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Ohio's Brownfield Problem and Possible Solutions: What is Required for a Successful Brownfield Initiative?

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OHIO’S BROWNFIELD PROBLEM AND POSSIBLE SOLUTIONS: WHAT IS REQUIRED FOR A SUCCESSFUL BROWNFIELD INITIATIVE?

“[W]e are entering an ‘Age of Possibility’— with vast new opportunities . . . . The Brownfields Initiative, . . . is bringing new development, new jobs, and new hope to communities - while engaging citizens and showing that environmental protection and economic development can go hand-in-hand.”

I. INTRODUCTION

In response to the environmental disaster at Love Canal, Congress

1. Vice President Al Gore, Preface to TODD S. DAVIS & KEVIN D. MARGOLIS, BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY, at xix, xix (Todd S. Davis & Kevin D. Margolis eds., 1997) (discussing the Clinton Administration’s Brownfields Economic Redevelopment Initiative). “Brownfield” is defined by the United States Environmental Protection Agency as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.” See infra note 15 and accompanying text.

2. Wendy E. Wagner, Overview of Federal and State Law Governing Brownfields Cleanups, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 15, 15 (Todd S. Davis & Kevin D. Margolis eds., 1997). What has become known as the Love Canal disaster began innocently enough over a century ago. In the 1890’s William Love built a canal off of the Niagara River in New York in order to generate electric power. ADELINE GORDON LEVINE, LOVE CANAL: SCIENCE, POLITICS, AND PEOPLE 9 (1982). The abundance of electricity attracted chemical manufacturing plants to the area. Id. However, political forces and the discovery of other means of generating electricity doomed the canal project. Id. In 1942, Niagara County gave the Hooker Electrochemical Company permission to use the abandoned canal as a receptacle for chemical waste. Id. at 10. For the next ten years, Hooker continued to dump chemical waste into the canal until most of the canal was full. Id. at 11. The canal was then capped with clay and earth. Id. In 1953, Hooker deeded the land encompassing the canal to the Niagara Falls School District for one dollar. Id. The deed contained a disclaimer in which Hooker disclaimed all liability that might result from injury or death caused by the presence of industrial contaminants. Id. An elementary school and a surrounding residential neighborhood were built on the site. Id. at 7. Over time the clay encapsulating the canal began to deteriorate allowing chemicals to seep and pool on the surface and leak into the basements of nearby homes. Id. at 12-15. The US EPA tested the air in residents’ basements and the soil and water in the area. Id. at 19-20. The tests uncovered chemicals that were known to be carcinogenic. Id. at 41. Studies also noted an increased incidence of miscarriages and birth defects among the residents closest to the canal. Id. at 92-93. Although the results of the tests were alarming, “[c]orrective measures were undertaken at a creeping pace.” Id. at 20. Residents who were informed that their basements and homes posed health risks were unable to move because...
passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. The intent of this legislation is to encourage private parties to voluntarily pursue remediation of contaminated industrial sites, and to provide government reimbursement for environmental cleanup when private parties have not taken action. Unfortunately, due to the broad strict liability that CERCLA imposes, CERCLA has had the unintended counter-effect of stifling brownfield cleanup and redevelopment. Therefore, many states have created voluntary cleanup programs and funding assistance programs as catalysts to brownfield remediation and urban redevelopment.

Recently, Ohio Governor Bob Taft proposed, and the Ohio legislature approved, a ballot measure to further brownfield

there were no buyers for their contaminated homes. Id. at 22. All of the involved governmental entities and the Hooker Company denied any responsibility. Id. at 25. Eventually after great public outcry from the Love Canal residents and extensive media coverage, the federal government appropriated $20 million to relocate the Love Canal residents. Id. at 213.

6. See DANIEL RIESEL, ENVIRONMENTAL ENFORCEMENT: CIVIL AND CRIMINAL § 13.05 (2000). The liability scheme imposed by CERCLA actually “encourages businesses to avoid liability rather than take steps to clean up the waste.” Solo, supra note 5, at 304. Current property owners who have reason to believe contamination may be presently on their property are reluctant to market the property for fear that in doing so the contamination will be discovered and they will expose themselves to environmental liability. Brian C. Walsh, Statute, Seeding the Brownfields: A Proposed Statute Limiting Environmental Liability for Prospective Purchasers, 34 HARV. J. ON LEGIS. 191, 202-03 (1997).
redevelopment efforts in Ohio. The Ohio voters subsequently supported Issue One in the November 2000 general election. Issue One will provide $200 million through the issuance of bonds for brownfield cleanup and redevelopment throughout the state of Ohio. Although Ohio would certainly benefit if current brownfields are cleaned and made productive again, Issue One has met with some opposition due in part to its lack of specifics. A state’s plan for brownfield redevelopment must be detailed, comprehensive, and well thought out in order to properly address the myriad of complex issues.

9. E.g. Randy Ludlow, Brownfield Bonds Proposed, CINCINNATI POST, Mar. 31, 2000, at 16A. The issue is to be funded without the aid of tax increases. Id. Bonds would be issued to raise the initial funds, and the interest on the bonds will “be paid over 15 years with existing funds and state liquor profits.” Id.


11. James Bradshaw & Randall Edwards, Measure Aimed at Cleaning Up Sites $400 Million Bond Package, COLUMBUS DISPATCH, Mar. 16, 2000, at 01D. The $200 million brownfield bond issue is being placed on the ballot with a $200 million conservation program. Id. Conservationists who oppose the brownfield issue are placed in a difficult position because both proposals are combined as one issue. Randall Edwards, Taft to PiggyBack Bond Issues Activists Torn Between Cleanups and Conservation, COLUMBUS DISPATCH, Feb. 4, 2000, at 01A [hereinafter Edwards, Taft to Piggyback].

12. In 1992 thirty-seven percent of the nation’s Superfund sites were located in the Great Lakes region due to the high concentration of former manufacturing sites. Daniel Michel, Comment, The CERCLA Paradox and Ohio’s Response to the Brownfield Problem: Senate Bill 221, 26 U. TOL. L. REV. 435, 436 (1995). In the Cleveland, Ohio area alone, it is estimated that there are over 6000 contaminated brownfield sites. Robertson, supra note 8, at n.20.

13. Joel Moroney, Wording a Bit Dim for Issue on Ballot, AKRON BEACON J., Aug. 18, 2000, at F3 (noting that the ballot language is confusing, and vague); Laura Yeomans, Issue 1 Deserves a ‘No’ From Voters, AKRON BEACON J., Oct. 7, 2000, at A11 (“The language of Issue 1 is so weak that the loopholes will allow the money to be spent in a variety of ways to bail out polluters.”); Editorial, The State of the State, CINCINNATI POST, Jan. 24, 2000, at 18A (“[I]t’s not at all clear at first blush that Taft’s proposals are adequate”); Randall Edwards, Environmentalists Hail Taft’s Proposal State of the State, COLUMBUS DISPATCH, Jan. 20, 2000, at 9A (stating that Governor Taft has “a wonderful idea”, but that he must provide more detail in order to gain support for the issue). The pertinent language of Issue One states that the revitalization encompasses, “providing for and enabling the environmentally safe and productive development and use or reuse of publicly and privately owned lands, including those within urban areas, by the remediation or clean up of contamination; and addressing by clearance, land acquisition or otherwise, contamination or other property conditions or circumstances that might be deleterious to the public health and safety and the environment and water and other natural resources, or that preclude or inhibit environmentally sound or economic use of the property.” 1999 OH. Ballot Measure No. 2 HJR 15 (ballot measure to amend the state constitution to authorize the issuance of bonds for environmental remediation and conservation).

14. In addition to the confusion caused by the numerous statutes that apply to brownfield redevelopment, much of the complexity stems from “the large number of professional disciplines necessary to tackle brownfields projects, as well as the lack of detailed information readily available about newly emerging state and federal programs.” TODD S. DAVIS & KEVIN D. MARGOLIS,
surrounding brownfields.

This Comment intends to survey the current state of Ohio’s brownfield redevelopment programs. It also examines the successes and failures of other states’ brownfield redevelopment efforts in order to uncover the elements of success common to a comprehensive brownfield redevelopment plan. Part II discusses the environmental, economic, and social problems that are associated with brownfield sites. Part III examines the impediments to brownfield redevelopment. Part IV illuminates the federal government’s efforts aimed at the brownfield problem. Part V provides an overview of Ohio’s current brownfield redevelopment programs. Part VI discusses the ingredients of a successful state brownfield redevelopment initiative through the examination of successful brownfield redevelopment programs in existence. This Comment suggests that a comprehensive brownfield redevelopment plan includes: releases from liability, structured standards and controls regarding cleanup, funding and financing assistance, and community participation.

