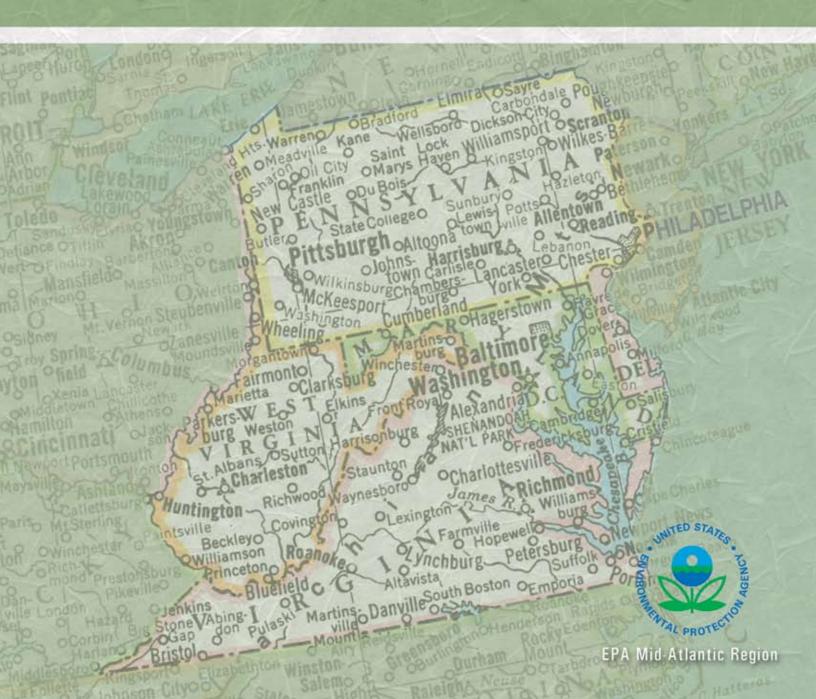




Mid-Atlantic Brownfields: Recasting the Future of Manufacturing and Mining Lands



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Prepared by:

SRA International, Inc. (Contract No. EP-W-07-023) 3434 Washington Boulevard Arlington, VA 22201

Prepared for:

U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response Office of Brownfields and Land Revitalization Washington, D.C. 20460

Message from Regional Administrator

Brownfields: Lands of Lost Opportunity Coming to Life Again

More than a decade ago, EPA recognized that local communities were struggling to address contaminated (or potentially contaminated) properties that were causing blight in neighborhoods, and lowering property values and tax revenues. The private and public sectors hesitated to invest in these properties—which became known as brownfields—for fear of bearing responsibility for any pollution found. In response, EPA offered seed money to local communities to identify and assess contamination on brownfields. This helped to resolve uncertainties and prepare these properties for redevelopment.

Since its inception in 1994, EPA's Brownfields Program has evolved into a highly successful collaborative effort between federal, state and local partners and private investors. Making up the core of EPA's Brownfields Program are the grants for assessment, cleanup, revolving loan funds and job training. To date, \$548 million in EPA grants have assisted thousands of local community efforts to revitalize brownfield properties.

Landmark legislation passed in 2002 broadened EPA's Brownfields Program and provided liability protection to promote private sector participation in brownfields cleanup and development. The availability of other financial and technical tools and resources further enhanced the Brownfields Program's value. These tools include a federal tax incentive, which encourages private sector investment; and state voluntary cleanup programs that allow properties to be cleaned up under state oversight, assuring developers and investors that they will never be held liable for past contamination.

EPA's Mid-Atlantic Region is an ecologically, demographically and economically diverse area. Home to over 29 million people, the Region spans the Atlantic Ocean to the Appalachian Highlands, and includes the District of Columbia and the states of Virginia, West Virginia, Maryland, Delaware and Pennsylvania.



Regional Administrator Donald S. Welsh (second from left) presents a check to the Johnstown Redevelopment Authority, Pa. for brownfields assessment and cleanup.

Brownfields are all around, in the smallest towns and largest cities; they comprise empty warehouses, decrepit factories, old coal mines, vacant gas stations and junk-strewn lots. They are located along waterfronts, near transportation hubs, in neighborhoods, suburbs and even the mountains.

Partnerships form the cornerstone of every successful effort to revitalize contaminated land in the Mid-Atlantic Region. Property owners, developers, local governments, and state and federal agencies each bring something unique to the table, and help to ensure that projects are adequately funded, protective of human health and the environment, and serve the communities in which they are located. Infrastructure needs such as roads, sewers and storm water management—require the direct involvement of local and county governments.

State brownfields programs provide incentives and guidance to promote redevelopment. As shown later in this report, EPA provides millions of dollars to support these programs and works closely with all our states to expedite redevelopment of brownfields. EPA is always seeking opportunities to develop partnerships with local, state and community organizations interested in revitalizing brownfields.

Cleaning up contaminated sites is now easier and faster. We are proud of the progress we have made. Since 1994, 140 recipients in the Mid-Atlantic Region have shared over \$52 million in brownfields grants, breathing new life into old properties. These grants to communities, states and non-profits have resulted in the cleanup of 65 brownfields, and leveraged 7,218 jobs and over \$525 million associated with assessment, cleanup and redevelopment in the Mid-Atlantic Region.

The possibilities of reuse are endless. Former brownfields in the Mid-Atlantic Region are now new homes, businesses, schools, municipal facilities, stadiums, parks, trails, and riverfront promenades—projects that have stimulated economic development and community revitalization while improving the environment and protecting public health. In this report, we are proud to share highlights of Mid-Atlantic brownfields redevelopment successes.

> EPA Mid-Atlantic Administrator Donald S. Welsh

EPA's Brownfields Mission

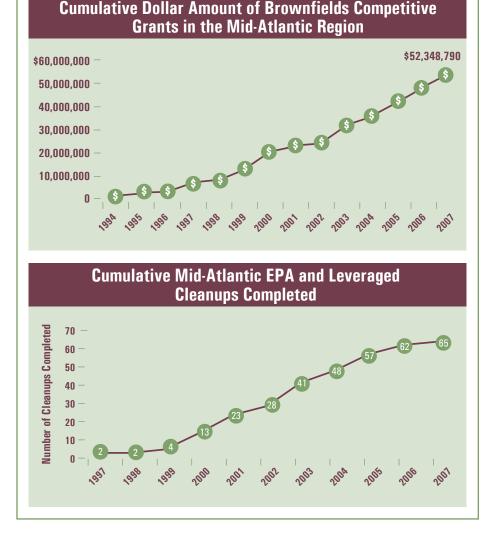
Brownfields are typically blighted former commercial and industrial sites that have been left idle or abandoned, causing both an economic and environmental drain on their communities. Fears of potential contamination and associated liability hamper redevelopment of these sites and make developing in pristine areas, called greenfields, more attractive. EPA estimates that between 500,000 and one million brownfields tarnish the landscape of communities across the country.

The mission of EPA's Brownfields Program is to resolve the environmental issues on these sites, relieve pressure to develop pristine open space and farmland, revitalize communities by creating jobs, and return property to productive use and local tax rolls. The Mid-Atlantic Brownfields program provides technical and financial assistance to states, communities and other stakeholders in the Region to assess, safely clean up, plan for and sustainably redevelop brownfields. We also sponsor conferences, community workshops and property transaction forums to help foster brownfields redevelopment.

The Mid-Atlantic Region was instrumental in bringing mining sites into the national Brownfields Program. At the heart of Appalachia, coal mining and steel production fueled economic growth during the early 20th century. Today, our Region is left with thousands of abandoned mining sites that acidify rainwater runoff, polluting over 5,000 miles of streams and rivers.



Bucks County, Pa. Bristol Riverfront North Brownfields mixed-use redevelopment project incorporates age-restricted residential units and first class office space.

