional Controls

ICs may be part of site specific responses, but they are not permitted for attainment of background or statewide health standard cleanups.

Reuse Benefits

Number of Sites

As of July 2002, 1,097 sites have completed the program and over 500 sites are underway.

Economic Benefits

- Although economic benefits from redeveloped sites are not officially tracked by Pennsylvania's VCP, officials estimate that 30,000 jobs have been created and approximately 1,097 businesses have located on redeveloped brownfields. A wide variety of industrial and commercial, along with residential projects, schools, recreational facilities (a golf course, athletic fields, trails), and open space are being developed on brownfields, and green infrastructure is encouraged.
- DEP has entered into several multi-site agreements. One, with Penn Fuel Gas, included the remediation of a former manufactured gas plant and railyard and the development of 2 ballfields for the Shippensburg Little League. A portion of this site has also been dedicated for green space and a wetland project.
- A number of the redeveloped sites have been located in Keystone Opportunity Zones (KOZ); benefits have resulted, but it is difficult to quantify what type of “dollar” impact this may have had on state and local communities.

3. How does Pennsylvania compare to other states in terms of financing incentives?

More than half the states -- including Pennsylvania -- now have some type of program in place to help finance brownfield reuse, and the Pennsylvania incentives are noted in the accompanying chart. What is interesting is their variety. States are putting many different – but equally effective – approaches in place to meet the diverse challenges and common goal of brownfield reuse.

About 23 states -- including Pennsylvania -- offer some array of tax credits, abatements, and other tax incentives to encourage brownfield projects. These programs basically help with a project's cash flow, by allowing revenue to be used for brownfield purposes rather than for tax payments. State and federal tax incentives historically have been used to channel investment capital and promote economic development in areas that have needed it – and brownfield targeting is a natural evolution of this type of program tool. Most tax incentives are targeted to offset cleanup costs or to provide a buffer against increases in property value that would raise tax assessments before the site preparation costs are paid off. They include:

- *Michigan*, with its new 100 percent, 12 year abatement of its single business tax to encourage site reuse in distressed areas. Abatements are available in communities that designate communities as what the law terms “obsolete property rehabilitation districts”
- *Colorado*, which has authorized tax credits to offset remediation expenses – a 50 percent tax credit against the first \$100,000 in cleanup costs, 30 percent of the second \$100,000, and 20 percent of the next \$100,000.
- *New Jersey* brownfield site owners in designated Environmental Opportunity Zones can get tax rebates from the state, through redevelopment agreements with developers, to allow recovery of up to 75 percent of their remediation expenses. And a new provision under consideration this year would allow developers to get corporate tax credits equal to the entire cost of cleanup if the project would generate new tax receipts equal to the credits within three years.
- *Illinois* provides a 25 percent income tax credit of up to \$150,000 per site, to developers who spend at least \$100,000 to restore contaminated sites, and these credits are transferable to new owners.
- *Missouri* offers a variety of property, income, and job creation tax incentives, for up to 10 years,

as part of its Brownfield Redevelopment Program. Site reusers pick from the menu according to their project needs, and package them together. The value of the incentives can total up to the entire cost of remediation.

Some 22 states offer financial assistance programs targeted directly to promote brownfield reuse. Pennsylvania has one of the nation's longest operating programs of this type. Capital gaps remain the biggest barrier to brownfield reuse, and more than half the states have worked to address this issue by putting some sort of financing incentives in place – both direct financing tools, such as loans or grants, or indirect financing assistance such as tax abatements or credits.