II. PROBLEMS ASSOCIATED WITH BROWNFIELDS

A. Contaminated Hazardous Land

The United States Environmental Protection Agency defines “brownfields” as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”15 The degree of

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15. Gabriel A. Espinosa, Building on Brownfields: A Catalyst for Neighborhood Revitalization, 11 VILL. ENVTL. L.J. 1, 8 (1990), citing Office of Solid Waste and Emergency Response, Environmental Protection Agency, Brownfields National Partnership Action Agenda (May 1997). Although the Environmental Protection Agency’s definition is generally accepted, multiple definitions of “brownfields” exist. Eisen, supra note 8, at 890 & n.20. For example, the United States Office of Technology Assessment (OTA) has enlarged the definition to include property “whose redevelopment may be hindered not only by potential contamination, but also by poor location, old or obsolete infrastructure, or other less tangible factors often linked to neighborhood decline.” Defining the Brownfields Problem, supra note 14, at 5, citing U.S. OTA, STATE OF THE STATES ON BROWNFIELDS: PROGRAMS FOR CLEANUP AND REUSE OF
harm posed by a brownfield site can vary greatly, because brownfields can encompass sites ranging from those that are severely contaminated to those with little or no actual contamination. A minority of the nation’s brownfields are contaminated at levels high enough to be considered for inclusion on the National Priorities List (NPL), but many are still candidates for action under CERCLA. Brownfield sites can include prior uses such as dry cleaners, manufacturing facilities, gas stations, factories and plants, and even office buildings. If contamination is present, the hazards can include groundwater contamination and health risks for the local residents. Sweeping environmental liability laws, which cause property to be kept off the market, magnify the problem by hindering the detection of contaminated sites. If contaminated sites are not detected, potential health hazards will not be addressed. Even if the land has no serious contamination, the abandoned site fosters further environmental threats such as unauthorized dumping.

In addition to the environmental concerns, abandoned industrial

16. See Defining the Brownfields Problem, supra note 14, at 5-6 (noting that actually uncontaminated property “may suffer from the ‘brownfields stigma’ until a site assessment proves the property is clean”).

17. The Government Affairs Office has estimated that there are 450,000 brownfields nationwide. DAVID L. CALLIES ET AL., CASES AND MATERIALS ON LAND USE 565 (1999); Walsh, supra note 6, at 198.

18. Defining the Brownfields Problem, supra note 14, at 7. The National Priorities List (NPL) identifies the nation’s most seriously contaminated sites under CERCLA, earmarking these sites for priority cleanup and federal funds. Id. The sites listed on the NPL are known as Superfund sites. CHARLES BARTSCH & ELIZABETH COLLATON, Preface to BROWNFIELDS: CLEANING AND REUSING CONTAMINATED PROPERTIES vii (1997) [hereinafter BROWNFIELDS: CLEANING AND REUSING]. Only approximately 1250 sites have been singled out under CERCLA to be placed on the NPL. Defining the Brownfields Problem, supra note 14, at 7.

19. John Chihak et al., Developing Brownfields, 19 HAMLING J. PUB. L. & POL’Y 254, 255 (1997); Defining the Brownfields Problem, supra note 14, at 5. See also BROWNFIELDS: CLEANING AND REUSING, supra note 8, at vii. (noting that brownfields can include steel and timber mills, mining facilities, machine shops, and chemical plants). Even an unassuming former office building can be a contaminated site, as many older buildings have insulation and tile made of asbestos, and lead paint, which have since been discovered to be harmful. See id. at 4. Because of these contaminants these building cannot even be demolished without considerable cost. Id.

20. Eisen, supra note 8, at 895.

21. Walsh, supra note 6, at 202-03. Property owners are unlikely to place their property on the market and risk detection of contamination by the purchaser who may then sue for the cost of cleanup. Id. See also Robertson, supra note 8, at 1078. Because the cost of remediation could far exceed the value of the property, owners would rather lose the resale value of the land than subject themselves to potential liability. Chihak, supra note 19, at 256-57.

22. Chihak, supra note 19, at 257.

23. Eisen, supra note 8, at 895.
sites pose other hazards to a community. For instance, an empty facility encourages loitering and poses a potential risk of fire. Curious children are drawn to such sites, unaware of the danger these sites pose. Moreover, “vacant properties contribute to high crime rates and the deterioration of urban neighborhoods." Lastly, if left unattended, the “pollution may worsen or spread” creating even greater environmental and health risks.

B. Urban Sprawl

Most brownfield sites are located within urban areas. When an industry closes its doors, or is lured to a suburban greenfield site, it takes with it employment opportunities and taxes and leaves behind a potentially contaminated site. As the jobs move out of the inner city, residents are left “chronically unemployed.” If the site was returned to

24. “Vacant facilities deteriorate and invite abuse, including the unsupervised stripping of parts or material, vandalism or arson, and ‘midnight’ dumping.” BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 2.


26. Eisen, supra note 8, at 895. Brownfields are “conspicuous symbols of the decline...[that] discourage urban investment and contribute to a pervasive sense of poverty and hopelessness.” Id.

27. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 2. If hazardous materials are left in barrels buried beneath the earth to rust, contamination may become even more severe. See id. at 14-15.


29. A “Greenfield” is “land that has never been used for manufacturing or commercial activities and which carries with it none of the potential for environmental liability of a Brownfield.” Id. at 791.

30. Businesses currently located in urban areas have found that it is less costly to move the entire company’s operations to a greenfield site than it is to expand their current facility in the city. Scott D. Garson, Rebuilding Communities through Brownfields Redevelopment, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 177 (Todd S. Davis & Kevin D. Margolis eds., 1997). In particular, one Cleveland, Ohio company determined that it would cost $1.2 million more to develop adjacent brownfield property in the city than it would be move the existing operation and expand in a suburban location. Id. at 179.

31. Robertson, supra note 8, at 1078. Higher unemployment rates caused by the lack of industry plague the poor and minorities who are financially unable to “escape...to the suburbs.” Glen M. Vogel, An Examination of Two of New York State’s Brownfields Remediation Initiatives: Title V of the 1996 Bond Act and the Voluntary Remediation Program, 17 PACE ENVTL. L. REV. 83, 88-89 (1999). Lower income inner city residents are trapped by their dependence on public transportation. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 3. Some see brownfield redevelopment as the "means to obtain much-needed job development and training for dislocated
“productive use [it] could create jobs, generate tax revenues, and raise the economic outlook for urban residents.”

Although the Superfund Act and similar legislation did not cause urban sprawl, this legislation has exasperated the problem and has limited the ability of local government to redevelop and revitalize urban areas. In order for redevelopment to take place “the climate must be conducive to investment.” Due to potential cleanup liability, extensive delays, and financing hurdles, developers are less apt to consider redeveloping the abandoned site in favor of a greenfield site. With uncertain liability looming over development on a brownfield site, cities are unable to attract industry back into the urban core.

Urban sprawl hastens the deterioration of cities, leaving a mature infrastructure in place. As industry and jobs move to unspoiled greenlands, new infrastructure must be put in place, while the existing infrastructure goes to waste. Federally provided funds are used to workers and minority populations” who live in the cities.  

32. Robertson, supra note 8, at 1079. However, even some sites that have been cleaned have not been sold or returned to productive use. Solo, supra note 5, at 302-03. These sites are left fallow because the owners fear future liability from contamination that might not have been detected when the site was assessed. Id.

33. Garson, supra note 30, at 179; Solo, supra note 5, at 301. See also Andrea Wortzel, Comment, Greening the Inner Cities: Can Federal Tax Incentives Solve the Brownfields Problem?, 29 Urb. Law 309, 310-12 (1997).

34. STATE ECONOMIC DEVELOPMENT CASE STUDIES: RECENT CHANGES 1 (Charles Bartsch et al. eds., 1991) [hereinafter STATE ECONOMIC DEVELOPMENT].