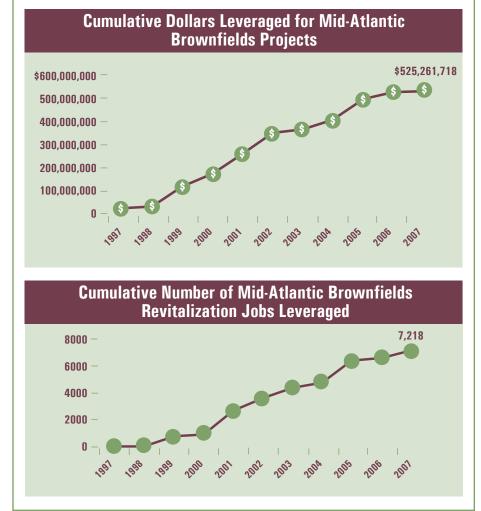




2002, President George W. Bush signs the Brownfields law at a brownfields site in Conshohocken, Pa.

The good news is that abandoned mining sites present tremendous revitalization opportunities. In June 1999, Central City, Pennsylvania received the country's first Brownfields grant to address contamination from mining sites. Since passage of the Brownfields law, which officially recognized mine-scarred lands as brownfields, many other Mid-Atlantic communities have received funding and technical support to address mine-scarred land projects.

EPA's Brownfields Program is a model of environmental stewardship that protects the environment, promotes partnership, strengthens the marketplace, and sustains reuse. Continuing our success in the Mid-Atlantic requires collaboration among all levels of government, the private sector and non-governmental organizations. Recognizing that environmental protection can be the engine that drives economic redevelopment, EPA will continue to support brownfields redevelopment to protect human health and the environment, enhance public participation in local decision-making, and build safe and sustainable communities.



"Partnerships form the cornerstone of every successful effort to revitalize contaminated land in the Mid-Atlantic Region."

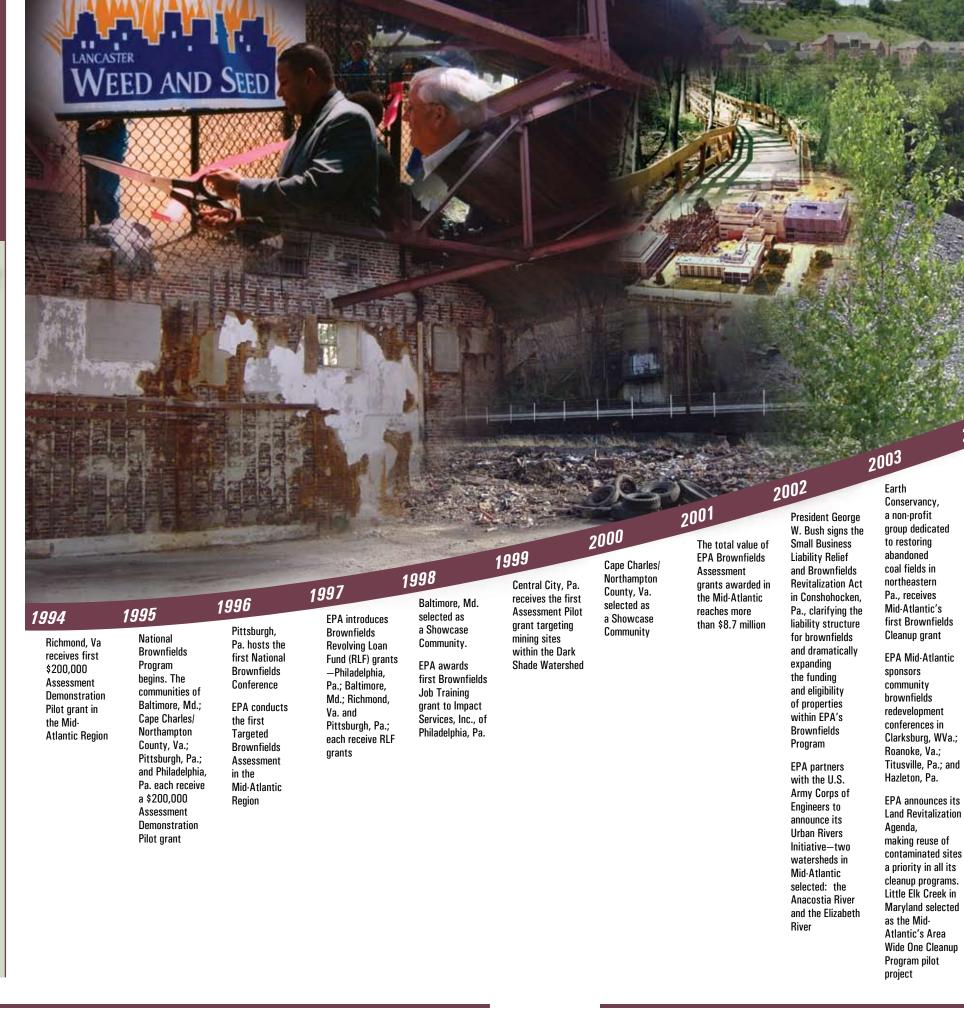
—Donald S. Welsh, Regional Administrator



Mid-Atlantic Region BROWNFIELDS MILESTONES

Over the years, EPA's Brownfields Program has grown from a single pilot project to a large-scale resource that assists thousands of communities with redevelopment efforts. This graphic represents the history and major milestones of the Mid-Atlantic Region's Brownfields Program and traces the progression of our success.

4



2004

The Federal Mine

Scarred Lands

Demonstration

three sites in

Program created,

the Mid-Atlantic

selected: Stone

Creek Tipple

property, Lee

County, Va.;

Kelly's Creek,

County, WVa.;

and the CAN DO

Cranberry Creek

site, Hazleton, Pa.

Atlantic and the

Commonwealth

of Pennsylvania

Cleanup Program

sign a first of

Memorandum

of Agreement

outlining how

the two agencies

will coordinate

efforts to clean

contaminated

sites

up and redevelop

its kind One

Kanawha

EPA Mid-

Titusville, Pa.; and

Land Revitalization

contaminated sites

2005

The Land Revitalization *Update,* a quarterly enewsletter for the Mid-Atlantic Region, is launched



EPA's new federal regulations for All Appropriate Inquiry take effect

Bucks County Redevelopment Authority makes the Region's first Brownfields Revolving Loan Fund loan for \$975,000

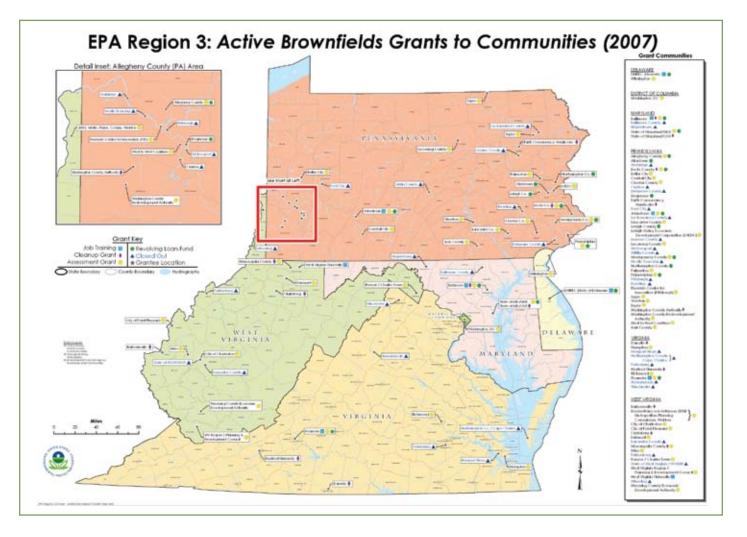
EPA announces \$5 million in Brownfields grants to communities in the Mid-Atlantic Region

2001



BROWNFIELDS Grant Types

Grants are the core of EPA's Brownfields Program. They support revitalization efforts by funding environmental assessment, cleanup and local job training programs. Since 1994, 140 recipients in the Mid-Atlantic Region have shared over \$52 million in Brownfields grants, breathing new life into old properties. The following sections provide examples of how EPA funds have contributed to successful brownfields redevelopment throughout the Mid-Atlantic Region.



