The South Point Plant NPL Site and The Point Industrial Park:

An Analysis of Existing Conditions and Reuse Opportunities



A Report prepared by E^2 Inc. for the Village of South Point, Ohio and the Lawrence Economic Development Corporation

April 8th, 2003

Acknowledgements

The primary responsibility of the U.S. Environmental Protection Agency (EPA) at Superfund sites is to ensure the protection of human health and the environment. Since 1999, through the Superfund Redevelopment Initiative (SRI), EPA has also been committed to the importance of considering reasonably anticipated future land uses when making remedy decisions at Superfund sites, and to ensuring that the cleanup of Superfund sites allows for safe reuse for commercial, recreational, ecological, or other purposes. EPA has been working to ensure that communities have the information and tools necessary to plan for the productive future use of these sites. With forethought and effective planning, communities can return sites to productive use without jeopardizing the effectiveness of the remedy put into place to protect human health and the environment.

Across the nation, more than 330 former National Priorities List (NPL) sites are being productively used or reused. The commercial and industrial use of these sites has generated 15,000 jobs and a half-a-billion dollar increase in annual incomes. Other sites are providing ecological and recreational benefits. The Village of South Point, Ohio, and the Lawrence Economic Development Corporation are not alone in their efforts to return a former industrial property into an asset for the community's future. This report, prepared by consulting group E^2 Inc., analyzes existing conditions and reuse opportunities at the South Point Plant NPL site to assist the Village of South Point and the Lawrence Economic Development Corporation in their efforts to return the site to productive use.

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Report Introduction

The Village of South Point and the Lawrence Economic Development Corporation (LEDC)'s efforts to redevelop the South Point Plant National Priorities List (NPL) site into an industrial park are underway. In the months to come, The Point industrial park will serve as a catalyst for economic growth and job creation for the Village of South Point, Lawrence County, and the Tri-State area.

The Village of South Point, Ohio requested assistance from EPA's Superfund Redevelopment Initiative (SRI) as part of their efforts to return the former South Point Plant NPL site to productive use. SRI granted the Village of South Point and the Lawrence Economic Development Corporation in-kind services from E² Inc., a consulting group that specializes in helping communities address the redevelopment of contaminated properties and ensuring that redevelopment and remedial actions are consistent.

 E^2 Inc. has developed several resources to assist the Village of South Point and LEDC in their efforts to return the site to productive use. E^2 Inc. has developed a four-part toolkit of communications materials to address the safety and liability concerns associated with formerly contaminated sites. The toolkit materials are designed to fit within LEDC's existing communications materials and will help to ensure that the site remedy remains protective as The Point is developed. The toolkit materials are included in Appendix A of this report. Second, E^2 Inc is working with EPA Region V to develop a pilot Ready for Reuse Determination (RfR) for the South Point Plant NPL Site that will comprehensively describe EPA's site activities and findings and address the concerns of prospective tenants and lenders. Finally, E^2 Inc. has developed this final report, which analyzes existing conditions and reuse opportunities at the South Point Plant NPL site.

This E² Inc. report serves several purposes. First, it has been written to provide potential tenants, community members and those interested in the redevelopment of the South Point Plant NPL site with information regarding the site's background and issues that impact reuse at the site. Second, this report has been written to provide concerned parties with information regarding mechanisms for addressing tenant and lender liability, safety, and transaction concerns at an NPL site. Finally, this report has been written to provide the Village of South Point and the Lawrence Economic Development Corporation with our research findings with regard to the reuse opportunities at the portions of the site known as the Eastern Disposal Area and the Northern Fly Ash Ponds, which have until this time been considered unavailable for reuse. The last two parts of this report describe potential additional private and public sector redevelopment resource opportunities and provide a summary of the report's research findings and a series of recommendations for enhancing reuse opportunities at The Point.

Executive Summary

The South Point Plant National Priorities List (NPL) site is a 610-acre Superfund site located in the Perry Township in the Village of South Point, Ohio. The site, 504 acres of which is owned by the Lawrence Economic Development Corporation (LEDC), was listed on the NPL in September 1984. Soil and ground water contamination from on-site munitions, fertilizer, coal, and ethanol industries affected only small portions of the site; the vast majority of the site's acreage was never contaminated. The site's remediation took eight months and was completed in December 2001.

Conditions for the industrial reuse of the South Point Plant Superfund site are excellent. Minimal, localized contamination, the completion of remediation, and highly engaged local entities – the Village of South Point, Lawrence County, and the Lawrence Economic Development Corporation – mean that plans to reuse the site as a industrial park called The Point are already underway. LEDC commissioned a Master Plan for The Point and has pursued a wide range of funding resources. \$3.35 million in infrastructure funding has been received from state and federal agencies, and LEDC is planning to have all infrastructure, including a new road, installed at the property by Fall 2003. The property has been designated as a non-contiguous developable site within the Huntington-Ironton Empowerment Zone, a federal designation that provides LEDC with \$2.2 million in acquisition funds and prospective tenants with a range of market-based incentives to locate on the property. Two tenants, M&M Services and Superior Marine, have already located on the property, and LEDC is planning a 40,000 square foot shell building to attract new tenants. LEDC will begin full-scale marketing of the industrial park to potential tenants and lenders following completion of the property's infrastructure in Fall 2003.

The successful reuse of the South Point Plant NPL site will involve continued support from LEDC and the area's local governments, additional funding resources, and the provision of effective tools and information to address the concerns of prospective tenants and lenders. E^2 Inc.'s analysis of the reuse challenges and opportunities faced at the South Point Plant NPL site focused on EPA site data, interviews with existing tenants and local lenders, and an assessment of areas on the property that are not yet available for reuse.

Reuse challenges identified at The Point include:

- The property's status as part of the South Point Plant NPL site could potentially result in tenants and lenders having legal and liability concerns about locating or financing a project on the property.
- The deed restriction and restrictive covenants placed on the South Point Plant NPL site restrict the site's uses to commercial/industrial uses and prohibit the use of site's ground water.

• The two areas on the South Point Plant NPL site that are not yet available for reuse – the Eastern Disposal Area and the Northern Fly Ash Ponds – face several reuse challenges, including cost considerations, that need to be addressed.

 E^2 Inc.'s research indicates that these challenges can be directly addressed in the following ways:

- The concerns of prospective tenants and lenders can be partially addressed by an EPA pilot measure called a Ready for Reuse Determination (RfR), which EPA is establishing to distinguish formerly contaminated properties as ready for specific types of reuse. The process, now underway for the South Point Plant NPL site, will take into account EPA and non-EPA documents to assess the reuse status for National Priorities List (NPL) sites. This assessment will result in a stand-alone, formal EPA cover sheet and accompanying report that describe the site's availability for reuse. This EPA measure will directly address the legal and liability concerns of prospective purchasers and lenders.
- The use restrictions imposed by the site's deed restriction and restrictive covenants can be clarified by working with previous site owners Ashland, Inc. and Honeywell, Inc. While EPA's site remedy specifies that the site's uses must be limited to industrial uses, possible areas for clarification include whether recreational reuses could be permitted on the property, as the site remedy as currently implemented is potentially sufficiently protective for recreational reuses, and whether the site's ground water could be used for process purposes (like equipment cooling) or other highly specific, non-potable uses. Ashland, Inc. and Honeywell, Inc. have indicated that they would be willing to work with LEDC to address concerns and help to facilitate reuse opportunities at The Point.
- E² Inc.'s research indicates that the two areas within the South Point Plant NPL site the Eastern Disposal Area and the Northern Fly Ash Ponds that are not yet available for reuse offer reuse opportunities worthy of serious consideration, and the obstacles preventing their reuse can be directly addressed. The Eastern Disposal Area and the Northern Fly Ash Ponds could provide space for additional building sites, parking areas for adjacent buildings, recreational areas for employees at The Point, natural "buffer" areas, or attractive open areas of vegetation.
- Cost considerations associated with the development of The Point can be addressed by accessing additional private, state, and federal resources. Additional resources identified by E² Inc. include the non-profit Ohio Community Development Finance Fund (CDFF), as well as a range of federal programs provided by agencies including the U.S. Department of Agriculture, the U.S. Department of Transportation, the U.S. Department of Commerce, and the U.S. Treasury Department.

The reuse of the South Point Plant NPL site will serve as a catalyst for economic growth and job creation for the Village of South Point, Lawrence County, and the Tri-State area. Existing tenants indicate that The Point's location and available economic incentives serve as strong incentives for companies to move into the industrial park.

Reuse opportunities at The Point can also be enhanced in several ways. By working to clarify the site's deed restriction, working with E^2 Inc. and EPA to develop a Ready for Reuse Determination for the site, developing reuse plans for the site's Eastern Disposal Area and Northern Fly Ash Ponds, and pursuing additional funding and resource opportunities, LEDC will be able to build on The Point's existing strengths and attract new tenants and financing opportunities. The development of The Point industrial park at the South Point Plant NPL site in South Point, Ohio, will provide a national example of how a contaminated former industrial property can be turned into an asset for a community's future.

Part I: Site Background: The South Point Plant NPL Site

The South Point Plant National Priorities List (NPL) site is a 610-acre Superfund site located in the Perry Township in the Village of South Point, Ohio. The site, 504 acres of which is owned by the Lawrence Economic Development Corporation (LEDC), was listed on the NPL in September 1984. Soil and ground water contamination from on-site munitions, fertilizer, coal, and ethanol industries affected only small portions of the site; the vast majority of the site's acreage was never contaminated. The site's remediation took eight months and was completed in December 2001.

Geography and Site Context

The South Point Plant NPL site is located on Ohio's southern tip in the Village of South Point, across the Ohio River from Huntington, West Virginia and ten miles downstream from Ashland, Kentucky, in Lawrence County, Ohio. The site is located between U.S. Route 52 to the east and the Ohio River to the west, and consists predominantly of flat and undulating expanses of open land. Solida Creek runs along the property's eastern boundary, paralleling U.S. Route 52. To the west, County Road 1 separates the site's river frontage from the remainder of the site. Ongoing archaeological research at the site has yielded Native American artifacts and burn pits. The site is surrounded to the north and south by residential properties, commercial properties, and a ball field. The site has direct access to air, rail, and highway systems and has 3,370 feet of Ohio River frontage with harbor facilities.

The Village of South Point has a population of 4,235, Lawrence County has a population of 62,319, and the population of the Huntington-Ashland-Ironton Metropolitan Statistical Area (MSA) is 316,641. Historically, the region's economy has depended on the production and processing of natural resources, especially coal and timber. Today, the counties in the MSA retain a strong emphasis on industry while also having developed a new emphasis on commercial and technology-based initiatives. The City of Huntington, West Virginia is developing a 95-acre business and technology park. Boyd County, Kentucky, is developing a 1,000-acre business and industrial park. A 40-acre industrial park is planned for another Superfund site in Ironton, Ohio, Lawrence County's seat, five miles north of the Village of South Point.

While E^2 Inc. is working with the Lawrence Economic Development Corporation (LEDC) and their plans for a 504-acre industrial park on the site, 80 noncontiguous site acres are owned by another entity, Biomass, Inc., which had planned to convert a older structure on the site into a wood-burning power plant to generate electricity. The company's plans remain on hold due to economic and political considerations.

Contamination History

Construction on the property began in 1943, when Buckeye Munitions built the South Point Plant on the property for the production of ammonium nitrate explosives for the federal government. Allied Chemical purchased the site in 1946 and produced ammonia, urea, nitrogen fertilizer solution, melamine, formaldehyde, and urea formaldehyde mixtures until 1978. Ashland, Inc. purchased the facility in 1979. Ashland, Inc. demolished and removed many of the existing Plant's structures and constructed a coal-water fuel pilot plant and a pitch prilling test plant, which formed pitch into small pellets. Both the pilot plant and the test plant have been dismantled. In 1981, South Point Ethanol acquired an 80-acre tract in the middle of the former production area for ethanol production. In 1985, Cardox, a division of the Air Liquide Corporation, began leasing a portion of the South Point Ethanol tract for liquid carbon dioxide production. South Point Ethanol ceased operation in August 1995. Air Liquide discontinued operation in January 1997.

From 1943 to the mid-1980s, site refuse, coal cinder, laboratory chemicals, asbestos insulation materials, waste lubrication oils, and by-product and off-specification solids were deposited in four areas: the Eastern Disposal Area, Disposal Area D, the Melamine Ponds, and the Northern Fly Ash Ponds. The Melamine Ponds, which were located on the eastern edge of the Mid-Plant Area, were remediated in 1978 by Allied Chemical with the help of Ohio EPA; the off-specification solids were removed and disposed of in an off-site landfill.

Four major releases occurred at the site between 1943 and 1979. In the mid-1950s, fertilizer stored in the Mid-Plant Area caught fire. The water used to extinguish the fire washed large quantities of fertilizer components onto the site grounds and into storm sewers. In 1971, a tank in the Mid-Plant Area ruptured, spilling 500,000 gallons of liquid ammonium nitrate, most of which entered a storm sewer that emptied into the Ohio River. In 1977, a portion of the Northern Fly Ash Ponds' northern dike failed, releasing fly ash into Solida Creek. In 1978, the Melamine Pond's eastern dike wall failed, releasing 100,000 gallons of water containing 1,600 pounds of ammonia nitrogen and 6,000 pounds of organic nitrogen into the Ohio River; an unknown quantity of the solution was discharged onto the site grounds.

Remediation History

The South Point Plant site was brought to the attention of EPA in June 1981 and listed on the National Priorities List (NPL) in September 1984. EPA identified Allied-Chemical, Inc. (now Honeywell, Inc.), Ashland Oil, Inc. (now Ashland, Inc.), Ashland Ethanol, Inc., and South Point Ethanol as the site's potentially responsible parties (PRPs).

EPA's site remediation, which began in May 2001 and concluded in December 2001, included institutional controls, surface controls, vegetated soil cover, capping, excavation, stabilization, consolidation, off-site disposal, bioremediation, and ground water decontamination. The institutional controls include a deed restriction instituted by the site's PRPs stipulating that the site can be used only for commercial/industrial purposes. Contaminated soil was excavated and

either taken off-site or consolidated in the Eastern Disposal Area, which was then capped. Contaminated ground water will continue to be pumped into the Ohio River and diluted, in compliance with an Ohio EPA National Pollutant Discharge Elimination System (NPDES) permit, for the foreseeable future.

Reuse Implications

 E^2 Inc., an environmental consulting group that specializes in helping communities address the redevelopment of contaminated properties, has been working with the Lawrence Economic Development Corporation (LEDC) to assist their reuse planning efforts for their 504-acre property, which is part of the South Point Plant NPL site. LEDC has determined that the property will be developed as an industrial park called The Point.

The history of the South Point Plant NPL site and the completion of the site's cleanup have two important reuse implications for the development of The Point. First, most of the South Point Plant NPL site – and most of the LEDC property – was never contaminated and is available for reuse. EPA analysis of the site concluded that the site's surface water and sediments were not contaminated, that there were five localized areas of soil contamination, and that the site's ground water was contaminated. Completion of the site's cleanup in December 2001 means that, with the exception of the site's ground water, the entire site is safe for industrial uses. A deed restriction and restrictive covenants placed on the site by previous site owners also requires that the site be used only for commercial/industrial uses. The site was not cleaned up to residential standards, so if anyone were to live on the site in the future, EPA data indicate that they could potentially be exposed to unacceptable levels of contamination. The site's ground water will continue to be pumped into the Ohio River for the foreseeable future.

Second, while the entire South Point Plant NPL site is safe for industrial uses, there are two areas of the site – each partly owned by both LEDC and additional property owner Biomass, Inc. – that are not currently available for reuse. The Eastern Disposal Area, a 13-acre area on the eastern edge of the site, has been partially covered with an impermeable cap to contain consolidated on-site wastes. The cap consists of a geosynthetic clay liner, a flexible membrane liner, and a 30-inch layer of soil atop the liners to prevent frost damage. The area is fenced off and, to avoid any potential damage to the cap, EPA restrictions require that no activities take place in the area.