35. The delay inherent in brownfield remediation can drastically add to the costs of development, making the property even less desirable. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 3. In urban areas the delay is compounded by the fact that often several parcels must be combined to create a developable site. Garson, supra note 30, at 178. Ownership and past use of the properties must be traced, and environmental assessments must be undertaken before any development may proceed. Id.

36. A study in Ohio uncovered that the cost of redeveloping a brownfield was four times the cost of building on a greenfield. See BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 3.  

37. See Defining the Brownfields Problem, supra note 14, at 4 (defining the brownfields problem as “an anchor weighing down the ship of today’s urban redevelopment movement”). But see Georgette C. Poindexter, Separate and Unequal: A Comment on the Urban Development Aspect of Brownfields Programs, 24 Fordham Urb. L.J. 1, 9 (1996) (arguing that the goal should not be to merely draw industry back to the urban core, but that the cities should focus on attracting businesses outside the manufacturing sector).

38. Solo, supra note 5, at 304. Often brownfields are well located near waterways, rail systems, highways, and with access to power and water lines. BROWNFIELDS: CLEANING AND REUSING, supra note 18, 2-3.

39. Infrastructure includes “transportation, communications, energy, water supply, and waste management systems.” STATE ECONOMIC DEVELOPMENT, supra note 34, at 2.

40. See Solo, supra note 5, at 304-305. The threat of Superfund liability encourages suburban sprawl which “indirectly encourages greater levels of air and water pollution by requiring workers”
build roads in suburban areas leaving the urban infrastructure to crumble.  

C. Depressed Urban Areas

In addition to environmental hazards, brownfield sites contribute to an area’s economic and social problems. The tax base in the area is threatened in a variety of ways. The industry leaves taking with it jobs and employment taxes that would have otherwise been paid into the city’s coffers. The profits of the industry are no longer funneled into the local economy. The loss of taxes also affects the funding available for the urban education systems and city services.

The potential for contamination greatly devalues the industrial site. Owners of property with possible contamination would rather abandon the property than face the cost of assessment and remediation. An abandoned former industrial site is not likely to be maintained; thereby causing an aesthetic blight on the community that furthers the depressed nature of the area.

41. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 3. This trend can be countered by effective transportation planning which encourages urban growth. Id. at 49-52. City planning can use transportation issues to encourage urban growth and reduce air pollution: eliminating minimum parking requirements in areas serviced by public transportation to discourage automobile use; increasing the density allowance in areas surrounding public transportation hubs; providing pedestrian walkways and bicycle paths; and allowing for mixed use urban neighborhoods so that commercial facilities are conveniently located next to residences. Id. at 52

42. Solo, supra note 5, at n.12, citing James T. O’Reilly, Environmental Racism, Site Cleanup and Inner City Jobs: Indiana’s Urban In-fill Incentives, 11 YALE J. ON REG. 43, 45-46, 54 (1994) (noting that urban decline leads to “a greater need for services, poorer quality housing, poorly funded school systems, and higher crime rates.”).


44. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at viii.

45. See infra note 50 and accompanying text.

46. Garson, supra note 30, at 177. When the job base is depleted, less income and business tax are generated. This tax base is “a critical source of funds for city services.” Id.

47. The reclaimed property may also be worth less than the investment necessary to bring about reuse. In St. Louis, Missouri the cost to remediate and redevelop a brownfield site cost the city $26.25 per square foot; the retail space that was created is worth $2.00 per square foot. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 3-4. Even if the site turns out to be uncontaminated the developer still needs to engage in costly environmental assessments.

48. Espinosa, supra note 15, at 9. If an owner takes the initiative to test his property and discovers environmental contamination, then “he is obligated to report the release of the contamination.” Chihak, supra note 19, at 256-57.

49. See Solo, supra note 5, at 285. When brownfields “remain dormant . . . adjoining neighborhoods suffer.” Id.
throughout the surrounding areas, further eroding the community tax base.  

Inevitably, the city and the taxpayers are left with the “legal, regulatory, and financial burden[s]” that accompany an abandoned brownfield site. The loss of industry feeds a vicious cycle: industry moves out decreasing the tax base, and as a result the city’s infrastructure suffers and the unsightliness of the abandoned land discourages investment in the area. The land lies fallow inviting criminal activity and urban decline. Cities seeking to revitalize and draw jobs back to the urban core are looking to brownfield redevelopment as the answer.

III. Hindrances to Redevelopment

A. The Legislative Landscape

A myriad of federal, state, and local laws exist regulating brownfields and their potential environmental impact. Many of these laws and regulations overlap and sometimes conflict causing confusion and ambiguity in determining potential liability. The most influential

50. Property allowed to remain fallow costs municipalities potentially “hundreds of jobs, millions of tax dollars, and hundreds of thousands of dollars in wages that might circulate through the area, bringing still more economic benefits.” BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 2.
51. Espinosa, supra note 15, at 9. Business owners “may directly deed the property to a municipality, the lender, or may simply ‘walk away’ and let the State foreclose on unpaid tax liens.” Id.
52. Defining the Brownfields Problem, supra note 14, at 6-7.
53. Id.
54. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at ix. But see Poindexter, supra note 37, at 1. The author chastises the shortsightedness of brownfield programs that look only at creating new jobs and preserving greenfields. Id. at 1. “Although the Brownfields Programs may solve present day employment problems, they also may create future environmental catastrophes.” Id. at 19.
55. Joseph Philip Forte, Environmental Due Diligence for the Real Estate Industry, in 6 THE ACREL PAPERS 5, 6 (Alan J. Robin et al. eds. 1994). A brownfield may be subject to federal cleanup laws if: the property contains “non-naturally occurring” hazardous substances without a permit for such substances; if petroleum has been disposed on the site; if the site contains an underground storage tank housing hazardous materials and/or petroleum; or if a structure on the site has loose asbestos or asbestos materials. Wagner, supra note 2, at 17-18.
56. Defining the Brownfields Problem, supra note 14, at 9. The federal government, all state legislatures, and many local municipalities have enacted statutes, ordinances, and administrative regulations for the purpose of combating environmental abuses. Osmond C. Howe, Introduction to 6 THE ACREL PAPERS 1, 1 (Alan J. Robin et al. eds. 1994). Developers seeking to examine the potential for liability and the cleanup requirements often find it difficult to determine the necessary
federal law is CERCLA, also known as Superfund.\(^{57}\) CERCLA authorizes action by the US EPA and provides funds for emergency cleanup of hazardous sites that pose an imminent threat to “public health or the environment.”\(^{58}\) CERCLA imposes strict liability\(^ {59}\) on Potentially Responsible Parties (PRP’s)\(^ {60}\) of property falling within the purview of the legislation.\(^ {61}\) Liability under CERCLA is applied joint and severally.\(^ {62}\) Therefore, those with the “deep pockets” and those who can most readily be found bear the burden even if they were not involved in the acts that led to contamination.\(^ {63}\)

In response to the unfairness created by CERCLA’s inclusion of innocent parties in the liability scheme, Congress passed the Innocent Landowner Defense to Liability,\(^ {64}\) also known as SARA.\(^ {65}\) SARA only applies to owners who are unaware of contamination at the time the property is acquired.\(^ {66}\) Unfortunately, the courts have failed to interpret cleanup standard. Wagner, supra note 2, at 17.

\(^{57}\) Brownfields: Cleaning and Reusing, supra note 18, at 5.

\(^{58}\) Espinosa, supra note 15, at 7.

\(^{59}\) See supra note 5.

\(^{60}\) Potentially Responsible Parties are comprised of four classes of persons or entities including: (1) present owner(s) and operator(s) of a property found to have contamination; (2) owners and/or operators of a site at the time the hazardous waste was disposed on the property; (3) the person(s) or entity(-ies) that arranged for the disposal of the hazardous material; and (4) the person(s) or entity(-ies) responsible for the transportation of the hazardous material. 42 U.S.C. § 9607(a) (1988). Although the actual text of the statute uses the conjunctive form when referring to “owners and operators,” the legislative history together with the rulings of other courts led the Eleventh Circuit to rule that the legislature actually intended the language to read “owners and/or operators.” United States v. Fleet Factors Corp., 901 F.2d 1550, 3 (11th Cir. 1990); See also Guidice v. BFG Electroplating & Mfg. Co., 732 F. Supp 556, 561 (W.D. Pa. 1989); But see Redwing Carriers v. Saraland Apartments, 875 F. Supp 1545, 1555-1556 (S.D. Ala. 1995).