Brownfields Assessment Grants

Assessment grants are available to state and local governments to support precleanup activities, such as environmental site assessments, creating brownfields inventories, planning for cleanup and redevelopment, and conducting community outreach activities.

To date, EPA has awarded 90 Assessment grants totaling more than \$23,783,000 to communities in the Mid-Atlantic Region.



Over 200 new homes built on a former slag pile-Pittsburgh, Pa.

Pittsburgh, Pennsylvania

From Slag to Riches: New Housing on Pittsburgh's Nine-Mile Run

Nine Mile Run, a former riverside slag dump bordering the main access highway to Pittsburgh's eastern suburbs, is being transformed into Pittsburgh's largest and most noteworthy residential development since World War II, Summerset at Frick Park.

For years, the 238-acre Nine Mile Run served as a dumping site for slag, an industrial by-product of steel production. When slag dumping ceased in the 1970s, the property became a dumping ground for construction debris. These activities turned the onceforested area into two large waste piles that towered over nearby trees and contributed to the pollution of Nine Mile Run stream.

Pittsburgh's Urban Redevelopment Authority (URA) recognized the potential value of turning abandoned industrial areas such as these into residential and commercial developments and used an EPA Brownfields Assessment grant to assess Nine Mile Run. EPA's grant prompted interest from other public and private partners. According to Marc Knezevich of the URA, "the availability of funding from EPA was instrumental in the project's early stages."

Brownfields remediation at the Nine Mile Run site was a complex and challenging venture that revitalized the existing community. A task force comprised of the URA, Summerset Land Development Associates, the City of Pittsburgh, private developers and surrounding community groups was formed at the start of the project to facilitate open discussion and impart a sense of ownership to the community. Incorporating principles of smart growth and new urbanism, more than 200 singlefamily homes, townhouses, condominiums and apartments have already been built. These developments feature tree-lined, pedestrian-friendly streets; smaller lot sizes; sidewalks; energy-efficient building materials; and alleyways that follow the pattern of Pittsburgh's historic neighborhoods. One of the residential developments has been designated as a PATH (Partnership for Advancing Technology in Housing) community, showing how revitalization of contaminated land can turn around an entire area.

More than 700 new housing units, nearly 100,000 square feet of new neighborhood commercial retail space, and more than 100 acres of park land are still under development. Ultimately, infrastructure improvements at Summerset at Frick Park are expected to cost \$50 million and private investment is expected to exceed \$200 million. "The availability of funding from EPA was instrumental in the [project's] early stages."

> -Marc Knezevich of the Urban Redevelopment Authority

Wheeling, West Virginia

Home Improvement in Wheeling

The City of Wheeling, West Virginia made the revitalization of its center district a high priority. The loss of manufacturing and other economic drivers left the center district spotted with idle and underused brownfields. Two adjacent, 10-acre sites—one known as the Pavilack property and another formerly owned by CSX railroad—were particularly promising and became key targets for cleanup and reuse.

The city used an EPA Brownfields Assessment grant to assess the Pavilack property, which was home to a steel foundry, an axle finishing plant, and a junkyard. Cleanup required asbestos removal and demolition of several buildings, and placement of a soil and asphalt cap to contain residual contamination. The CSX property was assessed with private funds in the late 1990s, which determined that the property did not require cleanup. Both of these sites were cleaned up under West Virginia's Voluntary Cleanup Program.



New Lowe's Home Improvement Center-Wheeling, WVa.

In 2006, phase one of an \$18.5 million redevelopment project on the two former brownfields was completed: a 160,000square-foot Lowe's Home Improvement store that created 175 jobs. The developer is acquiring adjacent land and planning two additional redevelopment phases that are expected to leverage as many as 1,000 jobs.

Shenandoah, Virginia

Parks Revitalize Communities Too

The 66-acre Big Gem Cast Iron Furnace site, located in the center of Shenandoah, Virginia, was once the principal producer of iron in the area. Like many manufacturing plants, it suffered from the effects of economic downturn and closed. Over time, the site's buildings were demolished and the land reverted to forest. In 1995, the property was donated to the city for redevelopment, though the extent of the site's residual contamination remained uncertain.

Using an EPA Brownfields Assessment grant, the town investigated the property and found that minimal cleanup would be required. EPA's funding allowed the town to develop a comprehensive landscaping and architecture plan for the site, promote community outreach, and solicit local resident input on reuse options.

The town installed ground water monitoring stations and a filtration system to make a pond on the site safe for recreational use. Nearly \$180,000 was leveraged from the Town of Shenandoah, the Virginia Department of Forestry, the U.S. Department of Housing and Urban Development, and Wrangler Jean Company, to create a community park. Phase I included the creation of a picnic area, a fishing pond, bridge and gazebo. Future redevelopment efforts will create an access



A view of the creek at Big Gem Park-Shenandoah, Va.

"EPA's funding and project support played a large role in allowing us to create a vision that enhances and benefits our community."

-Judy Jewell, Economic Development Director for Shenandoah

road to the property and a parking lot. When finished, the park will also have sports fields, an amphitheater, and walking trails.

According to Judy Jewell, Economic Development Director for Shenandoah, "The Big Gem project is really designed to add to the quality of life of our residents... EPA's funding and project support played a large role in allowing us to create a vision that enhances and benefits our community."

Lancaster, Pennsylvania

Brownfields to Ball fields

Named for the major league baseball player and humanitarian, Roberto Clemente Park in Lancaster, Pennsylvania was built in the 1960s as part of an urban renewal initiative. Over the next few decades, the park and surrounding neighborhood fell into disrepair. Neglect, poor management and an increasing concentration of poverty and blight in the surrounding neighborhood turned this 3.5-acre park into an underutilized, trash-ridden and vandalized parcel of urban parkland that became a neighborhood liability rather than



Roberto Clemente Park—a distressed neighborhood in Lancaster, Pa., gets a new walking path, playground, and baseball fields.

an asset. It was not until 1998 that the Inner City Group, a coalition of 12 neighborhoodbased non-profits, decided to clean up the 3.5-acre park as part of a larger bid to restore the community.

After encountering buried debris in the park during initial cleanup efforts, the coalition asked the Lancaster County Planning Commission for help. The Commission delegated a portion of its EPA Brownfields Assessment grant to conduct an environmental investigation of the property, which was previously home to varied industrial uses, including a scrap yard and a dry cleaning facility. The assessments revealed arsenic and lead contamination in the soil and trichloroethylene in the ground water.



Many rural areas in the Appalachian region face devastating and widespread environmental problems caused by their mining heritage.

"Anytime you have an opportunity to make a difference in this world and you don't, then you are wasting your time on Earth." —Roberto Clemente

Following a risk assessment, 60 cubic yards of soil were excavated and deed restrictions were placed on the property.

With \$700,000 in redevelopment funding, the revitalized park was dedicated in 2005. The park includes a walking path, playground and baseball fields for adult and youth leagues and plays host to a number of community activities.

By providing a safe, clean and attractive gathering place, the park fosters community pride and neighborhood harmony, youth development, socialization and recreation. The success of the restored Roberto Clemente Park has encouraged the Inner City Group to continue aesthetic and economic improvements to the surrounding neighborhood.

Central City, Pennsylvania

Using Brownfield Resources to Reclaim Appalachia's Coal Mines

Many areas in the Appalachian region face devastating and widespread environmental problems caused by their coal mining heritage. The Dark Shade Watershed, which encompasses the Borough of Central City and Shade Township, Pennsylvania, is one of those areas. Through EPA's Brownfields Program, these communities are finding new ways to promote the cleanup and reuse of mine-scarred lands.

After the coal mining operations of many Appalachian communities shut down following World War II, local economies like Central City's began to decline, and poverty levels climbed to well above national averages. Many of these communities also suffered the environmental effects of acid mine drainage (AMD), which is the seeping or surging of acidic, metals-laden water from abandoned coal mines. AMD coats streambeds with contaminated, orange sediment that can devastate entire watersheds.