Last year, more state legislatures focused on this aspect of financing than any other. This year, states are expected to consider additional program refinements or targeting -- or reallocation of resources to meet a tight budget situation. Currently:

- *Indiana* has a state environmental Revolving Loan Fund in place, which now include provisions to allow forgiveness of 20 percent of the loan amount for projects meeting community determined development goals, with priority given to gas stations and facilities located within ½ mile of a school or child-care center.
- *Illinois* now offers a Brownfield Redevelopment Loan Program to offer low-interest loans to local governments and private parties, for site assessment, remediation, and demolition costs. This is intended to complement the state's existing grant program that gives cities up to \$120,000 to pay for site assessments and preparation of cleanup plans.
- *Florida's* most recent package of laws added a loan guarantee program, which provides 5 years of guarantees or loan loss reserves for primary lender loans made in defined brownfield areas for redevelopment projects.
- *Missouri* offers loans and loan guarantees to support capital improvements on properties abandoned or underused for at least 3 years.

Finally, more states are developing innovative -- and typically non-cash -- programs to support brownfield redevelopment by helping to level the economic playing field between unused and brownfield sites. These types of state activities build on very real and practical opportunities to promote linkages across programs and leverage additional resources more easily. About half a dozen state programs do this in various ways, by limiting risk or offsetting critical costs such as those for site

assessments. In addition to the Pennsylvania SiteFinder program noted above, they include:

- *Michigan*, which has authorized cities and counties to establish Brownfield Redevelopment Authorities, which have tax increment financing (TIF) and bonding authority
- *Massachusetts*, which offers an insurance incentive to brownfield site development in targeted areas.
- *Wisconsin* has adopted incentives aimed at the process side of the financing picture, including a mechanism to cancel delinquent taxes for new purchasers as part of an agreement to clean up contaminated property.

POLICY FRAMEWORK -- HOW MIGHT PENNSYLVANIA ADVANCE ITS EFFORTS?

The confluence of environment and economic development issues and situations, which characterizes brownfield efforts, has meant innovation and constant change -- as new cleanup strategies are developed and implemented, as innovative approaches to public finance are put in place, and as creative private sector approaches, such as emerging environmental insurance tools, become more widely incorporated into these projects. Like manufacturing itself, "continuous improvement" has become the watchword in brownfield policy. Brownfield revitalization has become the "wonderland" in many state economic development circles, but with this new prominence also comes the proverbial Red Queen exhorting the Alices in all the states to run as fast as they can just to keep up.

As the brownfield reuse issue continues to evolve, more and more states have taken a cue from Pennsylvania and recognized the critical role that financial incentives must play if state voluntary cleanup programs are to be used more widely and effectively. Financing disparities and investors' fears of uncertainty continue to tip the economic development balance away from older industrial sites towards undeveloped greenfield locations. Because brownfield redevelopment needs are so diverse, the key to effective financial assistance lies with a combination of sources, both existing and new.

Next Steps for Pennsylvania: Identify New Brownfield Uses for Old Direct Financing Tools

States such as Pennsylvania, with a strong tradition of public support for economic development activities, are especially well positioned to promote brownfield reuse projects by giving a new twist to their existing economic development finance programs. As with federal programs, many state efforts were designed and their rules defined long before brownfield concerns surfaced. States are beginning to enhance brownfield initiatives -- like HUD has tried to do with its CDBG program -- simply by recognizing site assessment and remediation needs as legitimate project development activities within the context of the common financial assistance initiatives noted below. Pennsylvania could enhance its brownfield efforts by making existing programs more accessible for brownfield uses.

1. *Credit Programs*

Some of the state's economic development investment and loan programs are offered either directly or through development agencies, authorities, or corporations. These programs are capitalized from a variety of sources -- general appropriations, fee collections, or repayments from previous federal or state project loans. These efforts could be better targeted to the specific financing needs of brownfields. Because of public interest or community concerns, state lending agencies may be in a

better position to work with new purchasers or existing owners of contaminated sites -- for example, by offering more flexible loan terms -- to encourage cleanups and stimulate new development activity.

In addition, Pennsylvania could consider offering a brownfield-based loan guarantee program, which could minimize various risks that make financial institutions hesitant to lend on brownfield sites. Small businesses, start-ups, and new technology ventures typically are viewed as especially risky and often addressed in state programs; environmental risks are rarely addressed but could be the focus of a guarantee initiative.