\(^{61}\) Carver, supra note 5, at 245. Only certain sites, containing the most dangerous contaminates are considered Superfund sites. Defining the Brownfields Problem, supra note 14, at 5-6. Unfortunately, until a property has been tested for contamination its liability under CERCLA is unknown. See id.


\(^{63}\) Lenders are often times the party that can be located with the deep pockets. Defining the Brownfield Problem, supra note 14, at 8. See also Brownfields: Cleaning and Reusing, supra note 18, at 6. One small town mayor referred to the retroactive liability of CERCLA as a smart bomb that lands on the deepest pocket. Id. Although retroactive liability can have inequitable consequences, legislators are reluctant to repeal such provisions for fear of burdening the public with cleanup costs. Id.

\(^{64}\) 42 U.S.C. § 9607(b) (1988).

\(^{65}\) Solo, supra note 5, at 295. While SARA does help to some extent, it is not absolute assurance against liability under CERCLA, but merely a defense that can be asserted if CERCLA liability is pursued. See Id. at 295-96.

\(^{66}\) Forte, supra note 55, at 8.
SARA with any consistency, which creates confusion for developers. In order to be considered “innocent” under SARA, an owner must have made a diligent inquiry to determine whether contamination existed prior to obtaining the site.

The Resource Conservation and Recovery Act (RCRA) is another federal law with implications in brownfield redevelopment. RCRA was enacted prior to CERCLA to regulate the “generation, transport, treatment, and disposal of hazardous wastes.” However, RCRA’s focus on “the production of hazardous waste . . . left a gaping hole regarding the existing contamination” leading Congress to enact CERCLA. Although RCRA was set up with the purpose of managing hazardous waste, some of its corrective action provisions overlap with provisions of CERCLA creating confusion as to “which law governs hazardous materials at a specific site.”

In addition to the numerous federal laws regulating brownfields, many states have passed similar legislation known as “mini-CERCLA” statutes. These mini-CERCLA laws are mirrored after the federal Superfund Act, but usually have a larger scope, including sites that would not be considered Superfund sites at the federal level. Like its


68. 42 U.S.C. § 9607(b) (1992). In order for a property owner to use the innocent owner defense, he must prove that: the property was acquired after the contamination had taken place; he was not in any way responsible for the contamination; he did not “know or have reason to know of” the contamination at the time the land was obtained; and he “took reasonable precaution against foreseeable acts or omissions of third parties.” Forte, supra note 55, at 8. The investment required for an assessment to merely determine whether contamination exists under the SARA due diligence requirement may be substantial. Defining the Brownfields Problem, supra note 14, at 10. The cost may “prohibit the assessment of smaller sites deemed unworthy of the investment.” Id.

69. Wagner, supra note 2, at 16.

70. Id. CERCLA governs the “cleanup and removal of hazardous wastes at abandoned dumpsites” while RCRA is concerned with preventing sites from becoming Superfund sites through “hazardous and solid waste management.” Brownfields: Cleaning and Reusing, supra note 18, at 12.


72. Defining the Brownfields Problem, supra note 14, at 9-10; Brownfields: Cleaning and Reusing, supra note 18 at 12. RCRA regulations are often implicated at sites that have underground storage tanks, which contain “petroleum products” or other hazardous substances that pose the “threat of leaking or bursting into surrounding soils and groundwater.” Id. at 14-15.

73. Wagner, supra note 2, at 17.

74. Id. at n.26. For instance, the author notes that New Jersey has in place a more inclusive
federal counterpart, the state Superfund laws’ primary purpose is to compel PRP’s to engage in cleanups or risk liability. States are cognizant of the effect that federal environmental laws have had on brownfield redevelopment; therefore some states have insightfully incorporated statutes that encourage voluntary remediation.

B. Liability

The liability surrounding environmental risk has been described as “joint and several, perpetual, unlimited, and regardless of fault.” The risk of liability can far exceed the value of the property. Therefore, a developer contemplating the purchase of potentially contaminated property should first conduct an environmental audit, commonly referred to as a “Phase I Assessment” to determine what, if any, contamination exists. If the Phase I Assessment uncovers existing contamination, the developer or property owner will need to undertake additional assessments and engage consultants to determine the best course of action. The developer must survey the legal landscape to ensure that hazardous substance list which includes petroleum products and other waste considered hazardous according to state standards.

75. Carver, supra note 5, at 259-60. States’ Superfund laws primary purpose is the cleanup of the most severely contaminated sites within the state that are not targeted by the federal government on the National Priorities List. Id. at n. 39.

76. Wagner, supra note 2, at 17. Voluntary cleanup statutes in each state aim to encourage remediation by offering release from state Superfund liability upon the site’s approved cleanup. Carver, supra note 5, at 251-252. States may also have Federal SARA counterpart statutes which provide for an innocent purchaser defense, such as New Jersey’s Urban Redevelopment Act. N. J. STAT. ANN. § 58:10-23.11G(E)(1) (West 1995). However, because New Jersey’s defense statute only applies to purchasers in “qualified municipalities,” it fails to provide true liability protection to all innocent purchasers. Carver, supra note 5, at 264.

77. Forte, supra note 55, at 5; United States v. Shell Oil Co., 841 F. Supp. 962, 968 (C.D. Cal. 1993) (finding PRP’s liability to be joint and several).

78. See note 47 (recognizing that the cost of cleanup far exceeded the clean properties’ value). The value of a brownfield property may be difficult to determine due to the unknown costs associated with cleanup. Carver, supra note 5, at n.62. Although almost everyone speculates as to the cost of cleanup, developers must not lose sight of the value of the property once it is cleaned. Kevin D. Margolis & Todd S. Davis, Doing the Brownfields Deal, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 53, 54 (Todd S. Davis & Kevin D. Margolis eds., 1997).

79. Walsh, supra note 6, at 199. These investigative measures can prove to be costly with initial assessments costing as much as $5000. Id. Completion of this initial step usually requires the expertise of an environmental consultant and an environmental attorney “to prepare contract documents and evaluate the legal implications of information discovered during the audit.” Steven M. Wheller & Edward Z. Fox, Avoiding Environmental Liabilities: A Primer for Business, 23 ARIZ. ST. L. J. 483, 508 (1991).

80. Walsh, supra note 6, at 199. The significant costs involved in assessing possible
the correct level of cleanup is achieved in accordance with the governing regulations in the jurisdiction.\textsuperscript{81}

Risk of liability can still exist even after the appropriate level of cleanup is achieved.\textsuperscript{82} The EPA can still pursue action if a substance on the property is newly discovered to be harmful.\textsuperscript{83} There is also the risk that the initial audit did not detect all of the contamination, thereby creating the risk of future liability.\textsuperscript{84} This lack of finality serves as yet another deterrent to brownfield cleanup.\textsuperscript{85}

Developers especially avoid sites that are identified as Superfund sites on the NPL due to the high level of complexity and risk involved with a site with known serious hazardous contamination.\textsuperscript{86} Most states have focused their efforts on less contaminated sites, but a few states have successfully redeveloped sites listed on the NPL.\textsuperscript{87} These contamination is a deterrent to current owners. If the assessments uncover contamination, the cost of the required cleanup can cost millions of dollars. For example, the environmental cleanup costs of two buildings located in the former BF Goodrich Tire facility in Akron, Ohio were estimated to be between two and three million dollars. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 109. The high cost of cleanup, coupled with the developer’s inability to find tenants, prevented the developer from obtaining financing, and eventually forced the developer into bankruptcy. \textit{Id.} at 109-10. Today the buildings are home to Advanced Elastomer Systems, a polymer research firm. \textit{Id.} at 110.

\textsuperscript{81} See BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 10. CERCLA establishes cleanup criteria based on the risk of cancer of the particular substance at the contaminated site. \textit{Id.} State cleanup programs also usually gage the level of cleanup to the intended end use of the property. \textit{Id.} Congress has suggested five balancing factors as guides to determine the appropriate level of cleanup: “(1) effectiveness of the remedy, including implementability, technical practicability, and the ability to reduce risks; (2) reliability of the remedy over both the short and the long terms; (3) the remedy’s risks to the affected community, remediation workers, and the environment; (4) community acceptance of the remedy; and (5) reasonableness of the cost, compared to other available remedies.” \textit{Id.} at 11.

\textsuperscript{82} See Wortzel, supra note 33, at 313.