The second area, the Northern Fly Ash Ponds, consists of two solid 20-acre basins filled with fly ash. Located near the northeastern edge of the South Point Plant NPL site, each of the ponds served as an on-site repository for fly ash and cinders from the burning of coal. Fly ash is a dusty by-product of coal combustion. The two ponds have been contained within dikes and covered with vegetation to stabilize the fly ash. Fly ash is not considered a toxic substance by the Agency for Toxic Substances and Disease Registry (ATSDR) or EPA, but EPA restrictions at the site require that the fly ash in the two ponds remain contained and stabilized.

Despite these restrictions, E^2 Inc.'s research indicates that the reuse of the Eastern Disposal Area and the Northern Fly Ash Ponds is possible. The Eastern Disposal Area and the Northern Fly

Ash Ponds could provide space for additional building sites, parking areas for adjacent buildings, recreational areas for employees at The Point, natural buffer areas, or attractive open areas of vegetation. These options are discussed in greater detail in Part IV of the report.

As this review of the South Point Plant NPL site's history, contamination, and cleanup indicates, the contaminated portions of the site have been cleaned up and most of the site is available for industrial reuse. However, LEDC still faces challenges as it develops The Point into a successful industrial park. Stigma associated with the listing of the South Point Plant site on the NPL may remain. Prospective tenants and lenders may be concerned about potential legal and liability issues associated with the site. Private, state, and federal funding resources may be limited by The Point's status as part of a Superfund site. This report assesses each of these challenges, targeting tools and resources that can facilitate reuse opportunities at The Point. The following parts of the report present E^2 Inc.'s assessment of existing conditions at The Point and their implications for the property's successful reuse.

Part II: Interview Findings – Current Tenants and Local Lenders

Properties that are located on Superfund sites can face challenges as they are returned to successful reuse. Companies may choose to locate elsewhere, for example, because of the perceived danger associated with a property's contamination, even if that contamination has been cleaned up. Similarly, lending institutions may prefer to finance new developments rather than the redevelopment of Superfund sites because of the perception that the financing of these projects may result in higher costs and/or liability concerns.

To understand and address the potential challenges faced by prospective tenants and lenders at The Point, E^2 Inc. conducted interviews with current tenants and local lenders interested in financing opportunities at the property. The results of these interviews are reported below.

Tenants' Perspectives on The Point

In October, E^2 Inc. conducted interviews with representatives from M&M Services and Ohio University Southern, two of the three tenants that have located or will be locating at The Point in the near future. The interviews explored tenants' experiences at The Point and their concerns and recommendations related to the property's status as part of the South Point Plant NPL site.

M&M Services: Interview with Marty Meyer, President

M&M Services, the first tenant at The Point, located on the property in late 2001 and renovated two existing buildings for office and warehouse use. According to the company's president, the company located at The Point for three reasons: the industrial park's location, business incentives, and the availability of existing buildings on the property. The Point's location in the Village of South Point allowed the company to consolidate its operations in southern Ohio and eastern Kentucky at one location. The business incentives provided by the industrial park, and in particular the park's Empowerment and Enterprise Zone designations, offered tax advantages and benefits generated for each additional new company employee. The availability of existing buildings meant that the company could relocate quickly, without spending time developing a new site.

The Point's industrial history and contamination were not a primary concern for the company. Following several visits to The Point and conversations with LEDC, the company's president determined that the property offered several advantages over similar properties in the Tri-State area. Because the company self-financed its property acquisition at The Point, M&M Services did not work with any lending institutions.

The company's president offered several recommendations for future development at The Point. First, the importance of completing the property's utilities and infrastructure was emphasized. Second, the possibility of marking sample property boundaries at The Point with flags, stakes, or spray painted lines was raised to enable interested parties to be able to visualize how their company's facilities might look on the property. Finally, it was suggested that information describing the qualifying criteria and benefits provided by The Point's Empowerment and Enterprise Zone designations be provided to site tenants.

Superior Marine, Inc.

 E^2 Inc. was unable to obtain an interview with the second tenant – Superior Marine, Inc. – at The Point.

Ohio University Southern: Interview with Dr. Jim Crawford, Director, University Center for Development

Ohio University Southern, one of five regional campuses of Ohio University, located in nearby Ironton, anticipates that it will build a satellite industrial training facility at The Point. The training facility would serve the Tri-State area and also provide training services for the employees of companies located at The Point. The regional campus was awarded grant funding from the University's Board of Regents to proceed with the project and LEDC donated a fiveacre site for the facility. The regional campus selected The Point for three reasons: the industrial park's location, the University's need for a satellite campus in the Tri-State area, and LEDC's land gift. The University determined that The Point's economic incentives, including its Empowerment and Enterprise Zone designations, did not apply because of the University's status as a public educational institution.

The Point's industrial history and contamination were a primary concern for the University. Following several meetings with LEDC, during which the parties reviewed EPA's Preliminary Closeout Report for the South Point Plant NPL site, the University determined that the Report's documentation of the site's contamination, remediation, and current availability for reuse were sufficient to move forward with the project. The University is currently developing additional funding sources for the project's engineering and architectural services and will be working to establish a construction timeline in the near future. Dr. Jim Crawford, Director of the University's Center for Development, indicated that the University has enjoyed an excellent working relationship with LEDC and expects that relationship to continue in the future. Dr. Crawford did not have any recommendations for future development at The Point.

The Bottom Line: Site Tenants

The interviews with representatives from M&M Services and Ohio University Southern provide an initial indication that The Point's location and available economic incentives will prove attractive to prospective tenants. Both tenants also indicated that The Point was selected because of a combination of unique features that nearby facilities could not provide. M&M Services, for example, was able to consolidate multiple local operations in one location and operate with minimized construction costs because of the availability of existing buildings on the property. The University received a five-acre grant from LEDC and will be able to access a ready-made market – companies located at The Point – for its training services. These features indicate that LEDC's parallel marketing of The Point's general strengths – location and incentives – alongside features tailored to individual clients, like the provision of existing on-site buildings or a small land grant, has been effective.

The property's status as part of the South Point Plant NPL site was either not a concern or the concern was addressed by EPA's Preliminary Closeout Report. Future tenants at The Point may require additional information and place greater emphasis on the status of the site. Neither of the two existing clients, for example, needed to work with banks or located their operations in areas of the property that were formerly contaminated.

Area Banks' Perspectives on The Point

In October, E^2 Inc. interviewed representatives from three local and regional banks identified by LEDC: Oak Hills Bank, National City Bank, and U.S. Bank. The interviews explored the banks' relationships, if any, with The Point and the banks' approaches to contaminated and formerly contaminated properties, as well as possible tools and incentives to facilitate lending opportunities for prospective tenants at The Point.

Oak Hills Bank: Interview with Dan Mooney, Area President

Oak Hills Bank has established a relationship with LEDC and is interested in the financial opportunities presented by The Point. The bank has yet to finance any projects on the property, but is familiar with The Point. The bank processed a financing application from M&M Services, one of the property's present tenants. The application was turned down for reasons not related to the property's status as part of the South Point Plant NPL site.

Oak Hills Bank has a formalized environmental assessment process that includes a questionnaire, interviews with surrounding property owners, and a review of documents in the public record. The bank assesses a property's current usages, past usages, intended usages, and the probability of contamination on adjacent properties. If the bank's analysis yields any type of environmental concerns, the bank requires a Phase I assessment. The bank has minimal experience with financing opportunities at former Superfund sites or brownfields. The bank has tried to minimize its exposure to these types of properties, but recognizes that, in the Tri-State area, there are a considerable number of properties with environmental concerns and that the redevelopment of these properties could support economic growth in the region.

The bank's primary recommendation was that financing opportunities at properties like The Point would be significantly enhanced by documentation that formally assessed the entire property's original contamination, contaminant locations, remediation history, and current status and availability for reuse and enabled the bank's environmental assessors to evaluate the property's current marketability.

National City Bank: Interviews with Bank Representatives Richard Whalen and Randy Koenig and Environmental Site Assessor Steve Katzenstein

National City Bank has established a relationship with LEDC and has provided financing for Superior Marine Inc., one of the existing property owners at The Point. Because the project's financing was related to equipment and not property acquisition, the bank did not require any type of environmental assessment. National City Bank's environmental assessment process consists of a required Phase I assessment for *all* commercial mortgage applications, which can then lead to additional research as part of a Phase II assessment. The bank processes financing applications for properties that are part of Superfund sites as part of its conventional commercial mortgage review process.

National City Bank has minimal experience with financing opportunities at former Superfund sites or brownfields in the Tri-State area, but has financed a considerable number of properties elsewhere in the country. The bank's experience has been mostly positive – the bank has found that many sites listed on EPA's National Priorities List have either been adequately cleaned up or the original contamination was localized and/or did not require cost-prohibitive remedies. The bank is interested in future financing opportunities available at The Point.

The bank's primary recommendation was that, because a considerable number of financing applications that the bank reviews are turned down due to the applicants' limited cash flow, business plan, or debt level, prospective property owners at The Point need to ensure that their application is as strong as possible from the outset. The bank also indicated an interest in the availability of site-wide environmental information and documentation, stating that if documentation met their informational requirements, the documentation could, on a case-by-case basis, potentially substitute for the bank's required Phase I assessment.

U.S. Bank: Interviews with Jim Barrett, President, and George Moore, Account Manager

U.S. Bank has not established a relationship with existing property owners at The Point or with LEDC, although the bank's representatives indicated their interest in future financing opportunities at the property.

U.S. Bank has a department that is responsible for reviewing all available information related to a property's environmental safety. If sufficient information is not available, the bank conducts an independent review of the property's potential contamination, current usages, and the probability of contamination on adjacent properties. If the bank's analysis yields substantial environmental concerns, the bank requires a Phase II assessment. Once the bank's environmental evaluation department signs off on a property, financing applications for that property are treated as a conventional financing project. The bank's internal review of EPA's Preliminary Closeout Report for the South Point Plant NPL site indicated that the bank would require additional information about the location of contaminants and the site's current status.

U.S. Bank has financed projects at two environmentally impaired properties in Southern Ohio. The bank considers these properties, including properties located on Superfund sites, to be viable financing opportunities. The bank's experience with site cleanups has indicated that properties on these sites tend to be in substantially better condition than properties and projects located in existing industrial locations.

The bank's primary recommendation was that financing opportunities at properties like The Point would be significantly enhanced by documentation that formally assessed the entire property's original contamination, contaminant locations, remediation history, and current status and availability for reuse and enabled the bank's environmental evaluation department to assess the property's current marketability.

The Bottom Line: Area Banks

The representatives from each of the three banks interviewed indicated that the banks are wary of financing opportunities at environmentally impaired properties. However, the interviews also indicate that the banks are increasingly aware of the redevelopment opportunities provided by these properties and the additional tools that are available to remove their liability and risk

exposure concerns. All three of the banks interviewed were interested in the financing opportunities available at The Point.

The banks shared three similar general concerns about environmentally impaired properties:

- the need for sufficient and accurate information about the properties;
- the need for this information to be available for entire properties; and
- the need for this information to address a property's restrictions and availability for reuse in a clear, non-technical manner.

Each of these concerns is directly tied to the banks' larger concern that the financing of environmentally impaired properties may result in their exposure to unforeseen future costs and liability for previously undetected contamination. Below, Part III of this report describes an EPA pilot measure – a Ready for Reuse Determination – that addresses the banks' concerns.

Part III: Legal and Liability Issues

Liability concerns, as indicated above by E^2 Inc.'s interviews with local banks, can serve as a considerable challenge to the reuse of properties located on Superfund sites, even when those concerns are either unfounded or can be addressed using tools provided by EPA. This part of the report describes how liability concerns are shaping reuse opportunities at The Point today. This section describes the legal tools – deed restrictions and restrictive covenants – used by the previous owners of the South Point Plant NPL site to restrict the site's future uses to industrial uses. This section also describes an EPA pilot measure, called a Ready for Reuse Determination (RfR), that is designed to directly address concerns about properties located on Superfund sites need to be understood and addressed, these concerns should not serve as a deterrent to parties interested in The Point.

Property Deed Restrictions and Restrictive Covenants

The 504-acre property owned by LEDC has a deed restriction and restrictive covenants placed on it. This restriction and covenants also apply to all properties within the site boundaries of the 610-acre South Point Plant NPL site. Previous property owners Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol placed the deed restriction and restrictive covenants on the site in 1999 as a way to address their liability concerns. By restricting uses on the entire Superfund site to commercial/industrial uses, these entities permitted only uses that would not disturb the site remedy, not access the site's groundwater, and ensure that on-site workers would be safe while working on the site. The former South Point Plant NPL site has been cleaned up and is safe for industrial uses, but was not cleaned up to residential standards. If anyone were to live on the site

in the future, EPA data indicate that they could potentially be exposed to unacceptable levels of contamination. Finally, LEDC has also designed a "Declaration of Covenants, Conditions, Restrictions and Easements" for The Point.

Deed restrictions and restrictive covenants are institutional controls that are recorded as part of a property's deed. These controls can be placed, modified, and removed only by the property owner that originally put the deed restriction or restrictive covenants in place. Deed restrictions and restrictive covenants can be challenged in court on the grounds that they are unclear or ambiguous and statutory limitations can be imposed on the length of time that these controls are binding. In the long-term, the enforcement of these controls can be challenging, as a property's current owner is responsible for the maintenance of the property's deed restrictions and restrictive covenants. There is no local, state, or federal oversight or enforcement of deed restrictions or restrictive covenants.

The deed restriction and restrictive covenants placed on the South Point Plant NPL site by Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol restrict property uses at The Point to commercial/industrial uses and require that any activities on the property must not disturb the site remedy. The deed restriction reads as follows:

"No building, structure, or other object shall be built or placed on the Site that would disturb the cap over the landfills or would otherwise disturb any component of the remedy at the Site. Further, no one shall use surface or ground water from the Site for any purpose, including but not limited to human or animal consumption."

The seven restrictive covenants specify that the site's future uses shall be limited to commercial/industrial purposes only and reiterate the specifications described in the deed restriction in greater detail. There is one inconsistency between the deed restriction and the restrictive covenants. While the deed restriction states that "no one shall use surface or ground water from the site for any purpose," the restrictive covenants state that only the "use of any well for potable use" is prohibited.

Interviews with Ashland, Inc. representative Jim Butler indicate that Ashland, Inc. and Honeywell, Inc. will require the maintenance of the property's deed restrictions and restrictive covenants into the foreseeable future. Mr. Butler also indicated that the two companies would be willing to work with LEDC to address concerns and help to facilitate reuse opportunities at The Point.¹ Possible areas for clarification include whether recreational reuses could be permitted on the property, as the site remedy is sufficiently protective for recreational reuses. While the deed restriction and restrictive covenants do not specifically allow recreational reuses, for example, limited recreational uses, intended only for the tenants and employees of The Point, might be acceptable within the property's current industrial park context.² Additional areas for

¹ Jim Butler, Director of State and Local Government Relations, Ashland Oil. Telephone contact, 09/16/02.

² For additional information about the recreational reuse of Superfund sites, see EPA's report *Reusing Superfund Sites: Recreational Use of Land Above Hazardous Waste Containment Areas.* This report, along with other reuse information, can be found on the EPA website at: <u>www.epa.gov/superfund/programs/recycle/overview/recreuse.htm</u>.

clarification include whether the site's ground water could be used for process purposes (like equipment cooling) or other highly specific, non-potable uses that could provide a benefit to prospective tenants. Part IV of the report describes these possibilities in greater detail as part of the report's evaluation of reuse opportunities.

If LEDC decides to seek clarification or modification of the property's deed restriction and restrictive covenants, LEDC would need to file a request with both Ashland, Inc. and Honeywell, Inc. Mr. Butler indicated that an evaluation of an LEDC clarification or modification request would take approximately 1-3 months.

In addition to the property's existing deed restriction and restrictive covenants, LEDC has also designed a "Declaration of Covenants, Conditions, Restrictions and Easements" for The Point. This declaration is designed to make the industrial park an attractive and desirable place for businesses. By designating acceptable land uses and requiring LEDC oversight of building design, landscaping plans, and other property uses, the declaration ensures that both tenants and the local community can expect an attractive, safe industrial park. As the author of the declaration and the property owner, LEDC can alter these regulations at any time.