A loan guarantee program makes commercial lenders more likely to offer loans to operations whose fiscal health would ordinarily make lending to them a questionable risk. Guarantees serve to lower what bank regulators term the “risk ratios;” the guarantee strengthens the performance of a bank’s loan portfolio in the eyes of regulators because the guaranteed portion of the loan can not be subject to default or become -- in banking lingo -- “nonperforming.” Loan guarantees provide banks with a sought-after backstop. Although loan guarantees do not solve the problems caused by concerns over liability, they do address the issue of diminished collateral value. Since the issue of collateral is much less important for a loan backed by a guarantee, the problem of a facility’s lost market value due to contamination is reduced.

Pennsylvania could enhance access to affordable capital for companies by exploring a number of strategies currently being used in other states:

- help channel capital to small city and town efforts, by earmarking some of the state's portion of its HUD small cities CDBG allocation to brownfield assessment and cleanup activities, as Wisconsin has done;
- bring the advantages of HUD's Section 108 loan guarantee program to small cities by applying as a state to HUD for a small cities brownfield revitalization guarantee, pledging the necessary amount of its CDBG allocation as collateral (similar to the way in which CDBG entitlement cities pledge their allocation as collateral);
- establish a linked-deposit program to encourage private capital investment at brownfield sites -- especially investment needed for cleanup;
- establish a targeted loan guarantee program, to provide collateral guarantees or loan loss

reserves for primary lender loans made at brownfield sites for redevelopment projects, as Florida has done.

2. *Business development corporations and quasi-public entities*

An important source of investment capital, especially for small companies, is the publicly chartered private development bank, usually called business development corporations (BDCs) or development credit corporations. Currently, they operate in about 30 states. BDCs are authorized by state law and operated under state rules, but privately administered. Several states have chartered them as an alternative to direct loan and loan guarantee programs, especially those with constitutional restrictions on using state funds to help private business. To date, though, little BDC financial assistance has been directed to brownfield projects. Given its tradition of successful public-private partnerships targeted to community, Pennsylvania could make effective use of this type of capital formation tool in a brownfields context.

In addition, few states have sought to give quasi-public development authorities any kind of brownfields role. Pennsylvania could adopt an effort similar to Michigan's Brownfield Redevelopment Authority program; there, new entities patterned after traditional redevelopment operations are being chartered with a specific objective of promoting brownfield revitalization. They have been given traditional authority powers, including condemnation and the ability to use tax increment financing. More than 75 are in place in Michigan, where they have spearheaded projects both in large cities and in towns with as few as 1,500 people.

BDCs generate most of their capital from private sources, such as banks, insurance companies, and similar institutions that purchase shares of stock, provide advantageous loans, or extend lines of credit to the corporation. Some of the more recently established BDCs have used state-granted tax incentives to attract individual and business investments. Pennsylvania could consider this approach. Often, participation in a BDC allows the financial institution to participate in less risky companion or shared loans as part of a resource package assembled by the BDC to finance a business project. Most financing is directed to small companies that use the funding for construction activities and working capital.

Next Steps for Pennsylvania: Make Tax-Code Based Incentives More Applicable to Brownfields Projects

Pennsylvania, like all states, has used its tax code as a way to attract and channel investment

capital in ways that serve broader public purposes. Brownfield revitalization is clearly such an appropriate purpose, and more and more states have adapted their tax incentives to support site cleanup and reuse. Pennsylvania could consider different approaches taken by other states.

For example, Minnesota has modified its *TIF* laws to recognize one of the realities of brownfield sites — stigma. By defining a hazardous waste sub-district, cities can value brownfields at zero, for TIF purposes. This boosts the increment and the potential to raise proceeds for cleanup and redevelopment. Brownfield site owners in New Jersey's designated Environmental Opportunity Zones can recover up to 75 percent of their annual property taxes to offset costs they have incurred for site clean-up. Sites in Connecticut can take advantage of a 7-year deferral of increased property taxes that could occur because a clean site becomes more valuable. Similarly, Idaho offers a 7-year, 50 percent tax break on the property's appreciation due to remediation. Texas takes a 4-year, sliding scale approach, starting with a 100 percent abatement the first year.