\textsuperscript{83} \textit{Id.} Property owners run the risk that future standards will change, and therefore require further cleanup efforts. Tondro, supra note 28, at 814. If a particular substance is later discovered to be dangerous, or previously undetected contamination is later uncovered at a previously cleaned site the owner would be liable for correcting the contamination. Wortzel, supra note 33, at 313.

\textsuperscript{84} Solo, supra note 5, at 303.

\textsuperscript{85} Wortzel, supra note 33, at 313. In response to this lack of finality some states have taken action by providing releases from liability that incorporate safeguards against liability under these circumstances. \textit{See infra} pp. 30-32 and 35-37.

\textsuperscript{86} Humphrey, supra note 43, at 5 (noting that such sites present “special challenges”). \textit{See supra} note 18, and accompanying text.

\textsuperscript{87} Humphrey, supra note 43, at 5. An example of a successful NPL site cleanup is that of the New Brighton Project, located outside the Twin Cities in Minnesota. \textit{Id.} The Project began with an agreement between the US EPA and the city of New Brighton outlining the cleaning and future use of a severely contaminated twenty-eight acre parcel of land. \textit{Id.} The cleanup of the site is phased, with new manufacturing and commercial tenants selected to “to fit the city’s long-range
successes prove that the barriers to even the most contaminated sites can be bridged if a solid plan for cleanup and redevelopment is in place.

C. Lack of Financing Opportunities

Financing for redevelopment of brownfields is difficult to obtain. Lenders are concerned that the property will not be valuable as collateral due to possible contamination, or they feel that the borrowers will not be a good risk as cleanup costs deplete the borrower’s assets. The greatest deterrent to lenders, however, is the potential liability that the lender could face by its involvement with a borrower’s financial and environmental decisions. Lenders are discouraged from foreclosing on a property with possible contamination, because the lender could then be considered a responsible party as an “owner or operator” according to CERCLA.

Courts have broadly construed the law to find lending institutes liable for the environmental contamination caused by the borrower. In the landmark case of Fleet Factors, the Eleventh Circuit held that, “a secured creditor may incur section 9607(a)(2) liability, without being
an operator, by participating in the financial management of a facility to a degree indicating a capacity to influence the corporation’s treatment of hazardous waste. 95 Under this standard, the mere influential ability of the secured creditor is enough to trigger CERCLA liability. 96 In response to this broad reading given to 42 U.S.C. § 9607(a)(2), Congress amended CERCLA in 1996 adding a provision 97 that limited the purview of the phrase, “participate in management.” 98 Although the amended statute negated the specific holding in Fleet Factors, lenders are still rightfully cautious of the broad liability they could incur under CERCLA. 99

The US EPA attempted to address the inequities caused when CERCLA is applied to lending institutes by creating “safe harbors” to shield lenders from liability. 100 However, in Kelly v. Environmental Protection Agency, the court held that although the EPA is given

at 1222.

95. United States v. Fleet Factors Corp., 901 F.2d 1550, 1557-58 (11th Cir. 1990). Fleet Factors involved a CERCLA action filed by the government against the shareholders of Swainsboro Print Works (SPW), a bankrupt company, and Fleet, a lending institute. Emanuel County, Georgia involuntarily acquired the property due the bankruptcy of SPW. Fleet subsequently acquired the property in the foreclosure sale in an effort to recoup its security interest in the facility. The Environmental Protection Agency inspected the site and found asbestos and hazardous chemicals and filed the lawsuit. The court held that Fleet was not liable under 42 U.S.C. § 9607(a)(1) as the present owner of the facility, because at the time the litigation began the county still held title to the property. Id. at 1555. The court did however find that there was enough evidence to hold Fleet liable under 42 U.S.C. § 9607(a)(2) as having participated in the management of the facility at the time the waste was disposed of at the site. Id. at 1560. The court felt that a broad reading of the lender liability provisions in CERCLA would encourage lenders to “address hazardous waste problems at the facility” rather than turn a blind eye to the hazard. Id. at 1559.

96. The court in Fleet Factors elaborated that a creditor could be liable even if the creditor was not in a position to “participate in management decisions relating to hazardous waste.” 901 F.2d 1550, at 1558. This harsh position was taken by the court in an attempt to “achieve the ‘overwhelmingly remedial’ goal of CERCLA statutory” liability. Id. at 1557.


98. Monarch Tile, Inc. v. City of Florence, 212 F.3d 1219, 1222 & n.2 (11th Cir. 2000).


authority to carry out enforcement of CERCLA it does not have statutory authority to promulgate rules regarding the standards by which liability will be imposed.\textsuperscript{101}

The extreme risks that lenders face when lending to owners or developers of brownfield sites has created the policy known as “brownlining” or “environmental redlining.”\textsuperscript{102} Brownlining occurs when a lender simply refuses to do business with “certain types of companies or properties that carry environmental risks.”\textsuperscript{103} Rather than risk the uncertainty of contamination lenders avoid the situation altogether, leaving brownfield developers with limited options.\textsuperscript{104}

D. Greenfield Competition

Property values for brownfield sites have been driven down due to the uncertainty of cleanup costs and the potential for liability, therefore brownfield property usually can be acquired for less than a greenfield parcel.\textsuperscript{105} Additionally, brownfield sites are often located near central business districts, waterways, public transportation, and large populations of potential workers.\textsuperscript{106} These benefits however do not outweigh the costs associated with redeveloping a brownfield site.\textsuperscript{107} A developer who is considering redeveloping a brownfield site must first conduct an environmental assessment of the land.\textsuperscript{108} Depending on the

\textsuperscript{101} Kelley, 15 F.3d at 1105-1109. “Liability issues are to be decided by the court.” \textit{Id.} at 1107.

\textsuperscript{102} BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 16.

\textsuperscript{103} \textit{Id.} This practice places even more obstacles in the way of small business that are trying to effectuate cleanup. \textit{Id.} at 17.

\textsuperscript{104} In \textit{Kelley v. Envirt. Prot. Agency} survey data was introduced indicating “that lenders curtailed loans made to certain classes of borrowers or secured by some types of properties in order to avoid the virtually unlimited liability risk associated with collateral property that may be contaminated.” \textit{Kelley}, 15 F.3d at 1104.

\textsuperscript{105} Solo, supra note 5, at 298 (finding that the lack of a market for brownfield sites drives the price down).

\textsuperscript{106} Usually urban sites afford great views, access to medical centers, and a mature infrastructure. Eisen, supra note 8, at 897.

\textsuperscript{107} Andrew, supra note 100, at 31. Even with the aid of state led voluntary cleanup programs developers still find that it is economically wiser to develop a greenfield rather than to face the delay and expense that accompany brownfield redevelopment. \textit{Id.} The Midtown Corridor Project in Cleveland, Ohio provides a typical example of the astronomical costs that can be incurred in developing a brownfield site. Garson, supra note 30, at 179. In this case the initial assessment found asbestos present, resulting in a net cost of $1.6 million per acre. \textit{Id.} The price of an acre of greenfield property nearby could be purchased without the fear of liability for $20,000-$150,000. \textit{Id.}

\textsuperscript{108} Walsh, supra note 6, at 199-202.
findings in the assessment, the developer is faced with uncertain cleanup standards and costs, long delays, and the lack of finality from liability if contamination is later found on the land. While the developer can sue to recover its liability costs from other PRP’s, developers run the risk that they will not be able to recover any of the remediation costs. The government must provide incentives in order to encourage private investment into brownfield sites.

Even if a developer is willing to take the risk to redevelop a brownfield site, financing and environmental liability insurance may not be available for such an endeavor. A development on a greenfield site is a much better risk for lenders than facing the potential liabilities that accompany redeveloping brownfield sites.

E. Public Opposition

The neighbors of a brownfield site are placed in a difficult position:

109. Id. at 200. Brownfields are even more undesirable when a developer considers the unpredictable nature of delays that accompany brownfield projects. Id.

110. See supra note 83, and accompanying text (discussing the lack of finality that sometimes plagues brownfield cleanups).

111. SARA expressly provides that a “private part[y may] . . . bring suits for contribution to recover response costs incurred as a result of their cleanup of a hazardous waste site under section 113(f)(1).” Barnhizer, supra note 62, at 564.

112. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at viii. These incentives can take many forms and are usually creatively adapted to the particular site. Id. State and local governments should first try and leverage existing federal programs, and then “fill the gaps” with innovative solutions such as voluntary cleanup programs. Id. at viii-ix.