To address these problems, non-profit community groups and the communities of Central City and Shade Township formed a partnership to explore innovative ways of cleaning up the Dark Shade Watershed. The result was the creation of a "watershed approach"—the designation of the entire watershed as one contaminated and targeted property.

"We're a small community, and when we started the process to clean up the Dark Shade Watershed, people said, 'Oh, it doesn't matter; we're too small to be important.' But, we showed them that even small communities like ours can create successful partnerships and get assistance to clean up these sites. Small communities shouldn't be intimidated by the 'big government agencies.'"

-Sharon Harkcom, Project Manager, Central City



The project was awarded the first EPA Brownfields Assessment Pilot grant to address mine-scarred land. The innovative watershed approach, along with EPA's funding, enabled the two communities to leverage more than \$431,000 in financial support for cleanup and restoration from the Office of Surface Mining, the U.S. Department of Agriculture, the Pennsylvania Department of Community and Economic Development and coal companies.

Dark Shade Creek is being restored as a recreational tourist draw for fishing, whitewater rafting and eco-tourism. The use of partnerships and assistance from EPA and other federal, state and local entities is often critical to the success of projects like these in small communities.

"Everything has to start somewhere," said Sharon Harkcom, project manager with Central City. "We're a small community, and when we started the process to clean up the Dark Shade Watershed, people said, 'Oh, it doesn't matter; we're too small to be important.' But we showed them that even small communities like ours can create successful partnerships and get assistance to clean up these sites. Small communities shouldn't be intimidated by the 'big government agencies;' EPA has been a great partner and critical to getting our brownfields and environmentally impacted properties cleaned up. We couldn't have done it without their project support and financial assistance."

Brownfields Revolving Loan Fund Grants

Revolving Loan Fund grants capitalize a revolving pool of funds to pay for cleanup activities on brownfields. Private and public developers can apply for low- or nointerest loans from the funds for cleanup activities. A portion of the loan fund can also be used to provide grants, which do not require repayment, to pay for cleanup on publicly owned or non-profit-owned properties. Applicants must contribute 20 percent in matching funds.

To date, EPA has awarded 29 RLF grants totaling more than \$23.3 million to communities in the Mid-Atlantic Region.

Bucks County, Pennsylvania

Returning to the Waterfront

Using \$1 million from an EPA Brownfields Cleanup RLF, a \$200,000 EPA Brownfields Cleanup grant, and a \$5 million loan from the Pennsylvania Infrastructure Investment Authority (PENNVEST), the Redevelopment Authority of Bucks County and private developers are cleaning up a former industrial property on the Delaware River in Bensalem, Pennsylvania.

Known as the Riverfront South Brownfield Redevelopment Project, this 26-acre property was used for shipbuilding, warehousing and manufacturing from 1917 until 1997. In the 1940s, the U.S. government used the property to produce sulfuric acid, hydrogen fluoride and cryolite. When manufacturing ceased in 1997, machinery and buildings were removed from the property.

Since the property is located within a State Enterprise Zone, it was prioritized for cleanup and redevelopment. An environmental investigation conducted in 2004 with state funding revealed volatile organic compounds, polychlorinated biphenyls, pesticides and metals in the ground water. Some of this contamination was draining into the Delaware River. The Redevelopment Authority loaned \$1 million in EPA RLF funds to a private developer to initiate cleanup of the site. The estimated \$4.5 million cleanup is being conducted under EPA's One Cleanup Program agreement with Pennsylvania.

The site's eventual redevelopment will incorporate smart growth and new urbanism concepts, creating 500 housing units; office, retail and restaurant components; and pedestrian-orientated streets. Plans include



Cleanup of contaminated properties along the Delaware River, Bensalem, Pa.

four acres of public greenspace along the Delaware River that will complement natural aesthetics and provide an area for recreation, as well as new walking and biking trails that will connect the area to nearby parks.

Allentown, Pennsylvania

Insuring Success for Brownfields Redevelopment

The Lehigh Valley Iron Pigs, a Triple-A minor league team associated with the Philadelphia Phillies, has a new home in Allentown. The team's new, \$34.3 million, 7,000-seat stadium was built on a 26-acre brownfield.

The site was an electronics manufacturing plant from the mid-1940s through 2003. Following the plant's closure, all of the site's buildings were demolished, and the property became a vacant eyesore for the community. Environmental assessments revealed buried electronic parts and high concentrations of chlorinated solvents, mercury, nickel and silver.



New home for Allentown's Iron Pigs Triple A minor league baseball .

To assist in the cleanup, Lehigh County received a sub-grant from the City of Allentown's Brownfields RLF program to pay for environmental insurance, which proved crucial to the project's success. Due to the site's industrial history, the potential for unforeseen conditions requiring additional remediation and increased project costs was quite real.

The \$77,000 insurance policy provides coverage for any unexpected remediation costs that arise during excavation and construction. The policy will continue to protect the county against any hidden expenses—up to \$1 million—should any new conditions arise during a 10-year period ending 2016.

"The environmental insurance covers previously unknown environmental issues that could have halted construction," explained Bill Ahlert, chairman of the city's Lehigh Valley Land Recycling Initiative board.

When the Iron Pigs' new stadium opens in April 2008, it will not only offer the community new recreational options, it will produce 30 full-time and many other parttime jobs. These new jobs and associated commercial activity will stimulate additional economic development in the area.

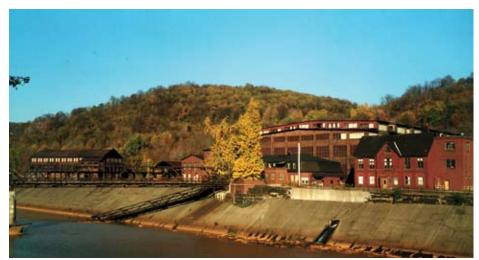
"We see this project as a hub around which economic development will occur. It's a perfect reuse for a former industrial property because we're taking a good portion of land and turning it into greenspace," said Glenn Solt, manager of capital projects for Lehigh County. *"The environmental insurance covers previously unknown environmental issues that could have halted construction."*

> —Bill Ahlert, Chairman Lehigh Valley Land Recycling Initiative board

Brownfields Cleanup Grants

Cleanup grants pay for site-specific cleanup on publicly owned or non-profit-owned properties. Applicants must own the property and contribute 20 percent in matching funds.

To date, EPA has awarded 16 Cleanup grants totaling more than \$3,260,000 to communities in the Mid-Atlantic Region.



The former Cambria mill complex received National Landmark status in 1989–Johnstown, Pa.



Johnstown, Pennsylvania

Former Steel Mill Preserving History and Creating Jobs

Johnstown was once a hub of Pennsylvania's steel country. At the industry's peak, steel mills covered 12 miles of the city's riverfront. Much of that activity was part of the Cambria Iron Works complex, which was established in 1848 and bought by Bethlehem Steel in 1923. As decades passed, Pennsylvania's steel industry fell into a period of steady decline, and in 1992, Bethlehem Steel closed all of its Johnstown mills. The former Cambria mill complex received National Landmark status in 1989.

After Johnstown's mill closings, unemployment rose to 25 percent and many left the city in search of work. In an effort to restore the historic mill complex and revitalize the city, the Johnstown Redevelopment Authority (JRA) acquired multiple buildings within the complex and several acres of vacant land. The community used EPA Brownfields Assessment funds and \$600,000 in Brownfields Cleanup funds to assess the site and initiate cleanup.

In support of this project, JRA secured grants totaling nearly \$7.3 million from 17 other sources, including the National Park Service, the U.S. Economic Development Administration, and the Appalachian Regional Commission.

