Environmental Liability Exposure and Its Effect on Economic Development Christina Barcello Temple University

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Environmental Liability Exposure and

Its Effect on Economic Development

In the height of the industrial revolution, Philadelphia was known as the workshop of the world. The city was home to dozens of factories which supplied the country with goods, and housed raw materials such as chemicals, lead, and petroleum. When industry halted, the majority of these properties were left abandoned for years. Recently, redevelopment has taken off in these former industrial neighborhoods and many projects have already been successfully completed. Environmental liability exposure is no longer an impediment for economic development in urban areas through assistance from municipal, federal, and private organizations, as well as state of the art insurance products.

The primary focus of this paper will be properties with known contamination, which are also referred to as brownfields. "The term 'brownfield site' is defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant" (EPA, 2015). Brownfields are typically former industrial or commercial properties, located close to existing infrastructure, making their cleanup and redevelopment particularly attractive (PA DEP, 2015). An estimated \$2 trillion of United States real estate is devalued due to the presence of environmental hazards (National Brownfield Association). There are currently 43 registered brownfields in the state of Pennsylvania (PA DEP, 2015) which possess opportunity for investment and economic development.

Sources of Environmental Liability Exposure

In order to properly mitigate against environmental liability, an investor must first identify the potential exposures associated with a brownfield redevelopment project. Developers should consider the extent of their exposure to liability for preexisting pollution and remediation of the brownfield. There is risk involved in the handling, treating, neutralizing, transporting, and disposing of hazardous materials. If an existing building is being adapted for reuse, there is a possibility of exposure to liability arising from the cleanup of asbestos, molds, lumber arsenic, and lead hazards within the structure. A contractor's cleanup operations could cause the severity of the pollution conditions to worsen, rather than improve. Exposure to hazardous chemicals during the redevelopment process could also give rise to workers' compensation claims. Furthermore, if the developer fails to completely eliminate the hazardous substances from the property, they could be subject to third party liability claims from occupants, visitors, and the surrounding community.

Additionally, developers should consider the possibility of an indirect loss due to business interruption. Despite thorough due diligence inspections, there is still a significant factor of uncertainty associated with brownfield redevelopment. Under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) buyers, lessors or lenders are held responsible for remediation of hazardous substance residues, even if a prior owner caused the contamination (Risk & Insurance, 2015). If a brownfield is deemed unsuitable for construction after it has been purchased, the developer will not be able to recover costs associated with cleanup of hazardous materials from the prior owner. Therefore, it is imperative for developers to have an accurate estimation of the risks and cost implications before taking on a project of this nature.

Mitigating against environmental liability exposures

Environmental Site Assessments

The developer should have the brownfield property assessed to determine the nature and extent of the contamination present. The United States Environmental Protection Agency (EPA) will provide grants for brownfield property assessment if redevelopment potential exists (EPA, 2015). This environmental investigation process begins with analyzing the property's past uses to identify possible contaminants. The initial study of a site is known as a Phase I Environmental Site Assessment (ESA). These assessments typically cost between 1,000 and 5,000 dollars, depending on the property's size.

During the Phase I ESA, an environmental consultant will review records, conduct a site inspection, and interviews with owners, occupants and local government officials (Green Building Alliance). The process of reviewing of records and interviewing may take a lot of time, but is essential to ensuring a quality assessment. If a Phase I Assessment does not produce adequate results, the consultant will then move on to Phase II. A Phase II Assessment consists of sampling and laboratory analysis to confirm the presence of hazardous materials. Tests that may be performed in this phase include surficial oil and water samples, subsurface soil borings, sampling of dry wells, geophysical testing for buried tanks and drums, and testing of underground storage tanks. This level of assessment can cost between 5,000 and 15,000 dollars (Green Building Alliance).