113. Another hindrance linked to the large scope of CERCLA liability is the difficulty developers may have in obtaining liability insurance. Solo, supra note 5, at 300. The extreme costs associated with environmental liability can bankrupt even the largest insurance companies. Id. As a result insurance companies have limited the amount of coverage available and have raised the premiums for environmental liability insurance. Id. See also Diane R. Archangeli, Using Old Insurance Policies as Weapons, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 154 (Todd S. Davis & Kevin D. Margolis eds., 1997) (noting that insurance policies in effect at the time the initial contamination occurred may cover the liability faced by the current owner of the brownfield). But see generally William McElroy & Todd S. Davis, Environmental Insurance in the Brownfields Transaction, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 144 (Todd S. Davis & Kevin D. Margolis eds., 1997) (suggesting that insurance is a workable option to help control liability risks when dealing with brownfield sites).

114. One survey of lenders found that over 40 percent of commercial lenders polled had withdrawn from a mortgage deal due to potential contamination of the site. Defining the Brownfields Problem, supra note 14, at 10. “About 87 percent of those bankers said that fear of environmental liabilities had delayed transactions.” Id. “And nearly 70 percent of the lenders surveyed indicated that problems due to contamination had actually come to fruition on properties they had mortgaged.” Id.
continue to live by an abandoned, potentially contaminated property, or have the property redeveloped creating the danger of greater pollution by way of inexperienced and unsupervised cleanup efforts,115 relaxed cleanup standards, and new industrial polluters.116 Community members are concerned that hasty efforts to redevelop brownfields will create the risk that “threatening levels of contaminants” will be allowed to remain in the ground thereby threatening the local water supply and the residents’ health.117

In an effort to generate brownfield redevelopment and draw business and industry back to the urban cores, states often implement tiered cleanup levels determined by the proposed end use of the land.118 Relaxed cleanup standards coupled with the fact that brownfield sites are often situated in minority neighborhoods have led to the formation of the Environmental Justice movement.119 To address racial environmental injustices, minority communities want former industrial facilities to be transformed back into greenfields as opposed to being redeveloped into industrial sites that create a greater risk of environmental harm.120 The “selection of remedies, cleanup standards, and future land uses” must be carefully considered when redeveloping a brownfield site that is situated

115. See Eisen, supra note 8, at 887-88 (questioning the effectiveness of states’ ability to oversee voluntary cleanups). Eisen argues that “inadequate or ineffective cleanups” result when states allow developers to be responsible for the cleanup “with little or no state oversight.” Id. Eisen places distrust in developers given their “shoddy environmental records.” Id. at 888.

116. See id. at 887 (questioning the “democratic nature of the process” given the limited influence the affected residents have on what happens to the brownfields in their neighborhood).

117. Andrew, supra note 100, at 31. One commentator went so far as to suggest that states’ voluntary cleanup statutes “trade increased health risks to the affected community for the prospect of new jobs and higher tax revenues.” Eisen, supra note 8, at 887. Community members usually want a site to be cleaned to the highest level possible without regard to the end use. John C. Chambers & Michelle A Meertens, Community Participation in Brownfields Redevelopment, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 183, 188 (Todd S. Davis & Kevin D. Margolis eds., 1997).

118. See infra pp. 32-35.

119. See Espinosa, supra note 15, at 15-16. The Environmental Protection Agency has described the environmental justice movement as “the fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws, regulations, programs, and policies.” BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 46. The environmental justice movement seeks to rectify past wrongs caused by the disproportionate siting of landfills and other hazardous waste sites near minority populations. Id.

120. Chambers & Meertens, supra note 117, at 187. See also Defining the Brownfields Problem, supra note 14, at 11 (noting the conflict these competing interests can create between developers and community members). On the other hand, there is the risk that redevelopment will lead to “gentrification.” Garson, supra note 30, at 186. Gentrification occurs when the poor are displaced and can no longer afford to live in the revitalized areas. Id.
in a minority community. 121

IV. THE BROWNFIELD REDEVELOPMENT EFFORT AT THE FEDERAL LEVEL

The Clinton Administration created the Brownfields Action Agenda (Agenda) in an effort to increase brownfield redevelopment. 122 The Agenda is aimed at “jump starting” brownfield redevelopment by lessening the confusion surrounding cleanup and liability; providing a concerted effort between federal, state, and local governments; and providing a framework for cleanup using the US EPA’s pilot program as a guide. 123 The Agenda’s first concern was to try to alleviate some of the fear of Superfund liability. 124

A. US EPA Prospective Purchase Agreements & Status/Comfort Letters

In a Prospective Purchase Agreement, generally the US EPA issues a covenant not to sue in exchange for a prospective purchaser’s agreement to clean the site to specified levels. 125 The assurance given is that the EPA will not pursue action against the purchaser if the specified level of cleanup is attained. 126

Prospective purchase agreements are not available in all circumstances, but the US EPA has expanded the situations in which they can be used. 127 The following eligibility criteria must be met before the EPA will enter into a Prospective Purchase Agreement: (1) the EPA

121. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 46.
123. Id. at 41. See infra pp. 31-33.
124. See Weiss, supra note 122, at 42.
125. Riesel, supra note 100, at 286; Weiss, supra note 122, at 42. The EPA usually requires payment for a Prospective Purchase Agreement. Riesel, supra at 285. The payment to the EPA may fulfill the requirement that the EPA benefit in some way, either by way of the cleanup itself or through the receipt of funds to be used for cleanup efforts. Id.
126. Riesel, supra note 100, at 285-86. The parties agree on the level of cleanup prior to the issuance of the purchase agreement. The cleanup level is selected to insure that the property will not pose a threat to those who come in contact with the site, or who live or work nearby. See id.
127. Id. Previously Prospective Purchase Agreements were available only if the EPA was planning on taking action, and the EPA would substantially benefit from the agreement. Id. The new policy takes into consideration the potential benefit the cleanup agreement will bring to the community. Id.
and/or the community must be benefited; (2) the purchaser must have
the necessary finances available to undertake the cleanup; (3) the
cleanup effort and reuse of the property must not pose a health risk to
the surrounding community; and (4) the site must be contaminated to
a degree that further action by the EPA is anticipated.\textsuperscript{128}

Comfort letters, also known as status letters, are different from
Prospective Purchase Agreements in that they offer no guarantee that
action will not be taken against a particular site.\textsuperscript{129} Comfort Letters
issued by the EPA generally alert a prospective purchaser to the
likelihood of an EPA action that would create federal CECLA
liability.\textsuperscript{130} Because status letters do little to allay the fear of liability,
they are only available if: the party has a reasonable apprehension that
Superfund liability might be incurred; the letter will likely spur
remediation and redevelopment at a site; and “no other mechanism is
available to address the party’s concerns.”\textsuperscript{131}

\textbf{B. US EPA’s Cooperation with States’ Voluntary Cleanup Programs}

The EPA is making an effort to cooperate with and encourage
voluntary cleanup programs at the state level.\textsuperscript{132} The EPA’s first step
was to remove 24,000 sites from CERCLIS,\textsuperscript{133} the Superfund database,
in order to encourage state action.\textsuperscript{134} The removal of a site from
CERCLIS helps to “assur[e] the parties that no federal action [is]
expected.”\textsuperscript{135} Additionally, the EPA has created Superfund
Memorandum of Agreement (MOA) Guidelines to evaluate state
voluntary cleanup programs.\textsuperscript{136} If a state’s voluntary cleanup program

129. Riesel, supra note 100, at 286-88.
130. Id.
131. Riesel, supra note 100, at 287.
132. Andrew, supra note 100, at 30. Although the EPA is making an effort to cooperate with
state efforts, the EPA has made it clear that the EPA “does not intend to ‘staff-up’ to run voluntary
cleanup programs under the state program.” Id.
133. CERCLIS database contains nearly 40,000 potentially hazardous sites. Weiss, supra note
122, at 42. The 24,000 sites that were removed are sites that “USEPA had already screened,
sometimes years before, and had found to be of no further federal interest.” Id.
134. Andrew, supra note 100, at 30; Riesel, supra note 100, at 288; Weiss, supra note 122, at
42.
135. Carol M. Browner, Brownfields are Becoming Places of Opportunity, 13 J. NAT
136. Riesel, supra note 100, at 288-89. The guidelines set out the “baseline criteria” by which
the EPA will evaluate each states’ voluntary cleanup program. Id, at 288. The MOA will vary with
each state according to the specifics of each states’ program. For instance, in Indiana a MOA will
not be issued for property that is listed on the NPL. Anne Slaughter Andrew, Indiana, in
meets the criteria set out in the MOA guidelines, the EPA will issue the state a MOA, which insures the state that the EPA will not seek CERCLA action against properties that are a part of that state’s voluntary cleanup program. 137