Illinois provides a 25 percent income tax credit of up to \$150,000 per site — this is available to developers who spend at least \$100,000 to restore contaminated sites, and these credits are transferable to new owners. Wisconsin offers a 50 percent credit for remediation spending in designated Development Zones. Wisconsin has also addressed a tax issue that has proven problematic in cities all over the country, namely, the issue of payment of back taxes on abandoned sites. Wisconsin allows assignment of tax liens, and subsequent cancellation of delinquent taxes for new purchasers as part of an agreement to clean up contaminated property that they acquire in this fashion.

In short, Pennsylvania, could consider several new tax incentive options to complement its existing efforts:

- single-year cost recovery of some or all remediation costs borne by new site owners, which could be very helpful to small businesses planning their capital needs over the short term;
- making cleanup-focused tax incentives transferable from developer to new owner, to broaden their appeal and usefulness for housing and commercial projects;
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- adopt a "menu" approach to tax incentives, as Missouri has done, to allow new site owners and developers the flexibility of choosing from a variety of property, income, and job creation incentives (up to a prescribed cap) to fit the specific parameters of their project;

- expedite transfer of tax delinquent properties, as Wisconsin has done, to discourage mothballing and give new owners tax forgiveness on these properties to address critical economic barriers to site reuse.

Next Steps for Pennsylvania: Adapt New Emerging Tools and Innovations

New tools to address the difficult financing issues surrounding brownfield site assessment and cleanup continue to emerge. Pennsylvania could consider adapting a number of these to further its efforts.

For example, environmental insurance is playing a growing role in bringing critical certainty to brownfield efforts -- it helps prospective purchasers quantify risks related to cleanup cost obligations, and it provides lenders with the comfort they want in terms of maintaining collateral value. More states and communities are exploring a public role in providing insurance, recognizing the great leveraging potential it has. For instance, Massachusetts has developed an insurance partnership (currently with AIG environmental), in which the state will cover up to half of the insurance premiums (up to \$50,000) for sites in designated redevelopment areas. This allows the state to negotiate more advantageous terms, while bringing the leveraging potential and risk management advantages of insurance to more sites. Given the sophistication of Pennsylvania's brownfield program effort, such an insurance tool could be especially advantageous there.

Several states target their brownfield tax incentives to job creation that is linked to site reuse. For example, Florida offers what they term a \$2500 "bonus refund" for jobs created by brownfield reuse projects. Such an approach would also work well in Pennsylvania.

Finally, some states have established, or are exploring, creative tax and funding earmarks to help address specific types of brownfield needs, typically, small sites with significant yet surmountable challenges. For example, Connecticut has launched a cleanup program targeted to dry cleaners, who can get up to \$50,000 to help with site remediation costs and pollution prevention measures. Funding comes from the state's 1 percent surcharge on dry cleaning services. Pennsylvania could consider this type of targeted approach to help small site owners.

Other states are exploring a wide variety of ideas to better target brownfield incentives, and meet specific brownfield project needs in a more cost-effective manner. They include:

- using some portion of state vehicle registration fees to fund gas station cleanups;

- devoting development fees in sprawling areas to brownfield purposes in declining ones; and capitalizing brownfield revolving loan funds with environmental fees or fines.
- developing a peer review system, perhaps through the state university system, to encourage the use of innovative and cost effective cleanup technologies;
- better focusing development grants programs to local governments, to make it clear that key brownfield related activities like demolition, cleanup, and site assembly are essential parts of the redevelopment process;
- instituting bonding set-asides for priority brownfield projects;
- adopting a type of environmental remediation TIF, that includes delinquent taxes as an eligible project cost, as well as make it extensive enough to cover costs of demolition and removal of all types of contaminants, including lead paint, asbestos, petroleum;
- aggressively promote "non-cash" incentives that the state can encourage, such as help with title clearance, site assembly, expedited permitting, etc.