Remediation requirements and techniques

The next step in tackling a project of this nature is undergoing environmental remediation, or cleanup, of the property. Environmental standards and regulations differ by state and by type of property. Relationships with federal and state regulators as well as other trusted parties such as brokers, carriers, buyers and sellers are necessary to sort out the regulatory requirements (Risk & Insurance, 2015). Remediation requirements also vary depending on the intended use of the property. Properties intended for residential use have higher cleanup standards than commercial sites, which requires additional time and money (Green Building Alliance, 2015). The environmental consultant performing the ESA can provide project specific estimations of the cost and timeframe of the remediation process.

The developer will then take necessary steps to decontaminate the property. Remediation techniques differ for soil and groundwater. Common soil remediation practices include the removal of polluting pipes and tanks, excavation and disposal, and soil vapor extraction. For groundwater, strategies include pumping and treating groundwater, chemical oxidation, and installing permeable reactive barriers (Green Building Alliance, 2015). Various state and federal grants are available to aid developers with remediation financing.

Strategies and Resources for Developers

Insurance Coverage

A developer considering a brownfield acquisition must evaluate the adequacy of their current insurance policies to cover unique environmental exposures. The primary risk associated with a brownfield redevelopment project is underestimating the severity of the environmental exposure present. This would result in increased cleanup costs, as well as a greater probability of settlement and defense expenses associated with third party liability claims and workers'

compensation claims. Several types of insurance coverages are well suited to handle these exposures, including environmental impairment liability (EIL), contractor's pollution liability, and remediation stop-loss.

The robust pollution legal liability market is an enabler of brownfield development, by serving developers' appetite for these types of properties and complying with strict environmental regulation (Risk & Insurance, 2015). Compared to the strict liability and exclusions of the past, insurance now provides greater coverage and more contract certainty for environmental exposures. "This fact, coupled with the maturing of insurance carrier market capital, has led to an explosion in capacity, with more than 25 insurers offering these products" (Business Insurance, 2015).

Environmental Impairment Liability

Site specific environmental impairment liability (EIL) policies cover third party claims arising from sudden or gradual releases of pollutants from specified locations (Survey of Commercial Insurance). These policies are commonly sold to factories, waste disposal sites, warehouses, and oil refineries. Known preexisting conditions are typically excluded on EIL policies. However, policyholders can purchase endorsements to protect against the costs of onsite cleanup and claims arising from preexisting pollution at insured sites. Therefore, this coverage is useful to developers both before and after remediation takes place.

The insurer will provide coverage for bodily injury, property damage, cleanup costs, and defense expenses. In order for coverage to be triggered, the pollution present on the insured site must result in physical injury or actual exposure to pollutants. Cleanup costs are generally defined as expenses incurred for the removal or remediation of soil, surface water, groundwater,

or other contamination in response to a covered pollution liability loss. EIL policies are subject to a "per-loss limit of liability". This is the maximum amount the insurer will pay for bodily injury, property damage, cleanup costs, and defense expenses resulting from each release of pollutants.

Contractors Pollution Liability

Contractor's pollution liability (CPL) coverage specifically addresses the needs of contractors performing environmental remediation. This coverage is typically purchased by general contractors and construction managers. Similarly to EIL, CPL also covers bodily injury, property damage, cleanup costs, and defense costs. However, a CPL policy is different from EIL because it is designed to cover contractor's operations at project sites rather than designated premises. CPL policies will also cover completed operations and contractual liability exposures.

Coverage is triggered when a loss arises from the insured's operations, which are described in the insurance application. The insurer uses this information to underwrite the policy. A CPL policy would cover a loss caused during the remediation of a brownfield redevelopment, as long as the contractor accurately described the nature of their work in the application. CPL policies commonly exclude asbestos abatement operations, but an endorsement can be purchased for this type of work.

Remediation Stop-Loss

Developers may purchase a remediation stop loss policy, or a cost cap policy, which was designed to facilitate real estate sales. This coverage insures remediation costs that exceed the projected costs of performing an environmental cleanup of a specific site. The policy provides

first party coverage, with the option of adding third party coverage through an EIL policy. A remediation stop loss policy would protect developers against cleanup costs exceeding the anticipated cost.