EPA Pilot Measure - A Ready for Reuse Determination

Based on local banks' liability concerns and their interest in the availability of site-wide documentation that could address an entire property's contamination and remediation history and availability for reuse, E^2 Inc. conducted a second round of interviews with U.S. Bank and Oak Hills Bank in November. E^2 Inc. presented information about an EPA pilot measure called a Ready for Reuse Determination (RfR) that the Agency is establishing to certify formerly contaminated properties as ready for specific types of reuse, and asked how the process could be adapted to best meet the banks' needs.

Background Information

A Ready for Reuse Determination (RfR) is a decision by EPA, in conjunction with States and Tribes, that a parcel of land is safe for specified uses. The pilot RfR process will take into account EPA and non-EPA documents to describe the reuse status of National Priorities List (NPL) sites. This process will result in a formal EPA cover sheet and accompanying report that describe the site's availability for reuse and communicates EPA's knowledge of a site's reuse potential. The type of reuse safely supported by the site will fall into one of six categories: residential, commercial/industrial, ecological, recreational, governmental, and agricultural. Documents like deed restrictions would be reviewed as part of the certification process.

Determinations will come in different levels or categories, depending on the amount of property assessment and/or cleanup that has been done. For example, a determination at an early stage of the EPA pipeline of activities might assert "no further Superfund interest" in the property based upon a Preliminary Assessment (PA) or similar assessment but not assert that the property is

clean. An RfR based upon extensive sampling that uncovered no contamination (e.g., at the end of a Remedial Investigation) would give additional assurances to the marketplace. A postcleanup RfR for the South Point Plant NPL site could offer the highest level of assurance possible, stating that EPA has determined that most of the site is available for industrial reuse, and would also include the property's use restrictions based upon the site's ground water contamination and wastes consolidated in the Eastern Disposal Area.

EPA's Ready for Reuse Determination will serve several purposes: (1) to help overcome the stigma associated with Superfund properties so that developers and citizens encounter fewer obstacles to their use; (2) to document and communicate EPA's knowledge about the environmental status of properties in a form that is useful to the general public; (3) to identify the types of use that the properties can safely support; and (4) to serve as an EPA document that landowners can reference in future real estate transactions. The Ready for Reuse Determination differs from EPA's liability tools, such as prospective purchaser agreements and comfort letters, in that the measure does not address liability issues or EPA's intentions at a particular property. Instead, the RfR provides an EPA statement on the property's environmental and use status. This status information will be documented on the formal EPA cover sheet and in an accompanying report.

Banks' Response to EPA's Ready for Reuse Determination

U.S. Bank and Oak Hills Bank representatives indicated that the information contained in a pilot EPA Ready for Reuse Determination (RfR) for the South Point Plant NPL site could address their earlier recommendation that documentation be provided to address the site's contamination and remediation history and availability for reuse. They confirmed that financing opportunities at properties like The Point would be significantly enhanced by comprehensive documentation that formally assessed the *entire* property's original contamination, contaminant locations, remediation history, and current status and availability for reuse. The bank representatives also indicated that the process could potentially fulfill the banks' requirements for a Phase I assessment, and possibly a Phase II, on a case-by-case basis. The bank representatives were optimistic that an RfR could play a substantial role in satisfying loan requirements, but were likely to continue conducting established due diligence practices to legally protect themselves.

Finally, an RfR was attractive to the two banks because the process provides lenders with access to EPA's site information, information that may not be typically available for a Phase I or II assessment. The banks understood that a Ready for Reuse Determination report was an informational document rather than a tool to address legal or liability concerns at a given site, but indicated that the RfR's value derives from its description of an entire site's contamination and remediation history and the site's current status and marketability.

The banks also raised two concerns about the process. First, the banks emphasized that the RfR must include all required information in an understandable and accessible format. Second, the banks would seek to ensure that the RfR includes a timeline of site activities and contamination,

potential impacts on properties' marketability, such as operations and maintenance requirements and deed restrictions, and an absence of EPA jargon and acronyms.

The banks indicated that EPA's Ready for Reuse Determination could, in theory, ultimately accelerate the processing of financing applications and enhance the likelihood of successful financing opportunities at properties like The Point. The banks' concerns that the pilot measure use clear language and include specific types of information have been incorporated into the design of the process.

Part IV: Reuse Challenges and Opportunities at <u>The Point</u>

Most of the 504-acre property owned by LEDC is available for reuse. Most of the property was never contaminated – EPA determined that contaminants were either manufactured or disposed of at five locations on the South Point Plant NPL site. Today, following completion of the site's cleanup, there are two areas within The Point that are not currently available for reuse: the Eastern Disposal Area and the Northern Fly Ash Ponds. This part of the report describes the limitations that need to be addressed before these areas can be reused. This part of the report also describes the range of potential reuse options that are available for both the Eastern Disposal Area and the Northern Fly Ash Ponds.

Existing reuse limitations at The Point can be considered in three general categories: technical limitations, physical limitations, and alternate ownership. Technical limitations are binding written agreements instituted to protect a site remedy or limit a site owner's perceived liability concerns. While technical limitations may, as written, restrict site reuse options, these agreements can be revisited and altered, usually only by the party that originally placed the limitation. Any modifications to such agreements at The Point would also need to be reviewed by EPA to ensure continued site safety and to maintain the integrity of the site remedy.

Physical limitations are actual material limitations. These limitations, like landscape features or existing on-site infrastructure, can be simple or complex to address, depending on the scale and cost of the changes required. As long as the proposed changes do not affect site safety or the integrity of the site remedy, physical limitations can be directly addressed using environmental, engineering, and construction services. Finally, the alternate ownership limitation refers to Biomass, Inc.'s ownership of a significant central portion of land within The Point. All future reuse opportunities for both the Eastern Disposal Area and the Northern Fly Ash Ponds need to be considered within the context of working with Biomass, Inc. or obtaining portions of the property outright.

Despite these challenges, E^2 Inc.'s research indicates that the reuse of the Eastern Disposal Area and the Northern Fly Ash Ponds is possible. The Eastern Disposal Area and the Northern Fly Ash Ponds could provide space for additional building sites, parking areas for adjacent buildings, recreational areas for employees at The Point, natural buffer areas, or attractive open areas of vegetation.

The Eastern Disposal Area

The Eastern Disposal Area is a 13-acre area on the eastern edge of the South Point Plant NPL site. Different portions of the area are owned by both LEDC and Biomass, Inc. This former dump area was in operation between 1946 and 1965 and received laboratory chemicals, coal cinders, and general site refuse. As part of the site remedy, this waste has been consolidated in a smaller area and covered with an impermeable cap to protect the surrounding soil, ground water, and surface water from contaminated seepage or runoff. The cap consists of a geosynthetic clay liner, a flexible membrane liner, and a 30-inch layer of topsoil to prevent frost damage. To ensure the cap's continuing effectiveness, EPA will inspect it on a regular basis. The Eastern Disposal Area is fenced off in order to protect the cap from being damaged by trespassers. Figure 1 provides a cross-section illustration of the Eastern Disposal Area cap.

Below, the report describes the potential reuse limitations and opportunities at the Eastern Disposal Area.

Limitations: Technical

Deed Restriction and Restrictive Covenants

The deed restriction and restrictive covenants placed on the South Point Plant NPL site by Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol restrict permissible land uses across all areas of The Point, including the Eastern Disposal Area, to commercial/industrial uses. E^2 Inc.'s research indicates that while Ashland, Inc. and Honeywell, Inc. will require the maintenance of the property's deed restrictions and restrictive covenants into the foreseeable future, the two companies would be willing to work with LEDC to address concerns and help to facilitate reuse opportunities at The Point. The South Point Plant NPL site has been remediated and is safe for industrial uses, but was not cleaned to residential standards. If anyone were to live on the site in the future, EPA data indicate that they could potentially be exposed to unacceptable levels of contamination.

Institutional Controls

Institutional controls (ICs) are technical limitations imposed by EPA to protect a site's chosen remedy and prevent human exposure to contaminants. After EPA considers all of the feasible ways to clean up a site to ensure that human and ecological health are protected, a remedy is chosen and implemented. The selected remedy typically includes institutional controls, which "are used to supplement engineering controls when residual contamination restricts the unimpeded use of a site...ICs are intended to maintain the integrity of remedies and minimize the potential exposure to contamination."³

EPA placed several institutional controls on the Eastern Disposal Area. First, EPA fenced the southern half of the area to protect the integrity of the cap placed over the materials consolidated on-site. The fencing is designed to prevent humans from accessing the capped area and potentially disturbing the cap or being exposed to wastes. Second, additional institutional controls prohibit any type of reuse on the cap, and EPA inspects the cap periodically to ensure its continuing effectiveness.

The institutional controls described above are designed to ensure that the South Point Plant NPL site is safe to use. If the ICs were disregarded, the site could potentially pose a risk to human and ecological health. However, while the controls are an important part of the remedy, they are also technical limitations that restrict reuse options, particularly at the Eastern Disposal Area. If LEDC determines that modification of site ICs could enhance reuse opportunities on the property, two approaches are available to alter those ICs through a modification of the site's Record of Decision (ROD): an Explanation of Significant Differences (ESD) and a ROD amendment.

Explanation of Significant Differences (ESD)

Any significant alteration to the ROD may require an Explanation of Significant Differences (ESD). An ESD may be initiated either by EPA or the site's PRPs. Changes that require an ESD are labeled as "significant yet not fundamental," meaning that the change will alter some component of the ROD, but it will not change the effectiveness of the remedy specified in the ROD. For example, an ESD is currently being considered for the H.O.D. Landfill NPL site in Antioch, Illinois, in order to remove a fence that is an integral part of the Remedial Design. However, the removal of the fence does not change the site's safety or reuse implications. Although an ESD can be initiated either by EPA or by a PRP, EPA's site attorney determines whether or not an ESD will be pursued. If the decision is made to move forward with an ESD, EPA must post a notice in a local newspaper. The notice is followed by a thirty-day public comment period. After the comment period, EPA determines whether to alter the ESD based on public comments, and the ESD is finalized.

³ Information about institutional controls is available on the EPA website at: <u>www.epa.gov/superfund/action/postconstruction/ic.htm</u>.

ROD Amendments

When the desired change to the ROD fundamentally alters the original site remedy, the ROD must be amended as part of a lengthy formal review process. Common situations that require ROD amendments include changes in the foreseen reuse of a site or changes in site remedy technologies. Similar to the ESD process, EPA's site attorney determines whether or not a ROD amendment will be pursued. A ROD amendment, like an ESD, must be initiated with a public notice in a local newspaper. This notification is followed by a thirty-day public comment period. EPA then develops a "responsiveness summary" to address the issues raised during the public comment period and meets with local government officials to discuss the implications of the proposed ROD amendment. Following the development of the responsiveness summary and the local meeting, EPA can then decide to move forward with the ROD amendment. The amendment must address the public's concerns, either by incorporating the public's suggestions or by directly explaining why a particular voiced concern need not alter the proposed ROD amendment.

Limitations: Physical

Landfill Cap

The primary physical limitation at the Eastern Disposal Area is the cap placed on the area's southern portion – owned predominantly by Biomass, Inc. – as part of the site remedy. The dual barrier cap, which creates a barrier between the consolidated waste and surrounding areas, is comprised of a Flexible Membrane Liner (FML) and a Geosynthetic Clay Liner (GCL). The FML is a thick layer of plastic that prevents water from leaching into the Eastern Disposal Area. The GCL is placed below the FML and acts as a second line of defense against water penetration.⁴ Figure 1 provides a cross-section illustration of the Eastern Disposal Area cap.

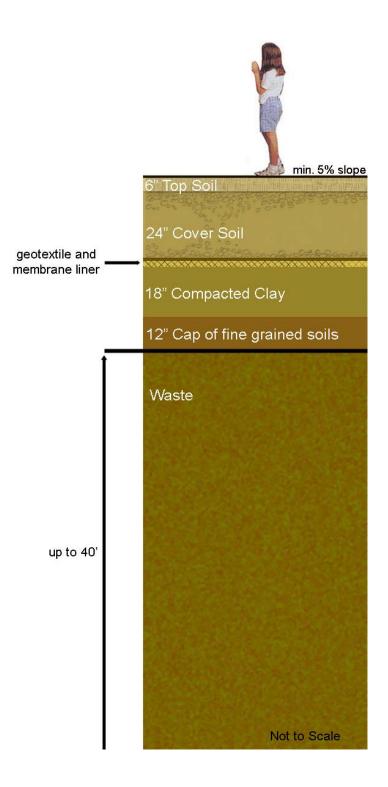
While the Eastern Disposal Area is also regulated by institutional controls, the Area's cap represents the primary reuse restriction. The cap, for example, is not designed to withstand the weight of asphalt or vehicles associated with a parking lot. Under even mild pressure, the cap could experience a rupture or leak that would allow contaminants to escape. Any structures placed on top of the cap could also violate the cap's integrity. The northern half of the former Eastern Disposal Area – owned predominantly by LEDC – is available for unrestricted reuse, but is also partially located on a steep incline that descends to Solida Creek.

Accessibility

Access to the Eastern Disposal Area is limited by the Area's fencing, as required by EPA.

⁴ Craig Cox, Cox-Colvin & Associates, remedial contractor for the South Point Plant NPL site. Telephone contact, 09/24/02.

Figure 1: Eastern Disposal Area Dual Barrier Cap



Reuse Options for the Eastern Disposal Area

The capped portion of the Eastern Disposal Area owned by LEDC is restricted due to cap limitations and the fencing surrounding the area. However, this area may be available for recreational reuse opportunities in the future. While the area could not be built on or used for parking, the area could provide open space, with walking paths and/or picnic tables, planted with either grasses or wildflowers, that could serve as a viable recreational use for companies' employees at The Point. LEDC would need to work with Honeywell, Inc., Ashland, Inc., and EPA to determine whether this reuse would violate the property's deed restrictions and other institutional controls or endanger the integrity of the cap. If recreational uses were to be considered for this area, LEDC could work with property owners at The Point to determine whether active recreational facilities, like a basketball court, or passive recreational opportunities, like walking paths or a picnic area, would be most appropriate for the area and best meet the needs of their employees.

The northern portion of the Eastern Disposal Area, partially owned by Biomass, Inc., is not capped or restricted, and should be available for reuse. Reasonable care would need to be taken to ensure that any construction in this area did not violate adjacent institutional controls or the site remedy. Reuse options for this portion of the Eastern Disposal Area could be expanded if LEDC obtained the remainder of this property. Reuse options for this portion of the site include structures, parking facilities, or roadway access. The area could also be maintained as an open space buffer for adjacent Solida Creek. This buffer could also optionally provide recreational opportunities like walking paths or areas with picnic benches for companies' employees at The Point.

The Northern Fly Ash Ponds

The two Northern Fly Ash Ponds – one of the ponds is located on property owned by Biomass, Inc. – are located near the northeastern edge of the South Point Plant NPL site. Each of the ponds are approximately 20 acres in size, and each served as an on-site repository for fly ash and cinders from the burning of coal. The two ponds have been contained within dikes and covered with vegetation to stabilize the fly ash. Fly ash is a dusty by-product of coal combustion. Ashland, Inc.'s operations at the South Point Plant NPL site used coal-fired boilers, creating fly ash that was then deposited in the Northern Fly Ash Ponds. Despite their potentially misleading name, the ponds are basins of solid fly ash material and do not contain any liquid.

Below, the report describes the potential limitations and reuse opportunities at the Northern Fly Ash Ponds.

Limitations: Technical

Deed Restriction and Restrictive Covenants

The deed restriction and restrictive covenants placed on the South Point Plant NPL site by Ashland, Inc., Ashland Ethanol, Inc., and South Point Ethanol restrict permissible land uses across all areas of The Point, including the Northern Fly Ash Ponds, to commercial/industrial uses.

Institutional Controls

EPA placed several institutional controls on the Northern Fly Ash Ponds. Since no cleanup actions were undertaken for the Northern Fly Ash Ponds, the institutional controls put in place by EPA are the sole remedy for the ponds. The ponds' institutional controls consist of surface controls that address slope stabilization, erosion control, and the enhancement of existing vegetation. Slope stabilization and erosion control allow the ponds to remain intact, minimizing movement of the fly ash. The vegetation provides a cover for the fly ash, stabilizing it and reducing dust. In addition, there are four-foot dikes surrounding the fly ash ponds that serve to contain the fly ash and prevent it from spreading or blowing away. The dikes also prevent trespassers from disrupting the fly ash, which could raise dust and thereby create an inhalation hazard.