All of these approaches could work well in Pennsylvania.

**Coping with Contamination:
Selected State Innovations in Brownfield Project Finance ***
What Could Pennsylvania Consider?

Tax Incentives: 22 states, including –

- Michigan's 100% single business tax abatement
- Colorado's sliding-scale remediation tax credit
- New Jersey Environmental Opportunity Zone property tax abatement/rebate to offset cleanup costs
- Ohio's 10%/\$500,000 assessment and cleanup cost tax credit
- Illinois's transferable 25% remediation tax credit
- Minnesota's hazardous waste sub-district TIFs

Targeted Financial Assistance: 19 states, including –

- Indiana's remediation RLF (up to 20% forgivable) remediation loans
- Illinois Redevelopment Loan Program available to private parties
- Florida's loan guarantees/loan loss reserves
- Massachusetts Reclamation Payback Fund guarantees pegged to new property taxes generated
- Wisconsin earmarking of state CDBG funds

Direct Financing Assistance: 13 states, including –

- brownfield/environmental G.O. bond issues in Ohio (\$200 million); Michigan (\$255 million); and New York (\$200 million)
- low interest cleanup loans — Delaware, New Jersey Minnesota
- Wisconsin's \$40 million package of grant and loan programs

Initiatives supporting brownfield financing: 10 states, including –

- Michigan's "brownfield redevelopment authorities"
- Wisconsin's forgiveness of back taxes; and state-level Brownfield Environmental Assessment Program
- Pennsylvania's "Key Sites" initiative – funds contractors to do site assessments and prepare cleanup plans
- Massachusetts Access to Capital Program – includes \$15 million to cover environmental insurance premiums on state-negotiated policies with AIG

** Complete information on each state's programs is available free at nemw.org*

The Impact of the new Federal Brownfield Law on Pennsylvania's Efforts

Pennsylvania's brownfield program initiatives, like those of other states, continue to evolve and mature, in the face of turbulent economic times, even as their basic goals remain the same, namely:

- bringing some certainty to the cleanup process;
- establishing some finality to cleanups, with liability relief and no further action mechanisms; and
- offering some incentives to site volunteers, to help level the economic playing field between old brownfield and new greenfield sites.

Pennsylvania, like most states, is struggling with significant budget pressures, and trying to balance the need to do things like offer incentives to attract investment to brownfield sites -- recognizing the return they can bring -- with the obligation to provide basic services.

This is the context within which the new federal brownfield law is being implemented, with important consequences for similar state efforts. In fact, by the end of 2003, the transition to the prescribed brownfield regulatory framework should be complete.

The Brownfield Revitalization Act signed into law on January 11, 2002 shifted virtually all responsibility for brownfield sites to the states. Congress recognized the significance of this shift, and increased EPA's support of state voluntary cleanup and response programs. The new law authorizes \$50 million per year for grants to states and tribes to establish and enhance state voluntary cleanup and other response programs -- more than triple the pre-enactment level, and Congress provided that in the fiscal 2003 budget -- and seems likely to approve a comparable amount for fiscal year 2004, even in the face of significant pressures on domestic programs.

But at the same time, with these new opportunities to promote reuse with certainty, without the fear of federal EPA overfiling, and with new state responsibilities to ensure quality, protective cleanups, will come new issues that Pennsylvania and other states will need to address.

- ***More state needs for federal brownfield resources.*** Even though Congress funded the state component of the new brownfield law at its fully authorized level of \$50 million, this pot of money will not come close to meeting the state needs already identified -- especially in the face of fiscal crises that most states face. At this time, EPA is considering about \$600,000 or

\$700,000 per state, a couple of million for tribes, with the balance to states based on their specific requests.

- ***Greater need for staffing and resource for Voluntary Cleanup Program operations.*** The new law will increase awareness of – and popularity of and demand for – more state involvement via the VCP process. This will put more pressure on these programs and their staffs, and strain their capacity to get sites through the state review process in a timely fashion. Conceivably, a few states this year may be forced to turn away VCP applicants – even those with money to pay the fees – because state budget shortages, hiring freezes, and buy-outs mean that they simply will not have staff to assign to accommodate more sites.