C. US EPA’s Brownfield Pilot Program 138

The most promising of the federal initiatives aimed at brownfield redevelopment is the recent EPA Brownfield Pilot Program, which was developed as part of the comprehensive federal Brownfield Action Agenda. 139 Under the program, the EPA awards grants of up to $200,000 to communities to encourage and spur on brownfield redevelopment. 140 The main purpose of the pilot program is to provide

137. Riesel, supra note 100, at 288-89. States that have received a MOA from the US EPA include: Colorado, Illinois, Indiana, Michigan, Minnesota, Missouri, Texas, and Wisconsin.  David J. Engel, Illinois, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 497, 503 (Todd S. Davis & Kevin D. Margolis eds., 1997); Arthur J. Harrington, Wisconsin, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 601, 602 (Todd S. Davis & Kevin D. Margolis eds., 1997). A state’s MOA may be rescinded if a state’s standards are amended and fall below that which is required by the US EPA. Engel, supra at 394.

138. Browner, supra note 135, at 1.  See id. at V. To be considered for a grant, a city, county, Indian tribe or state must make an application to the EPA indicating that it has identified contaminated properties that provide “the greatest opportunity for remediation and economic activity.” BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 32; Weiss, supra note 122, at 45. Pilots are then selected according to “(1) the applicant’s problem statement and needs assessment, (2) evidence of community-based planning and involvement, (3) the applicant’s implementation plan, and (4) the long-term benefits and sustainability of the project.” Id.

140. See Eisen, supra note 8, at 980. The money granted under the Brownfield Pilot Program is not to be put toward the actual cleanup but is to be used to conduct site investigation and
learning models of brownfield redevelopment. Through the use of the pilots the Action Agenda aims to: develop clear liability and cleanup standards, create a team effort by engaging private investors and community members, and encourage “job training programs” in order to educate the local workforce.

The first pilot program grant was awarded to Cuyahoga County in Ohio. The success of this initial pilot served as a model for other communities. Since the Pilot Program’s inception in 1993, over 300 assessments, establish and test “redevelopment strategies and models,” and to foster communication and collaboration between the “stakeholders involved in brownfield policy.” To that end, the EPA has even referred to the pilot program as “pilot demonstration projects.” BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 32. In an effort to learn from the pilots the EPA held the first Brownfields Pilot National Workshop in 1996 to gather feedback from the various stakeholders involved in previous pilots. Weiz, supra note 122, at 46.

The goal of simplifying the administrative element of the cleanup process was to be accomplished through the “Memorandum of Understanding” (MOU). Espinosa, supra note 15, at 13. The mission of the MOU as defined by the EPA is to “establish policies and procedures for a general working agreement between [various federal agencies] in support of the EPA’s Brownfield Economic Redevelopment Initiative.” Id. at 13-14. By distilling the various federal agency policies into a single guideline, the EPA hopefully can simplify an otherwise complex process. See id. at 13.

One of the goals of the EPA’s Brownfield Pilot Program is to unite communities through the joint involvement of local residents and businesses in the redevelopment effort. Eisen, supra note 8, at 982. The EPA “is committed to involving residents in every step of brownfields redevelopment - from applying for pilot programs to deciding how sites will be used in the future.” Weiss, supra note 122, at 46. Community meetings are a simple way to gather residents input and give the citizens a voice. Citizen input helps to lessen the tension in delicate matters such as environmental justice. See Weiss, supra note 122, at 46.

Training programs have been incorporated into local community college curriculums and provided in workshop form in pilots in Maryland and California. Weiss, supra note 122, at 46-47. In Ohio, the EPA provided a grant for the purpose of creating a curriculum at the Cuyahoga Community College, otherwise known as Tri-C, that would support job-training efforts. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 34.

The Cuyahoga County Planning Commission chose to use the $198,000 grant to investigate and initiate cleanup at three Cleveland area sites. BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 33. One of the sites, known as the Hauserman site, involved a building situated on contaminated ground which required “soil vapor extraction and groundwater remediation.” Id. The successful cleanup and redevelopment of the site into a distribution center has created 170 jobs that have generated over one million dollars in payroll taxes for the local government. Weiss, supra note 122, at 46.

The Buffalo, New York pilot offers a unique example of innovative reuse of a brownfield site. Browner, supra note 135, at II. A contaminated former Republic Steel property is being redeveloped as a “35-acre hydroponic tomato farm” which will employ 165 workers. Id. The innovative use is a “nonpolluting industry, with water and heat recycled through the system,” and is operational without the use of chemical fertilizers and pesticides. Id. Pittsburgh is another city that is benefiting from the EPA Brownfield Pilot Program.
brownfield pilots have been implemented. The EPA Pilot Program demonstrates that a relatively small grant can lead to marked improvements and be an impetus to revitalization.

V. OHIO’S CURRENT BROWNFIELD PROGRAMS

A. Voluntary Cleanup Programs

Ohio’s Voluntary Action Program, (VAP) or Program, was enacted to encourage voluntary remediation and development within the state that had been “chilled” due to the fear of liability under CERCLA. Ohio’s VAP was developed with the aid of environmental experts who “establish[-ed] comprehensive and specific guidelines for conducting brownfields projects.” Ohio’s Program is unique in that certified professionals oversee the cleanup process, and certified labs conduct the testing.

Voluntary action under the statute may be undertaken by anyone, including Potentially Responsible Parties, as long as the site is not

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Id. Pittsburgh, Pennsylvania, ravaged by industrial and economic decline, is using the pilot program grant to spur redevelopment at several sites. Id. at III. One site in particular, known as Nine-Mile Dump, is transforming a slag dump into a residential development. Id. at III-IV. Slag is “a gravel-like byproduct” of the steel industry. Id. Since removal of the slag would be cost prohibitive, the city plans to re-grade the slag and then add a three foot layer of topsoil on the top. Id. When the development is complete a waterfront “park-like” 1000 home residential development will replace what had previously been an eyesore and a blight on the city. See id.

149. See Browner, supra note 135, at I.
150. OHIO. REV. CODE ANN. § 3746 (West 2000). Ohio’s Voluntary Action Program, also known as Voluntary Real Estate Reuse and Cleanup Program, helps to expedite the cleanup process by enhancing the predictability of voluntary environmental cleanups. Todd S. Davis & Kevin D. Margolis, Ohio, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 542 (Todd S. Davis & Kevin D. Margolis eds., 1997) [hereinafter Ohio].
151. Michel, supra note 12, at 453.
153. Id. at 209-10. The requirements of a certified professional are enumerated in OHIO REV. CODE ANN. § 3746.07. Critics of Ohio’s program note that Ohio has not received a MOA from the US EPA in part because the Ohio EPA leaves so much of the VAP in the hands of certified professionals. Editorial, Cities Need Help With Brownfields, DAYTON DAILY NEWS, Mar. 29, 2000, at 8A. In denying Ohio’s Voluntary Action Program in a Memorandum of Understanding (also known as a Memorandum of Agreement), the US EPA stated that Ohio’s VAP “is privately operated, poorly monitored and has no public involvement.” Id.
154. Whether potentially responsible parties should be included in voluntary cleanup programs and eligible for liability release is a subject of debate. See infra pp. 30-32.
precluded under § 3746.02. In order to become a volunteer under Ohio’s VAP, a person must undertake a “voluntary action.” First, a volunteer should conduct a Phase I property assessment to determine what if any contamination exists at the site. If the Phase I property assessment detects contamination a Phase II assessment should be conducted to discover the extent of the contamination. Then a certified professional, with the aid of a certified lab, will conduct all cleanup activity. Once the property is certified as having reached acceptable levels of cleanup according to applicable standards, a certified professional may issue a no further action (NFA) letter. The certified professional then submits the NFA letter to the director of the Ohio EPA, who in turn issues a covenant not to sue to the volunteer.