The institutional controls described above are designed to ensure that the South Point site is safe to use. If the ICs were disregarded, the site could potentially become dangerous to human and ecological health. However, while the controls are an important part of the remedy, they are also technical limitations that restrict reuse options. If LEDC determines that modification of site ICs could enhance reuse opportunities on the property, two approaches are available to alter those ICs through a modification of the site's Record of Decision (ROD): an Explanation of Significant Differences (ESD) and a ROD amendment (see earlier description on pgs 18-19 for additional information).

Limitations: Physical

Fly Ash Toxicity

Physical limitations at the Northern Fly Ash Ponds revolve around the area's substantial fly ash deposits. Fly ash is a dusty by-product of coal combustion. Ashland, Inc.'s operations at the South Point site used coal-fired boilers, creating fly ash that was then deposited in the Northern Fly Ash Ponds. The physical limitations associated with the reuse of the fly ash ponds include the potential toxicity and instability of the fly ash, as well as the costs associated with its removal.

Fly ash is not considered a toxic substance by the Agency for Toxic Substances and Disease Registry (ATSDR) or EPA, so removal, mixing, or consolidation of the fly ash at The Point is a

viable option. Careful handling of the material upon removal, however, would be required to avoid creating a potentially hazardous situation, as the fly ash and cinders also contain sulfates, chlorides, iron, manganese and trace metals. The existing vegetation on the ponds, implemented as an institutional control, has served to stabilize the fly ash. Accordingly, the vegetation should not be removed unless the fly ash is also removed.

Fly Ash Instability

Fly ash is a loose, dusty by-product of coal combustion that constitutes a low-quality, physically unstable building surface. Unmodified fly ash should not serve as a foundation for any type of structure, including a parking area. In addition, because the fly ash ponds at the South Point site are located on top of a medium-drained sandy soil, the mixture of the fly ash with underlying soil or sinking piers into the soil would not sufficiently stabilize the surface for building.⁵ Given these dynamics, the removal of the fly ash or mixture of the fly ash with dense fill may be more viable alternatives to enable a range of reuse opportunities. However, in the removal scenario, the high costs associated with the removal of the approximately 283,500 tons of fly ash in the LEDC portion of the ponds would need to be considered.

Accessibility

The Northern Fly Ash Ponds present accessibility challenges. The ponds are currently heavily vegetated and surrounded by four-foot dikes, eliminating vehicular access. These challenges would need to be addressed before any removal of fly ash and/or implementation of reuses.

Reuse Options for the Northern Fly Ash Ponds

There are three different approaches available to facilitate the reuse of the Northern Fly Ash Ponds. The fly ash could be removed and deposited elsewhere, either on- or off-site, the fly ash could be left in place and mixed with another substance, or the fly ash could simply be left in place. Depending on the approach selected, reuse options can include structures, parking facilities, roadway access, a wetlands or other natural buffer area, or recreational opportunities such as walking paths, among other options. Figures 2-5 illustrate four possible reuse scenarios.

- Reuse Scenario A (Figures 2.1 and 2.2) shows the placement of structures on the Northern Fly Ash Ponds.
- Reuse Scenario B (Figures 3.1 and 3.2) shows the placement of parking facilities on the area.
- Reuse Scenario C (Figures 4.1 and 4.2) shows the development of a constructed wetland in the area.

⁵ Kevin O'Hara, Ohio EPA Division of Emergency and Remedial Response. Email contact, 09/20/02.

• Reuse Scenario D (Figure 5) shows the development of an expanded wetland and trail system in the area.

Emphasis in each of these scenarios is also placed on the thickening of the riparian edge along Solida Creek to both serve as a wildlife movement corridor and pedestrian greenway with trails leading to the Ohio River.

The fly ash pond owned by LEDC is shallower than the pond owned by Biomass, Inc. – cost estimates given below to address the site's fly ash consider only the LEDC's fly ash pond. Addressing the fly ash pond owned by Biomass, Inc. could be considerably more expensive. Regardless of relative depth, reuse options for the Northern Fly Ash Ponds are limited unless the fly ash is removed or stabilized.

Option 1: Complete Removal

The complete removal of the fly ash is the only option that would enable the area to be adapted for a variety of reuse opportunities, constrained only by the site's deed restriction and restrictive covenants.

Following the removal of the fly ash, the area would be available for structures, parking facilities, roadway access, a wetlands or other natural buffer area, or recreational opportunities such as walking paths, among other possible options. Removing the fly ash would also address the area's limited accessibility, as the stabilizing dikes and trees could be removed. The removal of the fly ash is also potentially the most expensive option, depending on the method chosen and the final destination of the ash.

There are companies that specialize in the excavation and transport of fly ash. Southern Excavating Company in Huntington, WV, for example, could clear the fly ash ponds using a back hoe and pumping equipment.⁶ Southern Excavating Company visited the site on October 4, 2002, and submitted a quote for the removal and/or consolidation of the fly ash. The company estimated the cost of either moving the fly ash to another location on-site or blending the fly ash with stabilizing materials and returning it to the pond at \$1-\$1.5 million. This quote does not include the cost and logistics of removing the trees and brush on the ponds.

⁶ Billy Price, Southern Excavating Company. Telephone contact, 10/02/02.

Once removed from the pond, the fly ash could be consolidated and moved to another location on-site, consolidated and incorporated into on-site building plans and used in construction, or consolidated and moved off-site.

The consolidation and relocation of the fly ash on-site would be the most cost-effective removal option, as transportation costs and regulatory compliance would be minimized. If LEDC obtained the portion of the fly ash ponds owned by Biomass, Inc., the fly ash could also be consolidated in this deeper pond, opening up the original LEDC pond for reuse. Alternately, if the fly ash were incorporated into on-site building plans, it could be mixed with additional materials to serve as roadbed fill. This option would require coordination between fly ash removal efforts and the construction of roads on the property, but would eliminate the need to transport the fly ash off-site and allow for an effective reuse that creates a benefit for The Point.

Finally, the fly ash could also be shipped off-site, either to be sold for use as fill or to be consolidated in a landfill. Fly ash is used as an ingredient in a variety of materials, including cement, concrete block, bricks, and as a soil-blending ingredient.⁷ If the fly ash were removed and a buyer was not available, the fly ash could be transported to a landfill. The fly ash would be permanently disposed of, but the costs associated with its transport and consolidation would be high. The fly ash would have to be removed, loaded on trucks, and transported to the landfill. In addition to transportation costs, licensed landfills near South Point, Ohio charge \$20-\$30 per ton of waste.⁸ While delivering the fly ash to a landfill would remove the material from The Point, it may prove to be cost-prohibitive. For the estimated 283,500 tons of fly ash located in the LEDC fly ash pond, it would cost approximately \$8-\$9 million in transport and landfill fees. As an alternative, off-site disposal options for the fly ash could also include the purchase of additional land that could serve as a final burial destination for the fly ash.

The removal and relocation of the fly ash under each of the options described above would remove the area's accessibility limitations and need for institutional controls. For example, if the fly ash were removed, the dikes could be taken out and the land could be prepared for reuse. The removal of the fly ash maximizes potential reuse outcomes.

⁷ Chris Bowman, Ohio EPA. Telephone contact, 10/02/02.

⁸ Billy Price, Southern Excavating Company. Telephone contact, 10/02/02.

Figure 2.1: Reuse Scenario A – Structures on the Northern Fly Ash Ponds

One option for the reuse of the Northern Fly Ash Pond located on LEDC's property is the placement of structures. This reuse option is dependent upon the removal and/or remixing of the fly ash with other soil suitable for construction.



Figure 2.2 provides an aerial view of this reuse option and illustrates how the placement of structures could coincide with a thickening of the riparian edge along Solida Creek to both serve as a wildlife movement corridor and pedestrian greenway with trails leading to the Ohio River.

Figure 2.2: Reuse Scenario A – Structures on the Northern Fly Ash Ponds



Figure 3.1: Reuse Scenario B – Parking Facilities on the Northern Fly Ash Ponds

A second option for the reuse of the fly ash pond located on LEDC's property is to provide parking facilities at The Point. This option would require that the fly ash is either removed and replaced with clean fill material or capped and covered by pavement. The pitching of the parking surface and use of vegetation along the edge of the parking facilities would serve to filter surface water prior to drainage into Solida Creek.

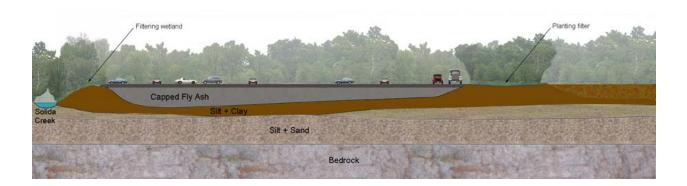


Figure 3.2 provides an aerial view of this reuse option and illustrates how the development of parking facilities could coincide with a thickening of the riparian edge along Solida Creek to both serve as a wildlife movement corridor and pedestrian greenway with trails leading to the Ohio River.

Figure 3.2: Reuse Scenario B – Parking Facilities on the Northern Fly Ash Ponds



Figure 4.1: Reuse Scenario C – Constructed Wetland on the Northern Fly Ash Ponds

A third option for the reuse of the fly ash pond located on LEDC's property is to develop a constructed wetland that would filter surface water and runoff at The Point prior to its movement into Solida Creek and the Ohio River. This option would require that the fly ash material is excavated and sold, disposed of, or reused as construction material on-site or elsewhere. The area of excavation would then be planted with wetland species. Additionally, the property's contaminated ground water, currently removed from the property and poured into the Ohio River, could be rerouted into the constructed wetland for initial filtration and cleaning prior to its transport to the river.

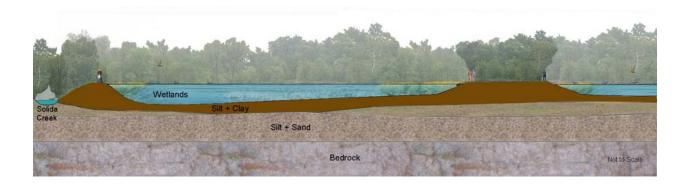


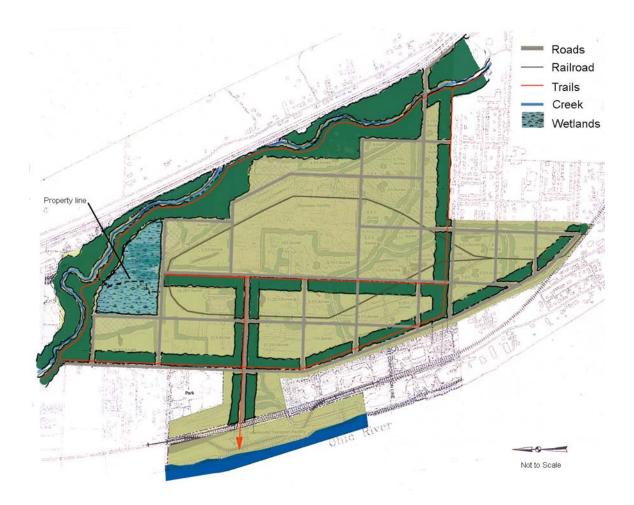
Figure 4.2 provides an aerial view of this reuse option and illustrates how this reuse option could coincide with a thickening of the riparian edge along Solida Creek to both serve as a wildlife movement corridor and pedestrian greenway with trails leading to the Ohio River.

Figure 4.2: Reuse Scenario C – Constructed Wetland on the Northern Fly Ash Ponds



Figure 5: Reuse Scenario D – Expanded Wetland and Trail System

Figure 5 extends Reuse Scenario C's ecological emphasis to the entire property, illustrating how parcels of land at The Point could be laid out to connect a constructed trail system and wetland with adjacent properties and neighborhoods. Within this option, parcels of land at The Point are delineated to maximize road and trail access within the industrial park and connections to adjacent properties, allowing the outside community to move through the industrial park to access the greenway trail along Solida Creek as well as trails to the Ohio River.



Option 2: Stabilization

Stabilization of the fly ash pond would leave the fly ash in place and address the stabilization of the pond's surface. The fly ash could be mixed with stabilizers such as cement kiln dust, enabling construction of a parking lot on top of the pond. For this option to be effective, roads would need to be built that provide direct access to the parking lot. In addition, ramps to the property surface would need to be built to accommodate the dikes, which must stay in place while the fly ash is present. Current vegetation would also have to be removed, and institutional controls might need to be modified to indicate that surface stabilization eliminated the need for vegetative cover. For a parking lot to function effectively in this area, structures would need to be placed nearby. Given the effective placement of structures and direct road access, this option could prove to be cost-effective and enable the area's reuse as a parking facility.

Option 3: No Modification

The third possible approach to the reuse of the Northern Fly Ash Ponds would be to leave the unmodified fly ash in the ponds. The ponds are covered with varying amounts of vegetation; the heaviest vegetation is located on the LEDC-owned pond. This vegetation helps to prevent dust circulation, and as long as the fly ash remains undisturbed, leaving the ponds in their current state will not negatively impact site safety. The primary reuse opportunities under this option would revolve around recreational activities that could provide an amenity for employees at The Point. Trails for running or walking, for example, could potentially be created on the ponds. Trails would require the addition of a layer of soil to cover the fly ash, and existing vegetation would need to be maintained or improved to facilitate this reuse. The deed restrictions on the property restrict explicit recreational uses, but the provision of walking trails for employees at the industrial park may be allowable. All parties, including LEDC, EPA, Ohio EPA, Ashland, Inc., and Honeywell, Inc. would need to work together to ensure the feasibility of this reuse.

Figure 6 shows the reuse opportunities provided by the three approach options described above.

	Reuse Opportunities		
	Structures / Wetlands	Parking Facilities	Recreational Activities
Fly Ash Options			
Option 1: Removal	1	\checkmark	 ✓
<i>Option 2:</i> Stabilization		\checkmark	
<i>Option 3:</i> No Modification			 ✓

Figure 6: Reuse Opportunities at the Northern Fly Ash Ponds, by Approach

Reuse Options at the Biomass, Inc.-Owned Property

The reuse options described above, based on the removal, stabilization, or maintenance of the LEDC-owned fly ash pond, also apply to the fly ash pond owned by Biomass, Inc. However, because the depth and volume of fly ash in this pond are substantially greater, the costs associated with its removal could prove prohibitive. Because of the greater depth and volume of the fly ash – up to 30 feet deep, approximately 968,000 cubic yards – vegetation on the pond is less extensive, so the area is less suited for recreational reuses like walking paths. The most likely use for this area would be to serve as a repository for fly ash from the LEDC pond. Following consolidation of the fly ash in this area, it would be possible to add a layer of soil over the fly ash and plant the area with attractive vegetation. The area could then serve as a landscaped field or as an area for walking paths, if the surface were sufficiently stable and safe. As stated above, the property's deed restriction may need to be modified for any planned recreational reuse in this area.

Reuse Conclusions

Both the Eastern Disposal Area and the Northern Fly Ash Ponds offer significant reuse opportunities, although there are several challenges that need to be addressed. The Eastern Disposal Area's northern and southern sections offer different reuse challenges and opportunities. Reuse of the area's northern section is limited only by the site's deed restriction and steep terrain, although incorporation of the property owned by Biomass, Inc. would increase the size of the area that could be reused. The northern section could be used for structures, parking facilities, roadways, open space, or as a recreational area.

The area's southern section, however, has an engineered cap over contained wastes, and must remain fenced and off-limits to human activities for at least 30 years. This section is restricted not only by the property's deed restriction, but also by the institutional controls, including site fencing, and the physical limitations imposed by the cap. A portion of the cap is also located on a steep slope that descends to Solida Creek and must remain protected from possible trespassing or erosion. The southern section of the Eastern Disposal Area may be available for reuse in the future as open space or for passive recreational opportunities like walking paths or picnic benches, if the area's institutional controls could be modified to allow these uses without damaging the integrity of the site remedy.