On a related note, demand for institutional controls as part of the cleanup remedy is growing significantly, a strategy which also requires some state oversight. Given these same program pressures, states will likely be squeezed as they try to monitor and manage institutional control agreements. So over the next year, in many areas the question will become – what are the practical limits of these state programs?

- ***Requests for technical and financial assistance from interested and earnest small cities will similarly strain program capacity.*** Cities, who will be barred from using new EPA grant money for administrative costs related to broader operation of site in assessment and cleanup grant programs, may turn to their states for help – especially small towns with no capacity of their own.
- ***“Brownfield program implementation -- phase 2” will unfold.*** States will need to refine or develop their own brownfield financing and VCP program policies, once federal EPA completes its own guidances governing new state roles and responsibilities. This will take time, take resources, and influence how the federal programs are carried out. At the same time, state legislatures will likely make changes in their own programs to reflect changes stemming from the Brownfield Revitalization Act – and this will impact existing state efforts

Where Is Pennsylvania Headed?

Since 1995, passage of its Land Recycling Program, the state has been at the forefront nationally of brownfield innovation and level of effort. In June 2003, Pennsylvania's Secretary of Environment Protection, Kathleen McGinty, laid out one of the priorities of Governor Ed Rendell in his first year in office -- strengthening the state's brownfield program as part of his "plan for a new Pennsylvania."

The plan calls for \$2 billion in bonds and loan guarantees over the next three years, which will leverage an estimated \$5 billion in private investment in economic development projects across this state. Part of that funding, the "Business in Our Sites" fund, would provide \$300 million in revolving loan fund capital for municipalities and their economic development partners to create future business growth and attract opportunities through the acquisition and preparation of key sites for development. Eligible activities would include acquisition of land; environmental assessment and remediation; demolition; site preparation activities; installation of infrastructure; and any other activities necessary to make a specific site ready for potential reuse.

Other proposed activities, laid out by Secretary McGinty, include:

- creating a new economic development office within DEP;
- using enforcement authorities as an "incentive" for absentee owners to clean up mothballed properties and make them available for reuse;
- encouraging local government to waive tax liens on contaminated properties as part of a deal that will encourage investment in and restoration of that property;
- working with the environmental insurance industry to develop a policy reflective of the options and flexibility designed within the Act 2 process that allows property remediation to be conducted in a timely and cost-effective manner.
- continuing the Brownfield Inventory Grant incentive program, which funds to local agencies to collect information on brownfield properties within their jurisdiction
- continuing the Key Sites Initiative partnerships between local economic development agencies and DEP, in which state-funded contractors are assigned to conduct environmental site assessments and prepare remediation work plans and cost estimates, to removes "the unknown" from the property.

CONCLUSION

Underused or abandoned industrial facilities are a national concern. Confronting the environmental and economic issues affecting site reuse requires a deliberate, multi-dimensional approach that often does not neatly fit with the rules and procedures of federal, state, or local economic development or environmental programs. Financing has emerged as a key barrier to brownfield reuse. Site assessment and cleanup requires financial resources that many firms lack and find difficult to secure. And without financing, private reuse projects cannot go forward, even if their proponents want them to. This further undermines efforts to revitalize the distressed areas that are home to so many abandoned, contaminated sites.

Yet in spite of the barriers, brownfield reuse opportunities are real. Hundreds of diverse projects have been documented, showing how they have been carried out in a way that makes economic sense, and that builds on the competitive advantage that specific sites boast. Such success stories suggest that liabilities can be worked out, that financing can be secured, and that cleanup can be accomplished -- in short, that brownfield redevelopment can be achieved.

The challenge that Pennsylvania faces now is to provide the next generation of program and process tools that make the economics of redevelopment projects work, and foster a climate that invites private investment in these projects. This is how Pennsylvania will retain the lead in brownfield revitalization that it currently enjoys.