Because of the historic mill's National Landmark status, none of the original buildings were torn down. Rather, many of the original structures were restored, including a carpentry shop now being used by a wood refinishing company, and an 1850's blacksmith shop that has attracted



The former Sterling Steel Company mill, McKeesport, Pa., whose redevelopment is estimated to leverage 500 jobs and \$17 million in investment.

the interest of several artisans. The restored complex is now a tourist draw and source of community pride, as well as being home to light industry, including two small manufacturing operations. Approximately 100 people work in these renovated historical buildings on the site, which also features an urban walking trail system and grounds for festivals and other public events

McKeesport, Pennsylvania

A Rusting Steel Mill Primed for New Uses

A 14-acre site in McKeesport, Pennsylvania was originally home to the Sterling Steel Company in 1889, the first U.S. facility to produce stainless steel. However, as technology advanced and newer facilities emerged over the next 90 years, the company's mill gradually became obsolete and operations ceased in 1981.

Located on the Monongahela River, the property was acquired by GLS, a private company, in 2000. Due to environmental contamination, GLS was unable to make site improvements so they approached the City of McKeesport for help. At the city's recommendation, the Redevelopment Authority of Allegheny County (RAAC) got involved and secured EPA funding for site assessments by working with the West-to-West Coalition, an economic development organization representing 22 Monongahela River Valley communities. Assessments identified petroleum and asbestos contamination on the former mill site.

In 2004, RAAC purchased the site from GLS and received an EPA Cleanup grant. RAAC raised an additional \$3 million in funding for the cleanup from federal and state Community Development Block Grant funds awarded to Allegheny County. Remediation is complete, though capping of contaminated areas will not be finalized until a reuse for the site is determined.

RAAC is evaluating reuse proposals that include a waste-to-energy facility as well as a transfer station for recycling wood waste. Because of its location near the river and nearby rail lines, the site's future use will likely be industrial. Ultimately, redevelopment of the former Sterling Steel property is estimated to create as many as 500 industrial jobs and generate \$17 million in investment from county, state and private sources for the City of McKeesport.

Brownfields Cleanup grants first became available in 2003 with the passage of the 2002 Brownfields Law.

Brownfields Job Training Grants

EPA provides funds to communities and non-profit organizations to train local residents to take advantage of the jobs created through the assessment and cleanup of blighted land. Through Job Training grants, EPA works to ensure that residents of brownfields communities do not bear a disproportionate burden of the consequences of these sites, and can benefit during the reuse process. To date, EPA has awarded 13 Job Training grants to communities in the Mid-Atlantic Region, with 396 trainees completing training and 297 obtaining employment.





Brownfields Job Training program participants learn a variety of skills as part of training curricula.

Brownfields Job Training grants produce skilled environmental technicians to help clean up brownfield properties.





Wilmington, Delaware

A New Line of Work for Wilmington's Undereducated and Underemployed Residents

Decades ago, the City of Wilmington, Delaware was a thriving manufacturing city of shipbuilding, rail car manufacturing, steel mills and tanneries. Today, approximately 25 percent of the city's land is brownfields.

Complementing two EPA Brownfields Assessment grants awarded to the city, the Delaware Department of Natural Resources and Environmental Control (DNREC) received two EPA Brownfields Job Training grants to train undereducated and underemployed residents of Wilmington's Southbridge and East Wilmington neighborhoods. With a combined population of approximately 8,000, these neighborhoods have poverty rates of nearly 18 percent, and the highest unemployment rates in the city.

The environmental aspect of DNREC's job training program is run by the Delaware Technical and Community College. It includes instruction on Occupational Safety and Health Administration (OSHA) construction safety and outreach, asbestos and lead based paint mitigation, forklift operation, HAZWOPER certification, and a general brownfields course.



The job training program in Baltimore, Md., has graduated nearly 100 students.

One of the unique aspects of DNREC's training program is the a-la-cart training it provides to participants. This provides participants with the opportunity to gain necessary certifications without completing the full 126-hour program. The success of this approach is evident since more than half of the trainees opted to take only portions of the course. To date, 88 participants in DNREC's environmental job training program are employed in the environmental field—doubling the original goals for training and placement.



Suiting up for Level A hazardous waste response.

Baltimore, Maryland

Baltimore's Job Training Program Targets Veterans

Like any mid-sized city, Baltimore has neighborhoods and communities with higher than average unemployment and poverty rates. As a result of declines in the industrial and manufacturing industries, the city has more than 60 known brownfields that are three acres or larger. Within these properties lies great potential for job generation, through both redevelopment and the demand for skilled environmental technicians to help address them.

To meet this demand, Civic Works, a local job training provider, has used three Brownfields Job Training grants to create and deliver an environmental training program, B'more Green. Based on Department of Labor studies indicating that as many as 25 percent of Maryland's veterans are unemployed, B'more Green includes a 15-day program specifically designed for veterans. Civic Works' latest class of veterans included those from campaigns as recent as Operation Iraqi Freedom and from as far back as Vietnam. Civic Works has graduated over 100 students to date, with a job placement rate of nearly 94 percent.

Targeted Brownfields Assessments

In addition to grants, EPA conducts site assessments on brownfields to assist communities with redevelopment planning. A Targeted Brownfields Assessment (TBA) is a Phase 1 and/or Phase 2 environmental assessment conducted by EPA to determine the nature and extent of environmental contamination on a brownfield.

Since 1996, EPA has conducted TBAs on more than 24 brownfields within the Mid-Altantic. Half of these properties have been redeveloped for new uses or have a redevelopment plan underway.

EPA also provides grants for state environmental response programs that address the assessment, cleanup and redevelopment of brownfields. These Mid-Atlantic state programs have conducted over 200 EPA-funded assessments, clearing the way for redevelopment on dozens of properties. *Communities that do not receive EPA Brownfields grants may be eligible for TBA assistance.*

To apply for TBA assistance from EPA, please go to our website: *http://www.epa. gov/reg3hwmd/bfs/regional/eligibility.htm*

Scranton, Pennsylvania

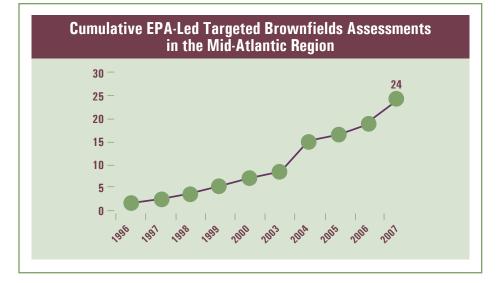
All Aboard!—Scranton's Historic Train Station is Revitalizing its Downtown

Dating back to the 1890s, the 4.5-acre, Central New Jersey Railroad's (CNJRR) freight station in Scranton, Pennsylvania had once been the central hub for the region's railroad traffic. Located adjacent to the Lackawanna River, the site was home to a 14,000-square-foot, Queen Anne-style train station used primarily for freight hauling until the mid-1950s. More recently, the facility was used as a warehouse, until it was ultimately abandoned in the 1990s. The City of Scranton took ownership of the property, which was placed on the National Register of Historic Places and remained one of the area's most recognized structures.

In 2000, CNJRR Station, LP purchased the station to redevelop the historic structure



Plans for new commercial and retail facilities in Scranton's Pa. former train station.



for commercial and recreational purposes. To determine the level of cleanup required, EPA Mid-Atlantic conducted environmental assessments under the TBA Program. Cleanup and redevelopment, which are expected to total more than \$4.5 million, will be funded through a \$2 million grant from the State of Pennsylvania's Redevelopment Assistance Capital Program, and the remainder from private investment.

Scheduled for completion in 2008, restoration of the site will retain the structure's historical integrity while creating new commercial and retail facilities—including a restaurant and 23,000 square feet of office space that will bring as many as 250 jobs to the area.

Philadelphia, Pennsylvania

A Former Quarry Becomes an Environmental Education Center

Using "green" technologies, an urban brownfield in a typical Philadelphia commercial corridor will be transformed into a new, neighborhood-based learning center for environmental studies.

At the request of the City of Philadelphia, EPA conducted a TBA on this former industrial site, revealing contaminants such as arsenic and lead in the soil.



The planned site of the Overbrook Environmental Education Center is located within a larger area targeted by the city for revitalization, and reuse of the property will be an important element in this overall effort. Grants provided by the Pennsylvania Department of Environmental Protection (PADEP) and the City of Philadelphia are contributing to the cleanup and redevelopment of the property. Juveniles Active in Science and Technology (JASTECH) will operate the center as a "living laboratory" offering environmental programs for students throughout the region.