The Northern Fly Ash Ponds can be addressed using three different approaches – removal, stabilization, or maintenance – that in turn determine the reuse opportunities that are available. Estimated removal costs if the fly ash is consolidated elsewhere on-site are approximately \$1-\$1.5 million, while removal and internment of the fly ash in a landfill would cost approximately \$8-\$9 million. Removal of the fly ash would permit the largest number of possible reuses, including structures, while the second, lower-cost stabilization approach could permit parking facilities and recreational activities to be located on the fly ash pond. Maintenance of the pond area could provide recreational reuse opportunities. All three of these approaches would have to address the same technical and physical obstacles to varying degrees, including the property's deed restriction and institutional controls, the area's accessibility, and the characteristics of the fly ash. Addressing these obstacles may take time, dedication, and financial resources, but the Northern Fly Ash Ponds do offer a range of significant reuse opportunities, including additional acreage for development or on-site recreational amenities, for The Point.

Part V: Potential Resources

Private Sector Resources

LEDC has successfully obtained state and federal grants from a range of sources. E^2 Inc. has identified an additional private sector resource – the non-profit Ohio Community Development Finance Fund (CDFF) – as well as several additional federal resources to augment these efforts. The CDFF, described below, provides funding for the construction and rehabilitation of commercial and industrial sites and funding for the upfront costs associated with new development projects. Additional federal resources are described in the following section.

Ohio Community Development Finance Fund

The Ohio Community Development Finance Fund (CDFF) is a private nonprofit organization that mobilizes public and private funding sources to facilitate a diverse range of community and economic development projects. CDFF finances non-profit community improvement groups in Ohio that oversee residential, commercial, and industrial projects. CDFF could be a relevant resource for LEDC, as it has partnered with similar organizations in Ohio to stimulate economic growth.

Grant-seekers must be CDFF members to be eligible for funding. Annual membership dues range from \$50-\$250, depending on the type of organization. CDFF members include: the Cincinnati

Quick Facts

Ohio Community Development Finance Fund (CDFF)

42 East Gay Street Suite 1000 Columbus, OH 43215 (T): 614.221.1114 (F): 614.221.7493

Primary Contacts:

Judy Hill, jhill@financefund.org, ext. 14 Carol Carter, <u>ccarter@financefund.org</u>, ext. 15 Nicole Bowen, <u>nbowen@financefund.org</u>, ext. 16

CDFF Website: http://www.financefund.org

Development Fund, Columbus Urban Development Corporation, Community Improvement Corporation, Corporation for Ohio Appalachian Development, Northeast Shores Development Corporation, Old North Dayton Development Corporation, and South Lorain Community Development Corporation. CDFF members also include banks and non-profit development corporations. Membership in CDFF would provide LEDC with access to CDFF funds and offer opportunities for LEDC to partner with CDFF-member organizations.

Grants

CDFF administers two grant programs that may meet LEDC's requirements.

Economic Development Grant

CDFF's Economic Development Grant provides funding for the construction and rehabilitation of residential, commercial, or industrial sites. The funding may be used for projects that create jobs for economically depressed regions or for projects that help to establish for-profit ventures and businesses. The maximum amount awarded to organizations for this grant is \$100,000. Programs funded by the Economic Development Grant must target low-income people. CDFF defines low-income as 80% of area median income.

Pre-Development Grant

CDFF's Pre-Development Grant provides funding to cover the "soft" upfront costs associated with new development projects. These costs are defined as any cost that does not generate a material result. The costs could include such expenditures as attorney fees, consultant fees, and engineering/architectural fees. The grant's maximum award to any one project and organization is \$12,000 and the grant must be matched by a 20% local contribution.

Grant Application Process

The CDFF requires that grant seekers follow a multiple-step application process. First, the grantseeker must fill out a preliminary application on CDFF's website or contact CDFF personnel. CDFF personnel review the application and decide whether or not the grant-seeking organization and its projects are eligible for CDFF funds.

If the grant-seekers and the project for which they need assistance are eligible for CDFF funding, the grant-seeking organization will be invited to submit a full application. The full application provides CDFF with comprehensive information about the applicant's project proposal, which is reviewed by CDFF's Board of Trustees.

The Board of Trustees selects several of these applications for further review and invites potential grantees to give a formal presentation about their organizations and project proposals. The Board of Trustees determines the final grant recipients following the presentations.

CDFF Board of Trustees

Fifteen people sit on the CDFF Board of Trustees and the majority of the Trustees are representatives from CDFF-member organizations. The remaining members are selected from outside institutions, including corporations, philanthropic organizations, and religious organizations. Board members are elected by member organizations at CDFF's annual meeting.

E² Inc. Resource Findings

Our research indicates that CDFF membership could provide LEDC will two substantial benefits. LEDC could apply for CDFF grant funding through one of the two grant programs discussed above. CDFF membership could also serve as a powerful networking and partnership resource, linking LEDC with development corporations and banks throughout Ohio.

Federal Resources

U.S. Department of Agriculture (USDA) Rural Community Development Programs

Two USDA programs – the Rural Community Development Initiative and the Rural Business Opportunity Grants program – may be able to provide LEDC with funding for technical assistance, economic planning, and training. The information below about each of the programs is from FY 2002 and may change in FY 2003, when both programs are renewed.

Rural Community Development Initiative (RCDI)

The Initiative provides technical assistance to recipients to develop or increase their capacity to undertake projects in the areas of housing, **Quick Facts**

USDA Rural Community Development Programs

Rural Housing Service National Office Room 5037, South Building 14th Street and Independence Avenue, S.W. Washington, D.C. 20250

Primary Contacts:

USDA Ohio Office David Douglas Community Programs Director (T): 614.255.2391

James Cogan Business Programs Director (T): 614.255.2420

RCDI Website: http://www.rurdev.usda.gov/rhs/rcdi

RBOG Website: <u>http://www.rurdev.usda.gov/rbs/busp/rbog.htm</u>

community facilities, and community and economic development in rural areas. The RCDI grant, which has a matching funds requirement, is made to an intermediary. The intermediary provides a program of technical assistance to recipients to build their capacity and ability to undertake projects related to housing, community facilities, and community and economic development in rural areas. The intermediary can be a private or public sector organization that has been organized for a minimum of three years. The minimum and maximum grant amount per intermediary is \$50,000 and \$1 million.

Eligibility

RCDI grant recipients can be nonprofit organizations, low-income communities, and federally recognized tribes, based on the definitions in the Notice of Funds Availability (NOFA). Since Lawrence County does not qualify as a low-income community, defined as communities where the median household income is 80% of the state or national average, LEDC could serve as the intermediary and work with a recognized local nonprofit organization. The Initiative also stipulates that grant recipients must be located in a rural area, defined as a city, town, or unincorporated area that has a population of 50,000 inhabitants or less. LEDC meets this criterion. Finally, matching funds must be provided in the form of cash or confirmed funding commitments and be at least equal to the RCID grant amount. In-kind contributions cannot be used as matching funds.

Grant Application Process

USDA will list procedures and qualifications for the FY 2003 RCDI grants on the Agency's website by February 2003. Once the grant application is filed, USDA does not require any additional filings or interviews. USDA notifies RCDI grant recipients directly.

Rural Business Opportunity Grants (RBOGs)

USDA's Rural Business Opportunity Grants (RBOGs) promote sustainable economic development in rural communities with exceptional needs. The grants are intended to assist with the costs of providing economic planning for rural communities, technical assistance for rural businesses, or training for rural entrepreneurs or economic development officials. Average grant awards are \$50,000, with a statutory limit of \$1.5 million.

Eligibility

To be eligible for a Rural Business Opportunity Grant, applicants must be a public body, nonprofit corporation, Indian tribe, or cooperative with members that are primarily rural residents. Applicants must have significant expertise in the activities they propose to carry out with the grant funds and financial strength to ensure they can accomplish the objectives of the proposed grant. They must be able to show that the funding will result in economic development of a rural area (any area of a State that is not within the boundaries of a city with a population in excess of 10,000 inhabitants). The project must include a basis for determining the success or failure of the project and assessing its impact.

Grant Application Process

Projects eligible for RBOG funding compete based on established grant selection criteria. Priority points are awarded to those projects that best meet these criteria and are ranked from the highest to the lowest scoring. The criteria include the sustainability and quality of the economic activity expected; the amount of leveraging of other funds; economic conditions in the service area, and the project's usefulness as a new best practice. Applications are funded up to the maximum dollars that are available in any given funding cycle.

To apply for RBOG funding, LEDC would file an application with the Ohio Rural Development State Office in Columbus, Ohio. To request an application, LEDC would have to contact the State Office and request a copy of the program regulation (4284-G) and refer to the application section.

E² Inc. Resource Findings

USDA's RCDI and RBOG grant programs may be able to provide LEDC directly with funds for technical assistance, economic planning, and training, or enable LEDC to work with other local organizations to coordinate the funding. Grant limitations include the size of the average grant amounts and the RCDI program's matching funds requirement. These grant programs may be relevant to LEDC both in the short-term, as tenants locate at The Point, and over the long-term, as LEDC requires additional funding sources.

U.S. Department of Transportation Rail Road Rehabilitation and Improvement Financing (RRIF) Program

The RRIF program, administered by the Federal Railroad Administration (FRA), a branch of the U.S. Department of Transportation, provides loans or loan guarantees for the:

- acquisition, improvement, or rehabilitation of intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops;
- refinancing of outstanding debt incurred for the purposes listed above; and

Quick Facts

Railroad Rehabilitation and Improvement Financing Program

Administered by: U.S. Department of Transportation Federal Railroad Administration

FRA Office of Public Affairs: (T): 202.493.6024 (F): 202.493.6013

Primary Contact:

Program Director Joanne McGowan (T): 202.493.6390

RRIF Website: <u>http://www.fra.dot.gov/rdv/finance/rrif.htm</u>

• development or establishment of new intermodal or railroad facilities.

The program currently has \$3.5 billion available for loan funding.

Eligibility

Eligible borrowers include railroads, state and local governments, government-sponsored authorities and corporations, and joint ventures that include at least one railroad. Program Manager Joanne McGowan confirmed that LEDC would qualify as an eligible borrower. The program requires detailed project proposal information and confirmation of sufficient collateral.

The RRIF program also features a Credit Risk Premium (CRP) in lieu of an appropriation equivalent to the federal government's estimated cost of making the direct loan or loan guarantee. Successful applicants will be required to cover 5-10% of the loan amount upon disbursement, depending on the project's assessed value and viability.

Grant Application Process

The RRIF program has an open application process – there are no set deadlines. Processing time currently takes 6-9 months. The RRIF program application requires that applicants provide the following information:

- The amount of the request and description of the technical aspects of the project, including a map;
- A description of the economic impact of the project and any related feasibility or market studies;
- A description of how the project will enhance safety and the environment; how it will promote economic development and US competitiveness; how it will preserve rail or enhance intermodal service to small communities and rural areas; and, whether it is included in their State's transportation plan;
- A description of the amount and type of collateral to be offered as security;
- A current balance sheet and income statement; financial statements; projected revenues; the assumptions on which the projections are based and the basis for the assumptions; and
- Information regarding potential environmental impacts of the project.

Applicants can also schedule a pre-application meeting with program staff to discuss their project proposal. The pre-application meeting also provides program staff with an opportunity to develop an initial estimate of the Credit Risk Premium that the applicant would need to cover following loan disbursement.

E² Inc. Resource Findings

The U.S. Department of Transportation's RRIF program is relatively new and has only funded two projects: Amtrak and the Mount Hood Railroad. The program's recent creation, combined with its \$3.5 billion in available funding, means the program could provide a unique opportunity for LEDC to be able to renovate, replace, or remove the rail facilities located on-site. The program could also fund new rail-related opportunities at The Point, including new rail spur lines or rail access to the Ohio River.

U.S. Department of Commerce Economic Development Administration (EDA) Programs

EDA offers several programs, in addition to its Public Works program, that may be able to provide LEDC with additional grant funding, loan funding, and economic development assistance. The three programs described below would likely require that LEDC work with the Village of South Point, Lawrence County, and the state EDA in order to access federal EDA resources.

EDA was established in 1965 to help localities generate jobs, retain existing jobs, and stimulate industrial, technological, and commercial growth in economically-distressed areas of the

Quick Facts U.S. Department of Commerce EDA Programs U.S. Department of Commerce Chicago Region 111 North Canal St. Suite 855 Chicago, IL 60606-7204 (T): 312.353.8143 (F): 312.353.8575 Primary Contact: C. Robert Sawyer rsawyer@doc.gov EDA Website: http://www.osec.doc.gov/eda

United States. EDA assistance is available to rural and urban areas of the nation experiencing high unemployment, low income, or other severe economic distress.

Economic Adjustment Program

EDA's Economic Adjustment Program assists state and local interests with the design and implementation of strategies to enhance local and regional economic opportunities. The program focuses on areas that have experienced or are under threat of serious structural damage to the underlying economic base. The program supports three types of grant activities: strategic planning, project implementation, and revolving loan funds. Strategy grants help organize and carry out a planning process resulting in a Comprehensive Economic Development Strategy (CEDS) tailored to the community's specific economic problems and opportunities.

Implementation grants support one or more activities identified in an EDA-approved CEDS. Activities may include the creation of strategically targeted business development and financing programs such as construction of infrastructure improvements, organizational development, and market or industry research and analysis. Revolving Loan Fund (RLF) grants may also be used to implement a CEDS.

LEDC could work with the Village of South Point and Lawrence County to access the grants provided by EDA's Economic Adjustment Program or, in the case of financing programs like a revolving loan fund, apply directly for assistance. EDA determines whether areas qualify as economically distressed during a pre-application process.

Research and National Technical Assistance Program

The Research and Technical Assistance Program provides information dissemination grants to help make critical information about economic development programs, projects, and emerging issues available to practitioners through different means, such as targeted newsletters, websites, and conferences. Research grants examine in depth important existing and emerging issues in economic development, and document the results for practitioners and policy makers. Evaluation grants systematically assess the economic impact of funding under EDA's programs to measure each program's effectiveness.

LEDC could work with the Village of South Point and Lawrence County to access the program's research grants. These grants could provide the funding to undertake detailed economic analyses of local market conditions and opportunities. However, the program does target different types of projects each year – check the program proposal guidelines that will be published by EDA in May 2003. Last year, for example, EDA solicited program proposals that focused on the role of institutions of higher learning in local and regional economic development and the ways that faith-based and community organizations can assist economic development efforts. To review last year's program guidelines, please refer to: http://www.access.gpo.gov/su_docs/index.html.

Partnership Planning Grants

EDA's Partnership Planning Grants provide support for the formulation and implementation of local economic development programs as well as strategies designed to create and retain permanent jobs and increase income for the unemployed and underemployed in areas of economic distress. Grants are intended to enhance economic development planning capability, support the formulation of development policies, and assist in building local institutional capacity.

Activities that are eligible for Partnership Planning Grants include: the preparation and maintenance of a Comprehensive Economic Development Strategy (CEDS) process, strategy

implementation, and the provision of planning and technical assistance to communities and local governments within the organization's jurisdiction. LEDC could work with the Village of South Point and Lawrence County to access EDA's Partnership Planning Grants. Grant guidelines will be published by EDA in May 2003 – grant awards range from \$10,000 to \$200,000.

Grant Application Process

To apply for each of the three programs described above, LEDC would work with EDA's regional office in Chicago. Program regulations and criteria vary, but LEDC does qualify as an eligible applicant for each program as "a public or private nonprofit organization or association acting in cooperation with officials of a political subdivision of a State." EDA will publish updated program regulations and criteria in May 2003.

U.S. Department of the Treasury Community Development Financial Institutions (CDFI) Fund

The Community Development Financial Institutions (CDFI) Fund was created to expand the availability of credit, investment capital, and financial services in distressed urban and rural communities. By stimulating the creation and expansion of diverse community development financial institutions and by providing incentives to traditional banks, the Fund's investments work toward building private markets, creating healthy local tax revenues, and empowering residents.