Government Assistance

The New Market Tax Credits (NMTC) program aims to generate private sector capital investment in low income urban areas. The \$15 billion program is administered by the Community Development Financial Institutions (CDFI) fund under the U.S. Department of Treasury. It provides private-sector investors with federal income tax credits in return for new investments in eligible businesses, such as real estate development. Brownfield cleanup and redevelopment projects often fall under these NMTC qualifications. The CDFI fund allocates tax credits for distribution through qualifying entities known as Community Development Entities, or CDEs (NMTC Coalition, 2015).

The Philadelphia Industrial Development Corporation (PIDC) is a public-private economic development corporation with the mission to spur investments that create jobs, revitalize neighborhoods, and drive growth to every corner of Philadelphia (PIDC, 2015). The organization is a qualified CDE and has provided critical support in the redevelopment of many brownfield sites in the city. Recently, the organization helped facilitate the redevelopment of an abandoned dye factory into Oxford Mills, affordable housing and offices for Teach for America (TFA) participants.

The developers of Oxford Mills were able to secure the financing to properly remediate this former warehouse for textile waste by working with the PIDC to align their projects goals with the NMTC program requirements. Oxford Mills serves as evidence that the redevelopment

of industrial sites can boost economic development. This project created 200 construction jobs and 100 permanent jobs in nearby schools. Between 2003 and 2013, NMTC investments leveraged almost \$70 billion in total capital investment to businesses and revitalization projects in U.S. communities with high rates of poverty and unemployment. The program generated approximately 750,000 jobs throughout the country during this ten year period (NMTC Coalition, 2015).

The Philadelphia Authority for Industrial Development (PAID) is a vehicle through which the PIDC manages properties and industrial sites on behalf of the city. This management includes property acquisition, improvement, environmental remediation, and sale. PAID serves as a channel for governmental contract and grant program funding for economic development projects throughout the city (PAID, 2015). The organization recently received a \$400,000 grant from the EPA, in order to assess brownfields in Kensington for petroleum and other hazardous substances (EPA, 2015).

PAID has distributed these funds to Temple University's Center for Sustainable Communities, which will partner with the New Kensington Community Development Corporation (NKCDC) to develop a plan for revitalization of brownfield sites located adjacent to the Lehigh freight rail corridor. Both entities will work with community members to determine the best use for the land once it has been properly remediated. Having a plan in place to revitalize the neighborhood will attract investors who might not otherwise see potential in these polluted properties. "Strategies for site reuse often lead to increased opportunities to leverage public and private investment and strengthen local economies" (EPA, 2015).

NKCDC's neighborhood plan aspires to repurpose a former textile factory located in an area that is currently impacted by drugs. The project plans include affordable rental housing, office space, business space, and publicly accessible green space. Redevelopment will also include sidewalk repairs, tree planting, additional lighting and improved security. The NKCDC reports that this investment "will spur additional capital investment, put eyes back on the street and reduce drug activity, bring new commercial activity and jobs, and improve the community's quality of life" (NKCDC, 2013). The planning assistance from Temple University and the NKCDC, backed by financial support from the EPA allows the city to put this land to better use. Without necessary capital to remediate these brownfields, making this polluted neighborhood more livable and equitable might not be affordable.

Conclusion

The devaluation of property due to environmental liability creates opportunity for developers who can profitably redevelop the sites. An increasing number of developers are successfully growing our local economy through strategic reuse of former industrial sites. By taking advantage of the resources available, developers are able to finance the additional costs which are unique to brownfield redevelopment projects. The EPA offers grants for environmental site assessments that might otherwise make a project unaffordable. Government organizations like PIDC and PAID work with developers to align their plans with projects that are eligible for financial assistance. The availability of insurance products makes it possible to build on these sites without fearing liability that could arise from known or unforeseen contamination.

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