The Overbrook Center will be built using sustainable design and construction practices. It will include a bio-retention basin, an urban garden consisting of native plants, and green roofing (which uses plant growth as insulation). The planned 46,000-square foot education center will preserve over 60 percent of the site as open greenspace and retain over 75 percent of its storm water to avoid burdening the neighborhood's aging sewer system. When cleanup and construction are

"There's no way to learn about the environment without being in the environment."

-Jerome Shabazz, an Overbrook parent and Executive Director of JASTECH Development Services



complete, the center will provide an urban oasis complete with native plantings, outdoor biology labs and green architecture. The Overbrook Center was presented a storm water best management practices award by the Academy of Natural Sciences.

Bucks County, Pennsylvania

Bank Sees Green on a Former Industrial Site

The former Stainless site in Perkasi, Pennsylvania was a vacant, 2.80-acre commercial property located in an industrial and residential area. The property was used industrially since 1912. The most recent industrial owner, Stainless, Inc., operated a steel fabrication facility there from 1967 through the mid 1980s, when operations ceased.

The property first became an environmental concern in 1990, when an oily discharge running into a small stream bordering the site was reported to the Bucks County



First Savings Bank's 40,000-square foot green office building, Perkasie, Pa.

The Overbrook Environmental Education Center received a storm water best management practices award from the Academy of Natural Sciences.

Department of Health. Initial site assessments performed by Stainless, Inc. revealed an underground storage tank containing fuel residue and water, and a subsurface vat containing solvents. Though some remedial actions were taken, trichloroethylene (TCE) levels remained high in the site's soil and ground water.

Following these initial assessments, the Bucks County Redevelopment Authority (BCRDA) purchased the Stainless property with the intention of cleaning and preparing it for resale. The site entered Pennsylvania's Act 2 voluntary cleanup program and received funds for treatment of TCE in the soils. While performing the cleanup, a nearby facility conducting its own required monitoring program, found TCE in its ground water samples.

All parties (the state, EPA, BCRDA, the impacted facility, and the community) lacking authority to investigate the source of the TCE, requested a TBA. The results of the TBA led to an EPA Removal Assessment investigating the entire area, finding multiple plumes. Meanwhile the TBA investigation and process assured protection of human health and the environment, and allowed the cleanup and reuse of the Stainless site to continue.

Following cleanup, the site was purchased by First Savings Bank and is now home to the bank's 40,000-square foot green office building. The building is Leadership in Energy and Environmental Design (LEED) certified and includes lots of natural light, efficient windows and other features which save 25 percent in heating and cooling costs.

Land Revitalization Programs

When EPA started cleaning up hazardous waste sites close to 30 years ago, citizens feared harmful health impacts and reduced real estate values. Developers shied away from contaminated sites. Now, communities want these properties returned to productive use, and reuse planning has become as important to the process as assessment and cleanup.

In 2003, EPA announced its Land Revitalization Agenda to promote the productive reuse of all contaminated land, including Superfund and Resource Conservation and Recovery Act (RCRA) sites. Reuse of contaminated sites promotes economic and social benefits to communities, results in faster and more protective cleanups, and helps retain greenspace. EPA's Land Revitalization Initiative seeks to resolve barriers to reuse and promote the reuse of sites that are being or have been cleaned up.

The Mid-Atlantic Region's Land Revitalization Program integrates cleanup and reuse as mutually supportive goals, emphasizes sustainable site reuse, develops partnerships to support reuse, and measures the economic and environmental benefits of reused properties.

In 2005, EPA surveyed more than 500 of the most severely contaminated hazardous waste sites in the Mid-Atlantic Region, encompassing more than 230,000 acres. Today, 93 percent of this land is in use or planned for reuse. More than half of the



The Money Point area of the Elizabeth River Basin in Chesapeake, Virginia is a 35-acre area that once thrived with shipping terminals, factories and wood treatment plants.

Region's former Superfund sites have new life as parks, wildlife areas or recreation areas. At other contaminated sites where federal cleanups were required, new industrial facilities, apartment houses, office buildings and retail stores have been built.

EPA and its state partners can help property owners and communities revitalize these sites by providing information to potential stakeholders, coordinating with other regulatory programs, incorporating reuse plans into cleanup designs, helping to resolve liability concerns, and expediting cleanup to support reuse.

The Mid-Atlantic Region's Land Revitalization Action Team works with buyers and developers to clarify EPA's role in the cleanup of a site and any financial or environmental obligations that remain. EPA can also review proposed revitalization plans to make sure they are compatible with EPA's cleanup plan for a site and protect human health and the environment. The Mid-Atlantic Region's quarterly enewsletter, the Land Revitalization Update, is a great source of information for news, resources and policies affecting the reuse of brownfields and other contaminated properties in the Mid-Atlantic Region. To view issues of the Land Revitalization Update go to: http://www.epa.gov/region3/ revitalization/newsletters.htm

The Mid-Atlantic Region's Land Revitalization program also focuses on complex, area-wide contamination problems to help revitalize broad geographic areas, such as watersheds, using collaborative and integrated approaches. Following are examples of collaborative approaches that cross traditional organizational and regulatory boundaries to coordinate multiple agency processes, streamline requirements and leverage resources.

The Mid-Atlantic Region's Land Revitalization Action Team works with buyers and developers to understand EPA's role in the cleanup of a site and any financial or environmental obligations that remain on the property.



Darby Creek, a tributary to the Delaware River, is targeted for ecorestoration, Philadelphia, Pa.

Interagency Collaboration at Little Elk Creek, Maryland

Little Elk Creek in Cecil County, Maryland was selected as an EPA One Cleanup Program Area-Wide Pilot in 2003. The Little Elk Creek pilot project used a collaborative, cross-programmatic approach to address a widespread ground water contamination concern at an underutilized industrial park and ensure that the site's development and reuse met the needs of the surrounding community.

The project's partners—EPA Mid-Atlantic, Maryland Department of the Environment (MDE), U.S. Army Corps of Engineers, National Oceanic and Atmospheric Administration (NOAA), Cecil County, City of Elkton, University of Maryland, and local property owners—collaborated to improve the interaction and information sharing between federal and state cleanup programs. The community formed the Little Elk Creek Reuse Committee to develop reuse recommendations for sites within the Little Elk Creek area.

This coordination of project partners enhanced data and resource sharing and greatly sped up the assessment and cleanup processes, reduced redundancy, saved time and money, and avoided missteps. At one of the sites, EPA and MDE are coordinating with the developer of a new housing development, allowing the developer to proceed with planning and construction of over 1,000 new homes as EPA conducts cleanup on the property.

Restoring Habitat to Revitalize Urban Rivers–Delaware River Estuary

The Delaware River Estuary, the largest freshwater port in the U.S., is highly industrialized; it is the third largest petrochemical port in the country, with millions of gallons of crude oil transported on the river daily. As a result, it is the most impacted area of the Delaware River system in terms of contaminants and habitat loss.

To improve the region's ecological health and support the revitalization and redevelopment of coastal communities, EPA partnered with NOAA, the States of Pennsylvania, New Jersey, and Delaware, and the Partnership for the Delaware Estuary to identify habitat restoration opportunities along the Delaware River Estuary.

A web-based regional database and mapping tool targets brownfields and other waste sites to promote the restoration of critical habitats along the Delaware River. This web site helps property owners and developers, community groups and federal, state, and local governments identify contaminated sites and underutilized properties and view existing restoration projects and potential sites for restoration. It also provides an overview of coastal habitats, natural resources critical to maintaining a healthy river and sources of contamination. To use the online tool, please visit: http://mapping.orr.noaa.gov/Web site/portal/Delaware/

The Urban Rivers Restoration Pilot Initiative Spurs Cleanup of One of the Most Contaminated Areas of the Chesapeake Bay Watershed

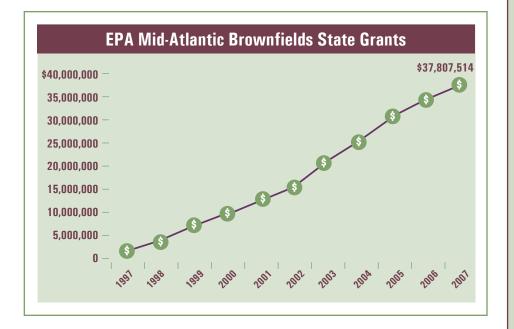
The Urban Rivers Restoration Pilot projects designated by EPA and U.S. Army Corps of Engineers address the challenges of urban river cleanup, protect public health, and promote economic sustainability.