Quick Facts

Community Development Financial Institutions Fund

U.S. Department of the Treasury 601 13th Street NW Suite 200 South Washington, DC 20005 (T): 202.622.8662 (F): 202.622.7754

Primary Contact: CDFI Help Desk: <u>cdfihelp@cdfi.treas.gov</u>

CDFI Fund Website: http://www.cdfifund.gov/

The CDFI Fund provides relatively small infusions of capital to institutions that serve distressed communities and low-income individuals. The Fund's activities leverage private-sector investments from banks, foundations, and other funding sources. While LEDC would not qualify for CDFI funding directly, for reasons described below, LEDC could work with eligible local lenders and institutions to access CDFI funding resources.

The U.S. Department of the Treasury provides the following definition of a community development financial institution: "Community development financial institutions (CDFIs) are specialized financial institutions that work in market niches that have not been adequately served by traditional financial institutions. CDFIs provide a range of financial products and services,

including mortgage financing for first-time home-buyers, financing for needed community facilities, commercial loans and investments to start or expand small businesses, loans to rehabilitate rental housing, and financial services needed by low-income households and local businesses. In addition, these institutions provide services that help ensure that credit is used effectively, such as technical assistance to small businesses and credit counseling to consumers. CDFIs include community development banks, credit unions, loan funds, venture capital funds, and microenterprise loan funds, among others."

The CDFI Fund operates several programs. Programs identified as being particularly relevant to LEDC and its efforts to develop The Point are listed below.

Bank Enterprise Awards Program

The Bank Enterprise Awards Program complements the community reinvestment activities of banks by providing monetary incentives to expand investments in CDFIs and to increase lending, investment, and service activities within severely distressed communities. Providing monetary awards for increasing community reinvestment activities leverage the Fund's dollars and puts more capital to work in distressed communities throughout the nation.

Core & Intermediary Program

The Core & Intermediary Program provides financial and technical assistance, in annual funding rounds, to legally existing organizations. Core applicants must be certified CDFIs or demonstrate the ability to become a certified CDFI for the purpose of creating community development impact, in markets that are economically distressed, through the provision of capital and financial services. CDFI Intermediary applicants target financial products and services to other CDFIs or emerging CDFIs.

New Markets Tax Credit Program

The New Markets Tax Credit Program permits taxpayers to receive a credit against federal income taxes for making qualified equity investments in designated Community Development Entities (CDEs). The qualified equity investment must in turn be used by the CDE to provide investments in low-income communities. The credit provided to the investor totals 39% of the cost of the investment and is claimed over a seven-year credit allowance period. In each of the first three years, the investor receives a credit equal to five percent of the total amount paid for the stock or capital interest at the time of purchase. For the final four years, the value of the credit is six percent annually. Investors may not redeem their investments in CDEs prior to the conclusion of the seven-year period.

E² Inc. Resource Findings

While LEDC would not qualify directly for the CDFI programs described above, the Fund's Bank Enterprise Awards Program could provide incentives to local and regional banks to invest in community development activities on LEDC's behalf. The Core & Intermediary Program could provide funding to CDFIs wishing to assist in the development of The Point. Finally, the New Markets Tax Credit Program could encourage local institutions and individuals to invest in LEDC and its redevelopment operations.

Part VI: Report Summary and Recommendations

Report Summary

Existing tenants' perspectives on The Point:

- The interviews with representatives from M&M Services and Ohio University Southern provide an initial indication that The Point's location and available economic incentives will serve to attract prospective tenants.
- The property's status as part of the South Point Plant NPL site was either not a concern or the concern was addressed by EPA's Preliminary Closeout Report. Future tenants at The Point may require additional information and place greater emphasis on the status of the site. Neither of the two existing clients, for example, needed to work with lenders or located their operations in areas that were formerly contaminated.

Area banks' perspectives on The Point:

- The representatives from each of the three banks interviewed indicated that the banks are wary of financing opportunities at environmentally impaired properties. However, the interviews also indicate that the banks are increasingly aware of the redevelopment opportunities provided by these properties and the additional tools that are available to remove their liability and risk exposure concerns. All three of the banks interviewed were interested in the financing opportunities available at The Point.
- The banks shared three similar general concerns about environmentally impaired properties: the need for sufficient, accurate information, the need for this information to be available for entire properties, and the need for this information to address a property's current limitations, availability for reuse, and marketability in a clear, non-technical manner.

Property deed restriction and restrictive covenants:

- Ashland, Inc. and Honeywell, Inc. will require the maintenance of the property's deed restriction and restrictive covenants into the foreseeable future, but the companies also indicated their willingness to work with LEDC to address concerns and facilitate reuse opportunities at The Point. Possible areas for clarification include whether recreational reuses could be permitted on the property and whether the site's groundwater could be used for process purposes (like equipment cooling) or other specific, non-potable uses.
- If LEDC decides to seek clarification or modification of the property's deed restriction and restrictive covenants, LEDC would need to file a request with both Ashland, Inc. and Honeywell, Inc. The process would take approximately 1-3 months.

EPA pilot Ready for Reuse Determination (RfR):

- A pilot Ready for Reuse Determination (RfR) is a decision by EPA, in conjunction with States and Tribes, that a parcel of land is safe for specified uses. The process takes into account EPA and non-EPA documents to evaluate the reuse status for National Priorities List (NPL) sites. This evaluation will result in a stand-alone, formal EPA cover sheet and an accompanying report describing the site's availability for reuse. The cover sheet communicates to the public EPA's knowledge of a site's reuse potential. The type of reuse safely supported by the site will fall into one of six categories: residential, commercial/industrial, ecological, recreational, governmental, and agricultural. E² Inc. is working with EPA Region V to develop a Ready for Reuse Determination for the South Point Plant NPL site.
- The banks interviewed indicated that an EPA pilot Ready for Reuse Determination could directly address their concerns about financing opportunities at environmentally impaired properties. The banks indicated that the process could, on a case-by-case basis, potentially fulfill their requirements for Phase I and Phase II assessments, providing the banks with access to comprehensive site information for Superfund sites. An RfR's designation of the types of reuse safely supported by a site directly addresses the banks' need for information that describes a site's limitations, marketability, and availability for reuse.

Reuse opportunities at The Point:

• Two currently unavailable areas within The Point – the Eastern Disposal Area and the Northern Fly Ash Ponds – offer significant reuse opportunities, although there are technical and physical challenges that need to be addressed. The Eastern Disposal Area and the Northern Fly Ash Ponds could provide space for additional building sites, parking areas for adjacent buildings, recreational areas for employees at The Point, natural buffer areas, or attractive open areas of vegetation.

- Reuse of the Eastern Disposal Area's northern section is limited only by the site's deed restriction and steep terrain, although incorporation of the property owned by Biomass, Inc. would increase the size of the area that could be reused. The northern section could be used for structures, parking facilities, roadways, open space, or as a recreational area.
- The Eastern Disposal Area's southern section has an engineered cap over contained wastes and must remain fenced and off-limits to human activities for at least 30 years. This section is restricted not only by the property's deed restriction, but also by the institutional controls, including site fencing, and the physical limitations imposed by the cap. The southern section of the Eastern Disposal Area may be available for reuse in the future as open space or for passive recreational opportunities, if the area's institutional controls could be modified to allow these uses without damaging the integrity of the site remedy.
- The Northern Fly Ash Ponds can be addressed using three different approaches removal, stabilization, or maintenance that in turn determine the reuse opportunities that are available.
- Estimated removal costs if the fly ash is consolidated elsewhere on-site are approximately \$1-\$1.5 million, while removal and internment of the fly ash in a landfill would cost approximately \$8-\$9 million. Removal of the fly ash would permit the largest number of possible reuses, including structures, while the second, lower-cost stabilization approach could permit parking facilities to be located on the fly ash pond.

Additional LEDC Resources:

- The Ohio Community Development Finance Fund (CDFF) is a private non-profit organization that mobilizes both public and private funding sources to facilitate a diverse range of community and economic development projects.
- CDFF membership could provide LEDC with two substantial benefits. LEDC could apply for CDFF grant funding through one of CDFF's two grant programs. CDFF membership could also serve as a powerful networking and partnership resource, linking LEDC with development corporations and banks throughout Ohio.
- Additional federal resources include USDA's Rural Communities Initiative, the U.S. Department of Transportation's Railroad Rehabilitation and Improvement Financing program, several programs offered by the U.S. Commerce Department's Economic Development Administration, and the U.S. Treasury Department's Community Development Financial Institution program. Some of these programs could offer funding, technical assistance, and economic development assistance directly to LEDC, while other programs would require that LEDC partner with local lenders or local and regional governmental bodies.

E² Inc. Recommendations

 E^2 Inc. recommends an iterative three-stage approach to enhancing reuse opportunities at The Point. In the first stage, LEDC can confirm and prioritize its short- and long-term goals for the entire property. For example, how important is it that the property's ground water be available for non-potable uses? Would LEDC like to pursue the reuse of the Eastern Disposal Area or the Northern Fly Ash Ponds? This decision-making process includes the selection of appropriate criteria to guide the Corporation's conclusions and priorities. Possible criteria could include: project costs, project timeframes, community impact of a project, a project's effect on future property uses, and a project's location on the property.

In the second stage, following LEDC's prioritization of its short- and long-term goals for the entire property, E^2 Inc. recommends that the Corporation move out in six ways to pursue and enhance reuse opportunities at The Point.

- First, LEDC can work with Ashland, Inc. and Honeywell, Inc. to clarify the site's deed restriction and restrictive covenants. Based on LEDC's prioritized goals for the property, the clarifications could include the use of the property's ground water for non-potable uses or the possibility of supporting passive recreational uses at The Point. The use of the site's ground water for non-potable uses could provide a substantial benefit to site tenants, as the water could be accessed for process purposes (like equipment cooling) or other specific industrial uses.
- Second, LEDC can clarify whether its relationship with Biomass, Inc. could include a working partnership, property acquisition, or some other connection that would enable LEDC to expand reuse opportunities at The Point.
- Third, LEDC can continue to work with E² Inc., Ohio EPA, and U.S. EPA to develop a Ready for Reuse Determination (RfR) for the South Point Plant NPL site. This pilot EPA process will designate The Point as being available for industrial reuse. This assessment will result in a stand-alone, formal EPA cover sheet and an accompanying report describing the site's availability for reuse, directly addressing the concerns of prospective purchasers and lenders.
- Fourth, LEDC can develop reuse plans for the Eastern Disposal Area and the Northern Fly Ash Ponds. Depending on LEDC's priorities and cost considerations, the two areas could provide space for additional building sites, parking areas for adjacent buildings, recreational areas for employees at The Point, natural buffer areas, or attractive open areas of vegetation.
- Fifth, the reuse opportunities at the Eastern Disposal Area and the Northern Fly Ash Ponds provide an opportunity for LEDC to educate the local community about the status of The Point and incorporate their input throughout the property's redevelopment.

• Sixth, LEDC can sustain its existing funding base by becoming a member of the Ohio Community Development Finance Fund (CDFF). LEDC should also attempt to maintain its existing marketing approach, providing strong general incentives for prospective purchasers that include the property's location and available economic incentives, as well as providing unique features, like the provision of shell buildings, tailored to individual clients.

In the final stage of the approach, following LEDC's pursuit and enhancement of reuse opportunities at The Point, LEDC will need to evaluate and adapt its priorities and criteria over time, as the development of The Point progresses and new challenges and opportunities arise. Depending on the rate of change, this evaluation may need to take place once a year or even more frequently. Once the evaluation is complete, LEDC's updated priorities and criteria will need to be applied to the reuse-enhancing activities taking place at The Point.

Appendix A: Communications Materials

In addition to this report and the pilot Ready for Reuse Determination under development for the South Point Plant NPL site, E^2 Inc. has developed several resources to assist the Village of South Point and LEDC in their efforts to return the site to productive use. E^2 Inc. has developed a four-part toolkit of communications materials to address the safety and liability concerns associated with formerly contaminated sites.

The toolkit of communications materials in this Appendix include:

- The South Point Plant Superfund Site: History and Cleanup
- Tools to Address Liability
- EPA Comfort Letters and Ready for Reuse Determinations
- Environmental Insurance

The toolkit materials are designed to fit within LEDC's existing communications materials and are intended to address the potential liability concerns and informational needs of prospective purchasers and lenders interested in The Point. The materials will also help to ensure that the site remedy remains protective as The Point is developed.



Introduction

The Point industrial park in South Point, Ohio, is open and ready for business. The Point's location and size, as well as the availability of a wide range of tax incentives and existing infrastructure, mean that the industrial park can offer your company an unequaled set of services and capabilities. If your company is looking for new facilities or to consolidate existing operations, The Point represents a perfect opportunity.

This fact sheet is designed to provide your company or lending institution with specific information about The Point's history as part of the South Point Plant Superfund site. The fact sheet describes the history of industrial operations at the site, the contamination identified at the site, and the site's cleanup, which was completed in December 2001.

The fact sheet is intended to help your company or lending institution gain a more complete understanding of The Point's history and its journey from being part of a contaminated Superfund site to a clean property that is safe and available for a variety of industrial uses. All information contained in this fact sheet was gathered from EPA data and site reports.

The brief history of the South Point Plant Superfund site is simple. Industrial operations at the site generated waste byproducts that contaminated the site's ground water and portions of the site's soils. Most of the site was never contaminated. The parts of the site that were contaminated have been cleaned up under EPA oversight to industrial standards. Today, almost all of the site and The Point's acreage is available for industrial reuse. A detailed history of the site follows.

Site History

Operations at the site began in 1943, when Buckeye Munitions built the South Point Plant for the production of ammonium nitrate explosives for the federal government. Allied Chemical purchased the site in 1946 and produced ammonia, urea, nitrogen fertilizer solution, melamine, formaldehyde, and urea formaldehyde mixtures until 1978. Ashland Oil purchased the facility in 1979. Ashland demolished and removed many of the existing Plant's structures and constructed a coal-water fuel pilot plant and a pitch prilling test plant, which formed pitch into small pellets. Both the pilot plant and the test plant have been dismantled. In 1981, South Point Ethanol acquired an 80-acre tract in the middle of the former production area for ethanol production. In 1985, Cardox, a division of the Air Liquide Corporation, began leasing a portion of the South Point Ethanol



tract for liquid carbon dioxide production. South Point Ethanol ceased operation in August 1995. Air Liquide discontinued operation in January 1997.

From 1943 to the mid-1980s, site refuse, coal cinder, laboratory chemicals, asbestos insulation materials, waste lubrication oils, and by-product and off-specification solids (such as ammonium nitrate, urea, and melamine) were deposited in four areas (*see map on page 2*): the Eastern Disposal Area, Disposal Area D, the Melamine Ponds, and the Northern Fly Ash Ponds. The Melamine Ponds, which were located on the eastern edge of the Mid-Plant Area, were remediated in 1978 by Allied Chemical with the help of Ohio EPA; the off-specification solids were removed and disposed of in an off-site landfill. There were also two areas on the site where industrial manufacturing activities took place: the Mid-Plant Area and the Coke Oven Gas Blowdown Area

Four major releases occurred at the site between 1943 and 1979. In the mid-1950s, fertilizer stored in the Mid-Plant Area caught fire. The water used to extinguish the fire washed large quantities of fertilizer components onto the site grounds and into storm sewers. In 1971, a tank in the Mid-Plant Area ruptured, spilling 500,000 gallons of liquid ammonium nitrate, most of which entered a storm sewer that emptied into the Ohio River. In 1977, a portion of the Northern Fly Ash Ponds' northern dike failed, releasing fly ash into Solida Creek. In 1978, the Melamine Pond's eastern dike wall failed, releasing 100,000 gallons of water containing 1,600 pounds of ammonia nitrogen and 6,000 pounds of organic nitrogen into the Ohio River; an unknown quantity of the solution was discharged onto the site grounds.

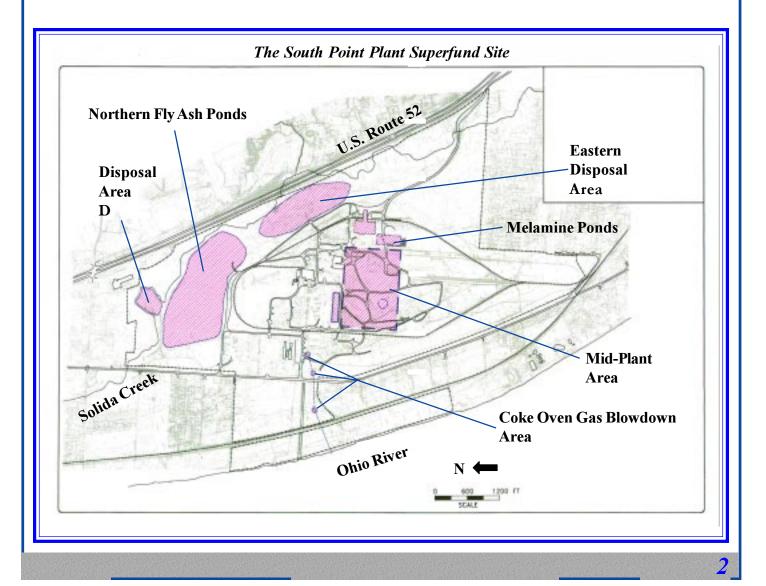


Contaminant Issues

The South Point Plant site was brought to the attention of EPA in June 1981 and the site was listed on the National Priorities List (NPL) in September 1984 due to soil and ground water contamination. EPA determined that the site's surface water and sediments were not contaminated. Sampling at the site indicated that there were five localized areas of soil contamination where waste materials were stored or industrial manufacturing activities took place. Sampling also indicated that the ground water underneath the site was contaminated. Contaminants found in the site's soils and ground water included volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), waste specific compounds (ammonia, nitrate/ nitrite, and sulfate), and metals (arsenic, barium, beryllium, cadmium, copper, and selenium).

Once contaminants were identified at the site and EPA determined that the contaminants did not pose an immediate threat to human health or the environment, the Agency conducted a Baseline Risk Assessment (BLRA). Included in the site's 1994 Remedial Investigation Report, the BLRA estimated the potential level of risk that the site would pose to human health and the environment if it was not cleaned up.

The BLRA evaluated potential risks to human health and the environment using two measures: Excess Lifetime Cancer Risks (ELCRs) and Hazard Indices (HIs). ELCRs describe whether exposure to carcinogenic (cancer-causing contaminants) at a site pose an unacceptable health risk to humans. ELCRs are expressed numerically, i.e., $1 \ge 10^{-4}$ or $1 \ge 10^{-6}$. Carcinogenic risk expressed as $1 \ge 10^{-4}$ means that one out of 10,000 people exposed to contamination over a 70-





year lifetime could potentially develop cancer as a result of the exposure. A carcinogenic risk of $1 \ge 10^{-6}$ means that one out of 1,000,000 people exposed over a 70-year lifetime could potentially develop cancer as a result of the exposure. The carcinogenic risk range established under CERCLA designates risks less than 10^{-4} to 10^{-6} as acceptable and protective of human health. Risks greater than this range indicate that the risks pose an unacceptable carcinogenic risk to human health.

Hazard Indices describe whether exposure to non-carcinogenic contaminants at a site poses an unacceptable health risk to humans. Each HI represents the ratio between the estimated exposure dose and a reference dose. An HI greater than one indicates that the estimated exposure dose for that contaminant exceeds acceptable levels for protection against non-carcinogenic health effects. An HI less than one indicates that the contaminants do not pose a risk to human health.

The cumulative risks indicated that the site's contaminants did not pose a lifetime carcinogenic risk to current and future exposed populations at the site. Within two exposure scenarios – an adult or child trespassing in the inactive area and any future resident of the site – the contaminants of concern did pose a potential non-carcinogenic risk greater than EPA's HI guidelines. The cumulative risk scenarios assumed that people could be exposed to contaminants by eating them (ingestion), breathing them (inhalation), or by absorbing them through the skin (dermal contact).

Remedial Strategies and Site Cleanup

Following assessment of the potential risks posed by the site, EPA selected a remedy for the site that addressed the site's soil and ground water contamination, requiring that the site be cleaned up to industrial reuse standards. EPA selected the site remedy, Remedial Alternative 5A, as part of the Agency's Record of Decision (ROD) for the site, published in September 1997. The site's cleanup began in May 2001 and was completed in December 2001. Cleanup activities included soil excavation and disposal, on-site containment and consolidation, and the continued pumping and discharge of the site's ground water into the Ohio River.

In order to safeguard the health of future users of the site, EPA also required institutional controls (ICs). The site's ICs required the fencing of the Eastern Disposal Area, surface controls for the Northern Fly Ash Ponds, and the imposition of a deed restriction on the site's properties that restricts the site's future uses to industrial activities. The deed restriction also prohibits the potable use of the site's ground water.

The Point Industrial Park: Contamination and Cleanup History

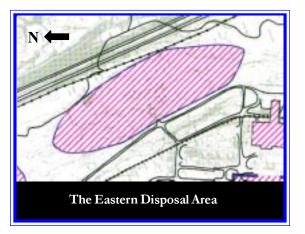
— 1943	South Point Plant built by Buckeye Munitions
— 1946	Property purchased by Allied Chemical
— 1946-1978	Fer tilizers and various chemicals produced on the property by Allied Chemical
— mid-1950s	Fer tilizer fire on the property
— 1971	Ammonium nitrate spill on the property
— 1977	R elease of fly ash into Solida Creek
— 1978	Failure of Melamine Ponds – contamination cleaned up by Allied Chemical, which is later purchased by Honeywell
— 1979	Property purchased by Ashland Oil
— 1981-1995	South Point Ethanol purchases an 80-acre portion of the property and operates ethanol production facilities
- 1984	EPA lists the site on the NPL
— 1985-1997	C ardox leases a portion of the property for liquid carbon dioxide production
— 1994	Completion of EPA's site Remedial Investigation Report
— May 2001	Cleanup of site contamination begins under EPA oversight – Honeywell pays for site cleanup costs, Ashland Oil manages the cleanup process
— Dec. 2001	Cleanup of site contamination completed

3



The five principal areas of soil contamination and the site's ground water contamination were cleaned up under EPA oversight. The site cleanup achieved EPA's remedial goals for soil contaminants. These five areas are discussed in greater detail below. The site's ground water contamination and cleanup are also described below. EPA's remedial goals for the site's ground water are long-term (approximately ten years) and have not yet been achieved.

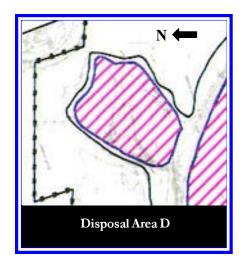
The **Eastern Disposal Area** is a 13-acre area on the eastern edge of the site, near US Route 52 and Solida Creek, which was in operation



from 1946 to 1965. It received site refuse and debris, coal cinders, and small quantities of laboratory chemicals. It may also have received asbestos insulation materials, ammonium nitrate, urea, melamine, and waste lubrication oils.

The contamination in this area was addressed by constructing a dual barrier cap to isolate the wastes. The cap covers the southern half of the Eastern Disposal Area, and forms a steep slope down to Solida Creek. Wastes from the northern half were excavated and moved to the southern half for inclusion under the cap. The cap consists of a geosynthetic clay liner, a flexible membrane liner, and a 30-inch layer of soil atop these to prevent frost damage. The remedy's impermeability to water serves to isolate the contaminants and prevent them from entering the groundwater via surface water percolation. The cap is to remain in place in perpetuity. To ensure the cap's continuing effectiveness, EPA will inspect it on a regular basis. The Eastern Disposal Area is fenced off in order to protect the cap from being damaged by trespassers.

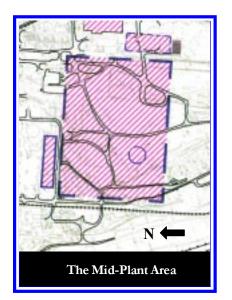
In order to maintain the integrity of the cap, no type of reuse is allowed in the capped area. The northern half of the Eastern Disposal Area, however, is available for industrial reuse.



Disposal Area D is a two-acre area on the northern edge of the site, to the northeast of the Northern Fly Ash Ponds. It is bordered on three sides by Solida Creek, and on the fourth by a dike. From the mid-1960s until 1977, this area received wastes similar to those found in the Eastern Disposal Area.

Disposal Area D was remediated by excavating the contaminated soil, which was consolidated and capped along with other on-site waste materials in the Eastern Disposal Area. Disposal Area D is available for industrial reuse, though obstacles to its reuse, such as steep terrain and limited accessibility, remain.

The **Mid-Plant Area** is located in the center of the site; all of the site's past industrial activities were centered in this area. The primary contaminant of concern in the Mid-Plant Area was arsenic.





The remediation of the Mid-Plant Area involved the excavation of arsenic-contaminated soils and a combination of on-site consolidation and off-site disposal of these soils. Soils with arsenic levels greater than 400 parts per million (ppm) were disposed of off-site at a disposal facility, soils with arsenic levels between 40 and 400 ppm were consolidated on-site under the Eastern Disposal Area's cap, and soils with arsenic levels less than 40 ppm were left in place.

The Mid-Plant Area has been cleaned up and is available for industrial reuse.

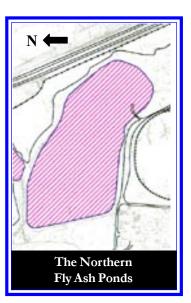
The **Northern Fly Ash Ponds** comprise 40 acres in the northeastern portion of the site, near Disposal Area D. This area began receiving fly ash and cinders from on-site coal-fired boilers in the mid-1950s.

EPA's selected remedy for the fly ash ponds are surface controls (slope stabilization, erosion control, and enhancement of existing vegetation). Four-foot tall dikes surrounding the area serve to contain the fly ash. The area is rendered inaccessible to cars and trucks due to trees growing on the dikes.

This area is available for industrial reuse, as fly ash is not considered a hazardous waste. However, the fly ash deposits will need to be

addressed and managed appropriately. The fly ash in the pond owned by the Lawrence Economic Development Corporation, ranges from zero to 15 feet deep. With its dust-like consistency, it is too unstable to provide an adequate surface for construction.

Several options exist for the disposal of fly ash. Fly ash can be mixed with cement to produce concrete used in roadbed construction. Fly ash can also be solidified by mixing the ash with cement dust; the fly ash can then be disposed of as solid waste.



Finally, fly ash can also be stabilized by mixing it with soil; the fly ash could then be placed back in the Northern Fly Ash Ponds and the areas could be used for parking or other low-impact surface uses.

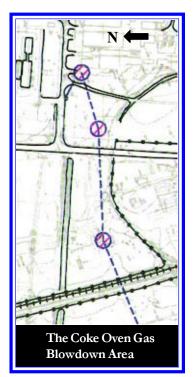
As long as the fly ash remains on-site, its handling and use are regulated by the site's institutional controls, which require that the fly ash remain stabilized. The main concern is that the fly ash not be handled in such a way as to create excessive dust. If taken off-site by truck or rail, the fly ash would be regulated by state transportation regulations, which stipulate that the fly ash must be adequately contained during transit.

The **Coke Oven Gas Blowdown Area** is on the western side of the site, northwest of the Mid-Plant Area. Coke oven gas from a coke facility was piped beneath the Ohio River to the site and used as a fuel. Several drip pots that were located along the gas line served to collect

coke oven gas condensate, mainly naphthalene. The primary contaminants of concern in this area were cyanide and carcinogenic polycyclic aromatic hydrocarbons (c-PAHs).

This area was remediated by excavating the soils contaminated with cyanide and c-PAHs in order to reduce the risks associated with dermal contact and ingestion. These soils were disposed of off-site. The area's coke oven drip pots were excavated and disposed of off-site. The area is now available for industrial reuse.

The site's **Ground Water**, and ground water from nearby wells, was sampled by EPA between 1989 and 1992. Analytical results indicated that



site's ground water quality has been affected by the Eastern Disposal Area, Disposal Area D, and the Mid-Plant Area. Cadmium and nitrate/ nitrite levels exceeded the national primary drinking water regulations, or maximum contaminant levels (MCLs), set by the EPA. Cadmium levels exceeded the MCL in background samples as well. Other constituents, primarily sulfates, iron, and manganese, exceeded national secondary drinking water standards, levels that EPA sets as guidelines but does not enforce. These constituents can cause corrosivity, staining, and objectionable color, odor, and taste. High levels of ammonia were also found in some of the ground water samples. Two areas of the site also have high levels of total dissolved solids and high specific conductance, two indicators of poor ground water quality. One area is centered on the northern part of the Northern Fly Ash Ponds immediately adjacent to Disposal Area D. The other area extends from the Eastern Disposal Area into the Mid-Plant



Area. These conditions are consistent with disposal activities and ground water flow patterns at the site.

The site's ground water is being pumped and discharged into the Ohio River at a rate of two to four million gallons per day. The site's primary ground water contaminants – ammonium, nitrates, and nitrites – are found at low levels in surface water. As long as these materials are diluted, they do not pose a risk to human health or the environment. Once pumped into the Ohio River, the contaminants will remain in the river until they are consumed by plants or other organisms, including bacteria. Mixing the site's contaminated ground water with water from the Ohio River provides a safe and inexpensive remedy.

Due to the pumping from the site's well fields, regional ground water flow is radial toward the center of the site. This flow serves to prevent contaminated ground water from flowing out of the site's boundaries and into adjacent municipal well fields. This containment system will continue to operate until the contaminants in the site's ground water have dropped to acceptable health-based levels; EPA estimates that this process will take ten years. Water for companies at The Point will be provided from municipal sources.

Current Site Status

The cleanup of the South Point Plant Superfund site's soils was completed in December 2001. The most heavily contaminated soils were excavated and disposed of off-site in approved landfills. All other soils that EPA determined to pose an unacceptable health risk were included under the dual barrier solid waste cap constructed over a portion of the Eastern Disposal Area. This cap serves to isolate the contamination and keeps it from entering groundwater via surface water percolation. The capped area is fenced and EPA will conduct regular inspections to ensure the cap's continuing effectiveness.

The site's ground water is not yet safe to drink. The site's wells will continue pumping the ground water and discharging it into the Ohio River, where it is diluted, until the site's ground water meets health-based standards. This pumping also serves to protect the Village of South Point's municipal wells from becoming contaminated by the site's ground water.

Conclusions

Following completion of the South Point Plant Superfund site's cleanup in December 2001, most of The Point is available for industrial reuse. All areas of identified on-site soil contamination have

been cleaned up and, of these areas, the Mid-Plant Area, the Coke Oven Gas Blowdown Area, the Northern Fly Ash Ponds, Disposal Area D, and the northern part of the Eastern Disposal Area are available for industrial reuse. The only portion of The Point that is not available for industrial reuse is the capped southern half of the Eastern Disposal Area.

The site's ground water remains contaminated and institutional controls have been put in place restricting its use as a source of drinking water. The site's ground water pumping system will continue to operate for the foreseeable future, until the contaminants reach acceptable levels.

As this fact sheet illustrates, the future of The Point is very bright. The minimal, localized areas of contamination on the property have been cleaned up and the property is available for industrial reuse. Today, several industrial tenants already occupy The Point. With completion of a new road system in Fall 2003, The Point's infrastructure will be complete, and your company will have access to all necessary utilities.

If your company or lending institution is interested in the land, location, and financial incentives provided by The Point, exciting new opportunities await. If you are interested in financing, insuring, or purchasing property at The Point, safety and liability concerns need no longer serve as an impediment to your company's growth and success. Today, The Point is open for your business.

Fact Sheet Sources

- Record of Decision: South Point Plant Site, September 1997, U.S. EPA
- Remedial Investigation Report: South Point Plant Site, Geraghty & Miller, Inc., August 1994
- Interview with Thomas Bloom, EPA Remedial Project Manager, and Kevin O'Hara, Ohio EPA Site Coordinator, September 16, 2002
- Interview with Craig Cox, South Point Remediation Contractor, September 24, 2002

Copies of the EPA reports listed above are available in EPA's Region 5 library, located at 77 W. Jackson Blvd, 12th Floor, Chicago, IL 60604. The site's Record of Decision is available online at <u>www.epa.gov/superfund/sites/rods/index.htm</u>.

Tools to Address Liability

Introduction

The

The Point industrial park in South Point, Ohio, is open and ready for business. The Point's location and size, as well as the availability of a wide range of tax incentives and existing infrastructure, mean that the industrial park can offer your company an unequaled set of services and capabilities. If your company is looking for new facilities or to consolidate existing operations, The Point represents a perfect opportunity.