One of these projects, the Money Point area of the Elizabeth River Basin in Chesapeake, Virginia, is a 35-acre area that once thrived with shipping terminals, factories and wood treatment plants. Legend has it that the locals dubbed the area Money Point for the jobs and wealth it created. However, the area now suffers from high concentrations of contaminants that have killed most of the aquatic life.

The Pilot supports the Elizabeth River Project (ERP), a non-profit group, in its efforts to motivate property owners along the river to make voluntary improvements. In 2006, ERP's Money Point Revitalization Task Force completed a 10-year Watershed Action Plan to clean up the river, conserve and restore habitat, and foster environmental stewardship with local industries. The Elizabeth River Project, in conjunction with 150 project partners, is now implementing its Watershed Action Plan to help guide cleanup priorities for the river.

Mid-Atlantic State Programs

EPA works closely with its state partners to promote the assessment, cleanup and reuse of brownfields. Each of the states in the Mid-Atlantic Region receives annual grants (Section 128(a) State and Tribal Grants) from EPA to support brownfields and voluntary response programs. Below is a summary of each state's various programs and incentives that aid brownfields projects, as well as contact information for each state.



Since 1997, EPA has given nearly \$38 million to Mid-Atlantic State programs to support brownfields work.

District of Columbia

The District of Columbia's Brownfield Revitalization Amendment Act of 2000 established the Voluntary Cleanup Program (VCP), a brownfields program, and authorized tax and other incentives for the cleanup and development of contaminated property.

In addition to the VCP, the District also enacted the Voluntary Remediation Action Program, which permits parties that are not responsible for a tank leak—such as a prospective purchaser—to remediate a site and obtain a No Further Action letter from the District.

For more information on the District's VCP and Brownfields Program, please contact the District Department of the Environment, Land Remediation and Development Branch at (202) 535-2289.



A new condominium building at the corner of 13th and M Streets, NW is the crown jewel of the neighborhood.

Prior to its redevelopment, the property had many different uses, including a supermarket, gas station, apartment building, print shop, take-out restaurant, liquor store and dry cleaner. Petroleum and solvents, both in the soil and groundwater, were cleaned up in 2005. The redevelopment of this .8-acre parcel is a valuable addition to this highly developed residential and commercial area.





Delaware's Brownfields and VCP Programs have helped with the costs associated with the recent redevelopment of more than 35 acres of the South Wilmington riverfront.

The properties include Christina Landing Towers & Townhomes, which had a long history of dumping commercial and industrial wastes. Plans for this site call for construction of 63 luxury townhouses, 273 upscale apartment units, and a 280space parking garage.

The nearby Justison Landing property has been in continuous industrial use since the late 1700s by the steel, rail and power industries. Over the years, the site became strewn with brick, rock, coal and ash, wood, slag, foundry wastes, and other debris. The property is currently undergoing redevelopment as an ultra modern mixed use residential, commercial and retail project.

Another of the area's properties, the Howard Street Commercial Development/ Christina Landing Retail Center, is currently being redeveloped for commercial and retail use. This site had a history of industrial uses, including a yard that processed scrap metal, old appliances and electrical transformers that may have contained PCBs. When completed, the property will contain a grocery store with supporting retail stores.

Delaware

Delaware established its VCP in 1993 and its Brownfields Program in 1995. The 2006 Hazardous Substance Cleanup Act Policy on Brownfield Grants authorized the appropriation of \$5,000,000 annually from the Hazardous Substance Cleanup Act Fund (HSCA Fund) for the purpose of reimbursing up to \$1,000,000 in cleanup costs for eligible brownfields redevelopment projects.

Up to \$225,000 may be awarded to any single private brownfields redevelopment project for approved costs incurred for assessment, investigation, cleanup activities, or oversight charges. Of this amount, the first potential \$125,000, being a dollar to dollar reimbursement, and the second potential \$100,000 being a fifty cents to the dollar reimbursement.

The Department of Natural Resources and Environmental Control (DNREC) administers the Brownfields Program and gives funding preference to redevelopment projects with public benefit—such as affordable housing (e.g., for low- to middle-income buyers), LEED Certified Green Buildings, and development consistent with smart growth principles. To apply for funding and for Brownfield certification, go to: (www.dnrec.state.de.us/dnrec2000/Divisions/AWM/sirb/ Brownfield/doc/BF_Cert_App.doc).

Delaware's Brownfields Tax Credit Program offers employment and capital investment tax credits to parties that clean up brownfields and encourage new business on them. Companies that invest at least \$200,000 in a facility on a former brownfield and create at least five new jobs are eligible to receive tax credits, including:

- \$650 per each \$100,000 of new investment;
- \$650 for each new job created; and
- a 15-year graduated gross receipts tax credit.

Credits for employees and investment increase by \$250 if the business locates on a brownfield in a targeted area.

DNREC promotes the cleanup and development of state brownfields by ensuring timely and effective cleanups with protective, equitable and sustainable remedies and long-term stewardship for properties that have a remedy in place. The state's Brownfields Advisory Committee, representing broad public interest and community perspectives, advises DNREC on its Brownfields Program including the development of rules, policies and procedures. For more information on Delaware's VCP and Brownfields Program, please contact James Poling at (302) 395-2600 or at *jim.poling@state.de.us.*

Maryland

Established by the state legislature in 1997, the Maryland Department of the Environment's (MDE) Voluntary Cleanup Program provides state oversight for voluntary cleanups of properties contaminated with hazardous substances and provides liability protection for inculpable parties. MDE's Brownfields Site Assessment Initiative uses federal funding to conduct site assessments on privately and publicly owned brownfields.

The Brownfields Revitalization Incentive Program, established in 1997 as part of Maryland's smart growth policy, focuses on the efficient use of existing infrastructure as an alternative to developing on open space. The "Maryland Smart Sites" Web site *(www.mdsmartsites.org)* provides a list of properties that meet the needs of businesses and developers and support Maryland's smart growth efforts. An online source for information on publicly owned redevelopment opportunities across the state, Maryland Smart Sites aims to market these opportunities in conjunction with an array of existing state, local and federal incentives.

Properties that qualify for remediation assistance from the Maryland Department of Business and Economic Development's Brownfields Revitalization Incentive Program (BRIP) are eligible to receive a property tax credit as well. They must participate in the state's VCP and the property must be located in a jurisdiction that has elected to participate in the BRIP. For five years after cleanup, VCP-participating qualified brownfield projects can receive a real property tax credit between 50 and 70 percent of the new increment of taxes on the increased value of the site. Properties located in any of the state's 28 designated enterprise zones may take advantage of the tax credit for up to 10 years. The brownfields credit, combined with other available state property tax credits, may not exceed 100 percent of the tax on the increased value of the site.

For more information regarding Maryland's Voluntary Cleanup Program, please contact Luke Wisniewski, Maryland Department of the Environment, at (410) 537-3493. For more information regarding the Brownfields Revitalization Incentive Program, please contact Jim Henry, Maryland Department of Business and Economic Department, at (410) 767-6353.



A property long regarded as an industrial landmark, the General Motors van assembly plant in East Baltimore shut down operations after 68 years. Duke Realty was awarded a purchase contract to clean up the site and invested more than \$140 million to redevelop the property into a commercial business park. The project is expected to create thousands of new jobs over the next ten years and aims to bring one of Baltimore's largest and most prominent industrial properties back to life.