Southern Ohio's Premier Industrial Park.

As your company considers The Point, you may have questions about liability or safety issues related to the property's status as part of the South Point Plant Superfund site. The answer to these questions is simple and straightforward: there are no liability or safety concerns at the site. Most of the South Point Plant Superfund site was never contaminated. The parts of the site that were contaminated have been cleaned up under EPA oversight to industrial standards. Today, almost all of The Point's acreage is available for industrial reuse. (For additional information about the South Point Plant Superfund site's contamination and cleanup, please refer to the *History and Cleanup* fact sheet.)

If your company or lending institution remains concerned about liability or safety issues at The Point, there are two tools available that can address these concerns: EPA Prospective Purchaser Agreements (PPAs) and the 2002 Small Business Relief and Brownfields Revitalization Act (referred to within this fact sheet as the "Brownfields Revitalization Act"). This fact sheet describes the two tools in greater detail.

Prospective Purchaser Agreements (PPAs)

EPA has historically used Prospective Purchaser Agreements (PPAs) to address companies' liability concerns at Superfund sites. A PPA is a contract between a prospective purchaser of a property located on a Superfund site, EPA, and the Department of Justice that allows the prospective purchaser to acquire a property, after meeting certain conditions, without incurring federal Superfund liability.

The primary elements of a PPA include:

• A covenant by the federal government not to sue the prospective purchaser, or take any other civil or administrative action against the prospective purchaser for any civil liability under CERCLA*;



- An agreement that the prospective purchaser will not have to pay for any prior or ongoing costs associated with the site's cleanup under CERCLA;
- A covenant by the prospective purchaser not to sue the federal government; and
- An agreement by EPA to remove any CERCLA lien it may have on the property.

PPAs have served as a powerful tool to protect the environment and enable interested parties to reuse formerly contaminated properties. While PPAs have historically been the primary tool used by EPA to address liability concerns, these agreements have been superseded by the provisions of the 2002 Brownfields Revitalization Act. For additional information about PPAs, please refer to the "Resources" section at the end of this fact sheet.

The Brownfields Revitalization Act of 2002

In January 2002, CERCLA was amended by the Brownfields Revitalization Act, which was enacted to provide prospective purchasers with a blanket form of liability protection similar to the protections provided by PPAs.

The Brownfields Revitalization Act provides a limitation on liability for parties who qualify as bona fide prospective purchasers (BFPPs). A BFPP is defined as a party who acquires ownership after the effective date of the Act (01/11/02) and meets certain other

^{*} CERCLA refers to the 1980 Comprehensive Environmental Response, Compensation and Liability Act, the law that created the Superfund program.

Tools to Address Liability

requirements that include compliance with notice obligations, exercising appropriate care, and agreeing to any existing land use restrictions, among other obligations. The BFPP also cannot be related to any potentially responsible party (PRP).

Southern Ohio's Premier Industrial Park.

EPA has officially stated that the 2002 Brownfields Revitalization Act will supersede the need for the issuance of PPAs. Because the Act is new, some companies are unsure of the legislation's implications and continue to request PPAs from EPA. In an effort to continue to facilitate reuse, EPA has granted some requests in the interim, despite the blanket liability protection provided by the legislation.

Conclusions

If your company or lending institution is interested in the land, location, and financial incentives provided by The Point, exciting new opportunities await. If you are interested in financing, insuring, or purchasing property at The Point, liability concerns need no longer impede your company's growth and success, as the 2002 Brownfields Revitalization Act provides blanket liability protection. In addition, at the time of writing, prospective purchasers can still pursue PPAs with EPA, although the need for these agreements has been superseded by the new legislation.

Because most of The Point commercial park was never contaminated, most of the available land does not require the liability protections provided by the Brownfields Revitalization Act and PPAs. For the portions of The Point where contamination was remediated to industrial standards, your company or lending institution can work with the Lawrence Economic Development Corporation (LEDC) and EPA to clarify any potential responsibilities under the Brownfields Revitalization Act. In both cases, the bottom line remains the same: potential liability associated with the South Point Plant Superfund site has been removed, and liability concerns need not hamper the site's redevelopment. The Point is open for your business.

Resources

Lawrence Economic Development Corporation: www.lawrencecountyohio.org/3.htm

EPA Prospective Purchaser Agreements: www.epa.gov/superfund/programs/recycle/communit/ forms/index.htm

The 2002 Small Business Relief and Brownfields Revitalization Act: www.epa.gov/brownfields/sblrbra.htm

The Point Industrial Park: available acreage and new construction





The Southern Ohio's Premier Industrial Park. EPA Comfort Letters and Ready for Reuse Determinations

Introduction

The Point industrial park in South Point, Ohio, is open and ready for business. The Point's location and size, as well as the availability of a wide range of tax incentives and existing infrastructure, mean that the industrial park can offer your company an unequaled set of services and capabilities. If your company is looking for new facilities or to consolidate existing operations, The Point represents a perfect opportunity.

As your company considers locating at The Point, you may have questions about EPA's interest in the property as part of the South Point Plant Superfund site. Following completion of the site's cleanup in 2001, EPA's current interest in the site consists of monitoring the site's remedy and making sure that the remedy remains effective and intact. Most of the South Point Plant Superfund site was never contaminated. The parts of the site that were contaminated have been cleaned up under EPA oversight to industrial standards. Today, almost all of The Point's acreage is available for industrial reuse.

If your company or lending institution requires additional information about EPA's interest in the South Point Plant Superfund site, or EPA confirmation of the site's availability for reuse, there are two tools available: comfort letters and Ready for Reuse Determinations (RfRs).

Comfort Letters

EPA's primary vehicle for communicating the status of Superfund sites is the comfort letter, also referred to as a status letter, which EPA can provide to your company or lending institution upon request. A comfort letter describes the level of interest that EPA has at a given site. There are four types of comfort letters:

- A "No Previous Federal Superfund Interest" comfort letter states that the Superfund program has not been involved with the site in question. No evidence exists that connects the site to the Superfund program.
- A "No Current Federal Superfund Interest" comfort letter states that the site has been deleted from the National Priorities List (NPL) and archived by EPA or is in close proximity to an NPL site, but not actually part of the NPL site.
- A "Federal Interest" comfort letter indicates that EPA is either responding or has responded to the site to which the letter refers.



A "State Action" comfort letter states that response actions at a site are being handled by the state in which the site is located.

At The Point, EPA could issue a "Federal Interest" letter to your company or lending institution to provide formal recognition of EPA's interest in the property as part of the South Point Plant Superfund site. The letter would state that the site's contamination has been cleaned up and that EPA's ongoing interest in the site consists of monitoring the site's remedy to ensure that it remains effective and intact.

If your company or lending institution would like to request a comfort letter for a piece of property at The Point, a letter can be requested either before or after the property is purchased. EPA issues comfort letters because parties interested in a given property have a legal right to know how the site is related to the Superfund program. These letters were designed to serve as sources of EPA information. For additional information about comfort letters, please refer to the "Resources" section at the end of this fact sheet.

EPA has also developed a tool that can officially confirm the South Point Plant Superfund site's availability for industrial reuse for your company or lending institution. This new process, called a ready for reuse (RfR) determination, is discussed in the following section.



Ready for Reuse Determinations (RfRs)

A Ready for Reuse Determination (RfR) is a pilot process that EPA can use to officially recognize Superfund sites – like the South Point Plant site – as being available for a specified type of reuse. The pilot RfR now being developed for the site will indicate that contaminated portions of the site have been cleaned up, do not pose a risk to human health and the environment, and are available for industrial reuse.

The site's RfR, which includes The Point, may be helpful to your company or lending institution because it explains how the property was evaluated and cleaned up and explains, in a clear and accessible format, why the property is now officially recognized by EPA as being available for industrial reuse. An RfR can help to reassure your company or lending institution that EPA has evaluated The Point and made a official decision regarding its reuse potential following completion of the site's cleanup.

The RfR for the South Point Plant Superfund site includes two elements: a "cover sheet," which summarizes EPA's knowledge of the site, and an accompanying report that elaborates on the information used to make the determination. The RfR process takes into account both EPA and non-EPA documents. The type of reuse safely supported by different sites can fall into one of six categories: residential, commercial/industrial, ecological, recreational, governmental, and agricultural. For example, EPA would not certify the South Point Plant site as being available for residential reuse, since a deed restriction is in place to limit the site to industrial reuses. At The Point, the RfR provides official EPA recognition that the site is available for industrial use. An RfR is not a legally binding document. It is a summary of EPA site knowledge as of an effective date.

The RfR process can benefit your company or lending institution at The Point and help to facilitate the reuse of Superfund sites like the South Point Plant site in several ways. First, an RfR at the site can reassure your company or lending institution about the site's reuse potential by clearly describing the site's remedy, its reuse implications, and the reuse categories that the site can safely support.

Second, an RfR can address potential safety concerns that your company or lending institution may have about The Point's status as part of the South Point Plant Superfund site. The RfR's accompanying report reviews the risk assessment conducted at the site and describes how the site's cleanup was designed to address the identified risks. The report also includes an explanation of how the site's remedy was evaluated following the completion of cleanup and how EPA determined that the site no longer posed a risk to human health or the environment.

EPA Ready for Reuse (RfR) Determinations: Reuse Categories

- Residential
- Commercial/Industrial
- Ecological
- Recreational
- Governmental
- Agricultural

Third, an RfR can potentially reduce the time and resources needed to address environmental due diligence requirements, facilitating real estate transactions. Finally, the RfR for the South Point Plant site is an EPA document that can be used to inform future real estate transactions. As a result, the RfR can help ease concerns that your company or lending institution may have about the resale potential of properties at The Point. The RfR's cover sheet provides a reference for future real estate transactions indicating that The Point can support industrial uses, as approved by EPA.

The RfR process is a pilot program in the initial stages of development. Pilot projects for determinations at Superfund sites are being developed at the South Point Plant site and several additional sites across the country. The RfR for the South Point Plant site will state that most of the site was never contaminated, that the parts of the site that were contaminated have been remediated under EPA oversight to industrial standards, and that almost all of The Point's acreage is available for industrial reuse.

For additional information about the RfR determination process, your company or lending institution should contact EPA Region V.

Resources

Lawrence Economic Development Corporation: www.lawrencecountyohio.org/3.htm

EPA Region V: www.epa.gov/region5

Comfort Letters: www.epa.gov/compliance/resources/faqs/cleanup/ superfund/index.html#9

Environmental Insurance

Introduction

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Southern Ohio's Premier Industrial Park.

The *Tools to Address Liability* fact sheet provides information about two tools – EPA Prospective Purchaser Agreements and the 2002 Brownfields Revitalization Act – that can address liability or safety concerns that your company may have about The Point's status as part of the South Point Plant Superfund site. In addition, environmental insurance tools can also help to address your company's concerns. Environmental insurance limits a policy holder's level of exposure to concerns like cost overruns, third party claims, and collateral value loss.

This fact sheet provides a general introduction to four common categories of coverage: professional liability coverage, owner/operator liability coverage, legal defense coverage, and secured creditor coverage. In particular, these types of coverage provide companies with effective risk management strategies for sites that are contaminated or in the process of being cleaned up.

At a property like The Point, located on a Superfund site that has been cleaned up, these tools are less relevant. There are no liability or safety concerns at the South Point Plant Superfund site. Most of the site was never contaminated. The parts of the site that were contaminated have been remediated under EPA oversight to industrial standards. Today, almost all of The Point's acreage is available for industrial reuse.

The History of Environmental Insurance

In the past, environmental insurance has been perceived as either too expensive, inflexible, or narrowly defined. However, there have been several major changes in the environmental insurance industry over the past decade, including: increased policy limits, longer policy durations, more flexible coverage options, and increased reliance on pre-existing research like EPA site assessments.

First, policy limits have increased considerably – in the mid-1990s, a \$4 million limit on a liability coverage policy was a rarity. Today, policies with limits of \$200 million may be provided by a single carrier. Second, the duration of policies has also increased; policies



now commonly provide ten years of coverage. In addition, environmental insurance can now be pooled. A company can purchase a pooled insurance program for a portfolio of properties and provide coverage for redevelopment efforts at all of the properties. Third, the flexibility of many environmental insurance programs has also increased – different policies can be combined and rewritten to meet your company's needs at specific properties, while the policies' premiums have decreased substantially. Finally, whereas insurance companies used to require expensive site assessments, insurance companies increasingly rely on pre-existing site data and evaluations.

Environmental Insurance for Your Company

Professional Liability Coverage

If your company or lending institution requires any type of environmental assessment at The Point, your assessor needs to hold this type of coverage. Professional liability coverage protects site assessment professionals from personal injury costs and also from liability for injuries incurred by a third party from assessment errors or omissions. Before conducting any assessment, EPA's site and risk assessments can also be reviewed to determine if their findings meet your company's needs.

Owner/Operator Liability Coverage

This type of coverage provides property owners with protection from the costs of third party claims for site cleanup, property damage, and

Environmental Insurance

bodily injury arising from contamination. At The Point, this type of coverage would likely not meet your company's needs, as the site's contamination has been cleaned up and the site is ready for industrial reuse.

Southern Ohio's Premier Industrial Park.

Legal Defense Coverage

The

This type of coverage provides property owners with protection from legal defense costs. Equally important, legal defense coverage can also help to prevent settlements that lead to further legal action. At The Point, as elsewhere, this type of coverage can serve as an effective general risk management tool for your company. However, the completion of the cleanup of the South Point Plant Superfund site means that this type of coverage would not be needed to protect your company from the legal costs associated with third party claims arising from site contamination or cleanup.

Environmental Insurance for Your Lending Institution

Secured Creditor Coverage

While lender liability concerns about federal requirements have been largely addressed by the 1996 Lender Liability Law, your lending institution may still have potential concerns about providing financing for the development of your property at The Point.

In the mid-1990s, insurance companies began offering secured creditor coverage to address these concerns. Secured creditor coverage protects a lender's interests in the event that a borrower defaults and provides compensation to the lender for collateral value loss. This type of coverage can directly address your lending institution's financing concerns, essentially serving as a loan guarantee.

Environmental Insurance: Limits and Alternatives

Today, the environmental insurance industry provides more flexible, affordable, and long-term policies that can address the needs of companies and lending institutions, particularly at properties where contamination exists or cleanup is underway. These policies are less relevant at The Point, given that the cleanup of the South Point Plant Superfund site has been completed.

Insurance analysts also emphasize that environmental insurance should be understood as a tool that works most effectively as part of a risk management strategy that also includes risk retention and risk transfer. Risk retention is a form of self-insurance – the practice of setting aside funds to pay for both anticipated and unexpected costs.

Environmental Insurance Providers

- AIG Environmental: <u>www.aig.com</u>
- Chubb Group: <u>www.chubb.com</u>
- Environmental Compliance Services, Inc.: www.ecsconsult.com
- Environmental Insurance Agency: www.enviroinsurance.com
- Environmental Strategist: www.estrategist.com
- Kemper Environmental: <u>www.kemperenvironmental.com</u>
- Lohman Insurance: <u>www.lohmaninsurance.com</u>
- National Environmental Coverage Corp.: www.necc.com
- Twin Elms Environmental Insurance Agency: www.twinelms.com
- Wm Rigg Co.: www.wrigg.com
- Zurich North America: www.zurich.com

Risk transfer refers to any agreement with an outside party to transfer the liability and costs associated with a perceived risk to that party through an indemnity agreement. Your company or lending institution should also keep in mind that, as in any marketplace, extensive research and sustained communication with insurance companies are critically important to ensure the determination of appropriate coverage and long-term security.

Conclusions

If your company or lending institution is interested in the acreage, location, and financial incentives provided by The Point, exciting new opportunities await. Your company's growth and success at The Point need not be impeded by liability concerns, as the site's cleanup has been completed and environmental insurance tools can help to address your remaining concerns. For additional information about other relevant tools, please refer to the *Tools to Address Liability* fact sheet. Potential liability associated with the South Point Plant Superfund site has been removed, and liability concerns need not hamper the site's redevelopment. The Point is open for your business.