Capitalizing on the success of the adjacent Clipper Magazine Stadium, Armstrong World Industries, Franklin and Marshall College, Lancaster General Hospital, and EDC Finance Corporation are rejuvenating 47 acres of industrial property Armstrong no longer needed for its manufacturing operations.

The mixed-use redevelopment project includes the creation of a collegiate athletic complex, community recreational access, and Lancaster General Hospital clinical and therapeutic facilities, administrative offices, and a nursing college—creating hundreds of jobs and fueling additional economic development in Lancaster City. This high-profile revitalization project has been designated as one of PADEP's Brownfield Action Team projects and is participating in the One Cleanup Program with PADEP and EPA.

Pennsylvania

Since 1995, the Pennsylvania Department of Environmental Protection's (PADEP) Land Recycling Program (Act 2) has been instrumental in encouraging the voluntary cleanup and reuse of contaminated commercial and industrial sites. Nearly 2,700 properties have been remediated and 76,000 jobs created or retained since the inception of the program by utilizing the four cornerstones of Act 2: uniform cleanup standards, liability relief, standardized reviews and time limits, and financial assistance.

Since 2003, Pennsylvania has invested \$230 million in brownfields revitalization, helping to clean up and redevelop 950 abandoned industrial sites covering more than 6,000 acres, while creating and retaining 27,000 jobs. Investment and cleanup activities in the last four years alone represent nearly 40 percent of all properties remediated under the Act 2 program.

To accelerate this effort, the Brownfield Action Team (BAT) program was launched in 2004. BAT serves as a single-point-of-contact system to streamline permitting processes and redevelopment efforts for sites that local officials target as priorities. The BAT works closely with other state agencies to provide cleanup and financing strategies. BAT projects typically receive PADEP permits and other authorizations in half of the usual time. Since its launch, BAT has helped 33 projects in 22 counties to redevelop more than 4,500 acres of brownfields.

Also in 2004, Pennsylvania signed a historical Memorandum of Agreement with EPA, enabling Pennsylvania's Land Recycling Program to serve as a "one-stop shop" for EPA and Pennsylvania standards that guide the cleanup of brownfields.

Pennsylvania's brownfields have been redeveloped into everything from parks and walking trails to commercial offices, retail and entertainment complexes, and single- and multi-family residential developments. These achievements build on the commonwealth's already strong track record of making environmental protection work for the business community.

For more information on Pennsylvania's Brownfields Program, please contact Jill Gaito, deputy secretary, Pennsylvania Department of Environmental Protection, Office of Community Revitalization and Local Government Support, at (717) 783-1566 or at jgaito@state.pa.us.

Virginia

Since 1997, Virginia's Department of Environmental Quality (DEQ) Voluntary Remediation Program (VRP) has provided a framework for remediating brownfield properties. The VRP is a non-enforcement cleanup program that provides a formal mechanism for DEQ oversight while providing flexibility to the participant. The VRP uses a risk-based approach that provides reasonable cleanup goals and allows for institutional and engineering controls to be considered as remediation approaches. Eligibility is limited to properties where remediation is not mandated pursuant to a federal or state regulatory program. When the remediation is satisfactorily completed, DEQ issues a "certification of satisfactory completion of remediation." This certification provides assurance that the remediated site will not later become the subject of a DEQ enforcement action unless new issues are discovered. The DEQ also provides site assessment services as an incentive for the reuse or redevelopment of brownfields.

The General Assembly of Virginia enacted House Bill 2141 in 1997, which amended the Code of Virginia and created a property tax incentive. The code created a separate class of property, the environmental restoration site, for VRP participants. The section allows the local governing body of any county, city or town, by ordinance, to exempt or partially exempt environmental restoration properties from local taxation annually for a period up to five years. Upon the request for a determination if a property is the subject of remediation activities conducted in the VRP, a letter will be sent to the requesting party certifying whether the property meets the criteria of an environmental restoration site. Such certification can then be presented to the local governing body for any special tax considerations. Properties that are enrolled in the VRP may also be eligible for federal tax incentives.

DEQ's goal in implementing its brownfields program is to provide innovative, business-oriented provisions that are substantive, user friendly and timely. A "Brownfields Manual" published by DEQ facilitates brownfields cleanup and redevelopment by offering an overview of the process, frequently asked questions and flowcharts to help quickly and easily assess a project's eligibility.

For more information on Virginia's VCP and Brownfields Program, please contact Kevin Green, DEQ's Division of Waste Program at (804) 698-4326 or at *klgreene@deq.virginia.gov*.



Since the early 1920s, the 1.4-acre Clarendon Triangle site in the City of Arlington had been host to a mix of residential and commercial uses. The property was occupied by several gasoline distribution stations, a car wash, an automobile dealership, and an office building. By the late 1980s, the site became dilapidated and largely vacant.

Starting in the late 1990s, the surrounding Arlington area began to experience significant revitalization due to market forces and local "smart growth" initiatives. Before construction was initiated, a Corrective Action Plan to address documented petroleum contamination was formulated and approved. As a result, areas of contamination were properly addressed and successfully resolved. The redevelopment of the Clarendon Triangle site played a significant role in transforming a once-blighted area into a functional community combining the best of urban residential and functional retail uses.





The decline and legacy of three primary economic sectors, coal mining, steel production and glass production, have left vast areas in West Virginia with real or perceived contamination. Revitalization of mine-scarred lands and other former industrial sites is complicated in some areas by declining populations, absent responsible parties, and transportation and logistical challenges. Small communities often lack the personnel and expertise to successfully compete against larger urban centers for brownfields resources. To overcome these hurdles and support rural areas, the West Virginia State Legislature developed a model approach by establishing two Regional Brownfield Assistance centers to support community efforts to turn brownfields into productive land again.

West Virginia

West Virginia's Voluntary Remediation and Redevelopment Act (VRRA) limits enforcement actions by the West Virginia Department of Environmental Protection (WVDEP), provides financial incentives to entice investment, and limits liability under environmental laws and rules for those who remediate brownfields sites under the program. The VRRA and its implementing regulations were developed by a diverse group of stakeholders to encourage voluntary remediation and redevelopment. This process has led to a strong program that is protective of communities and the environment while promoting economic development in West Virginia. The VRRA provides for flexibility in the voluntary cleanup of under-utilized properties and marks a turning point in state environmental policy.

In 2005, the West Virginia State Legislature created two regional Brownfields Assistance Centers to support community efforts to turn brownfields into productive land again, one serving northern counties and the other serving southern counties. Both assistance centers are state mandated and funded, and work closely together in conjunction with WVDEP and the West Virginia Development Office.

The Centers conduct general citizen and local government education efforts on brownfields; solicit grants and low-interest loans for assessment, cleanup and job training; and provide support for preliminary legal and planning work. Requests are prioritized from communities that are already working on community-wide development planning and may be interested in integrating brownfields redevelopment into those plans. Additionally, the Centers can acquire property and act as a developer, and may enter into partnerships and agreements with other public or private entities to manage and coordinate remediation and redevelopment activities.

For more information on West Virginia's VRRA and Brownfields Program, please contact Ken Ellison, WVDEP's Division of Land Restoration at (304) 926-0455.

EPA Mid-Atlantic Contact Information

For more information about redevelopment projects described in this report, please contact:

Tom Stolle Brownfields Coordinator U.S. EPA 3HS51 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-3129 stolle.tom@epa.gov Christopher Thomas

Land Revitalization Coordinator U.S. EPA 3HS51 1650 Arch Street Philadelphia, PA 19103-2029 (215) 814-5555 thomas.christopher@epa.gov

For more information on how to apply for EPA Brownfields grants, please go to EPA's Mid-Atlantic Brownfields Web site: *http://www.epa.gov/reg3hwmd/bfs/*

Land Revitalization Newsletter

For more up-to-date information on Brownfields and other Land Revitalization projects, please visit the Mid-Atlantic Region's Land Revitalization Newsletter Web site: http://www.epa.gov/region3/revitalization/newsletters.htm





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