155. A site is ineligible for participation in the VAP if it is precluded by overriding federal or state legislation such as, but not limited to: The Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C.A. § 1251, as amended; RCRA, 42 U.S.C.A. 6921, as amended; CERCLA, 42 U.S.C.A. § 9601, as amended; The Safe Drinking Water Act, 42 U.S.C.A. § 300(F); and OHIO REV. CODE §§ 3737.88, 3737.882, 3737.889 (relating to remediation governed by the fire marshal). OHIO REV. CODE § 3746.02 (West 2000).

156. Ohio, supra note 150, at 543. Voluntary action can include a Phase I or Phase II property assessment, a sampling plan, a remediation plan, or other remedial actions that are “necessary or appropriate to address the contamination.” OHIO REV. CODE ANN. § 3746.10(A) (West 2000).

157. Phase I assessments under the Ohio Program are conducted according to the American Society of Testing and Materials (ASTM) standards and procedures. Brown, supra note 152, at 204.

158. Id. at 203.

159. Instead of developing a single procedure for the Phase II assessments, Ohio’s Program relies on the guidance of a certified professional to develop the plan for the Phase II process. Id. at 209-10. The professional also ensures that procedures are followed according to the risk-assessment guidelines. Id. at 210. For an easy to understand explanation of Ohio’s innovative use of risk-based standards, see id. at 210-11.

160. Id. at 211.

161. Ohio, supra note 150, at 542.

162. The certified professional may issue the NFA letter: if the Phase I or II property assessment indicates that contamination is not present or is within applicable standards; or if remediation has been conducted under the VAP and data indicates that contamination is within applicable standards; if the property standards are based on the end use of the land and the appropriate restrictions have been recorded on the deed; and if the remediation was achieved by engineering controls, and a “plan for the proper operation and maintenance of the engineering controls” is in place. OHIO REV. CODE ANN. § 3746.10(C) (West 2000).

163. The covenant not to sue provides the volunteer with the assurance that the state will not pursue a suit based on contamination that occurred prior to cleanup. See Brian Thomas Lang, Note, Ohio’s Voluntary Action Program: Solving Ohio’s Toxic Waste Woes?, 60 OHIO ST. L.J. 285, 303 (1999). Unfortunately, the covenant issued by the state offers no immunity from federal liability. Id. The US EPA’s “current enforcement position does not contemplate pursuing an enforcement action in connection with a site that is participating in the Voluntary Action Program.” Ohio, supra note 150, at 544. Ohio is currently seeking a MOA from the US EPA which will provide VAP participants assurance that federal liability will not be pursued. Id.
Ohio’s VAP has been both applauded and criticized. Those who favor the program praise its comprehensiveness and cite examples of successful brownfield reclamation projects that would not have been possible without the aid of the VAP. The opposition argues that by allowing PRP’s to participate in the program, the VAP goes easy on environmental polluters. Other opponents argue that Ohio’s VAP fails because the US EPA does not endorse it; therefore it does not absolve an owner of federal liability for cleanup.

B. Financing Programs

Release from liability alone will not be enough to persuade developers to choose to redevelop a brownfield site over a greenfield site. Remediation is very costly and fraught with unknowns. Ohio

164. Ohio Rev. Code Ann. § 3746.12(A) (West 2000). The director must issue the volunteer a covenant not to sue if the NFA is submitted by a certified professional and is accompanied by verification under § 3746.11. Although little governmental control is placed over the cleanup process, the director must audit at least twenty-five percent of the sites receiving NFA letters to ensure that the certified professionals and the certified labs are qualified. Lang, supra note 163, at 297.

165. Ohio, supra note 150, at 542.

166. See Lang, supra note 163, at 285 (crediting the Ohio VAP with the successful redevelopment of a contaminated former penitentiary site in Columbus, Ohio into a new sports arena to house the NHL expansion team, the Columbus Blue Jackets).

167. A.J. Renner, Taft Visits Canton to Promote Issue I, THE CANTON REPUBLICAN, Oct. 26, 2000, at B-3. (criticizing Ohio’s VAP for allowing "polluters to clean up brownfields without oversight from the Ohio EPA")

168. See Editorial, Bonds Offer Potential to Clean, Preserve Ohio, DAYTON DAILY NEWS, July 2, 2000, at 10B (“[F]ederal liability still exists, because the U.S. EPA says Ohio’s VAP program relies too heavily on self-monitoring and allows virtually no public oversight”). Release from liability under Voluntary Action Programs may be misleading because while a state has the authority to release a site from the state’s mini-CERCLA law, states do not have the authority to release a developer from Federal CERCLA liability without the approval of the United States EPA. See BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 34. Ohio is seeking a Memorandum of Agreement from the United States EPA that endorse the actions of the Ohio VAP. Ohio, supra note 150, at 544. If a Memorandum of Agreement is obtained by the Ohio EPA, then covenants not to sue issued by the state will also be recognized by the federal government. Id. Currently, land owners may seek status letters from the federal government, but unless a state’s VAP is given a Memorandum of Agreement from the United States EPA a VAP participant is not completely shielded from federal liability. Id. But see id. at 542 (Ohio’s VAP is considered to be “among the most comprehensive and progressive voluntary cleanup legislation enacted in any state to date.”).

169. See Garson, supra note 30, at 180 (noting that the cost and trouble of conducting audits and assessments is difficult to overcome when greenfield parcels are available at a better price).

170. Eisen, supra note 8, at 907-11. Part of the uncertainty surrounding brownfield remediation is attributed to “considerable vagueness and uncertainty associated with applicable cleanup standards.” Id. at 907. Lack of finality and technical complexity add to the unknowns. Id at 910-11; see generally Michael L. Gargas & Thomas F. Long, The Role of Risk Assessment in
has developed several programs to help property developers fund brownfield redevelopment efforts including: the Urban Redevelopment Loan Program,\(^{171}\) the Water Pollution Control Loan Fund,\(^{172}\) Ohio Water Development Authority Loans,\(^{173}\) the Competitive Economic Development Program,\(^{174}\) and the Urban and Rural Initiative Grant Program.\(^{175}\) In addition to the government subsidized loans, Ohio provides protection to lending institutes that provide loans to brownfields projects that are a part of the VAP.\(^{176}\) Ohio offers additional financial incentives in the way of tax credits through the Brownfield Site Cleanup Tax Credit Program and tax abatements\(^{177}\) for the amount assessed to the increase in property value attributed to site remediation.\(^{178}\)

VI. **ELEMENTS COMMON TO A SUCCESSFUL BROWNFIELD INITIATIVE—OTHER STATES’ EXPERIENCES**

In order for a state program to succeed, it must work in tandem with

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171. The Urban Redevelopment Loan Program provides loans, up to five million dollars, to governmental and not-for-profit entities to fund development in “distressed areas.” *STATE OF THE STATES*, supra note 7, at 13.


174. The Competitive Economic Development Program provides grants to “small cities (less than 50,000) and small counties, for business expansion and retention purposes. *STATE OF THE STATES*, supra note 7, at 13. The grants are given to enable the cities to provide loans to businesses in order to fund “projects that will create or retain jobs.” *Id.*

175. The Urban and Rural Initiative Grant Program provided funding to not-for-profit and governmental entities for the purpose of developing “distressed areas.” *STATE OF THE STATES*, supra note 7, at 13. As of 1998, there were no funds remaining in this program. *Id.* *OHIO REV. CODE ANN.* § 6123.041 (West 2000); *Andrew*, supra note 100, at 30.


177. The increase in property value attributed to cleanup is automatically “exempted from real estate taxes for a ten year period” under *OHIO REV. CODE § 5709.87: Ohio*, supra note 150, at 545.

178. *Andrew*, supra note 100, at 30; *STATE OF THE STATES*, supra note 7, at 13. The federal government also offers developers a tax incentive through the Taxpayer Relief Act of 1997. Browner, *supra* note 135, at VI. The Act creates a tax incentive by allowing businesses to deduct the cost of cleanup immediately, instead of having to spread the cost over many years by way of depreciation. *Id.*
the federal initiatives and guidelines. It must comprehensively address and respond to the issues that serve as hindrances to brownfield cleanup and redevelopment. When a legislature considers creating or changing a state brownfield redevelopment initiative, much can be learned by examining what has worked for other communities.

A. Liability Shield

Because the fear of liability is an impediment to brownfield redevelopment, releases from liability are a necessary component of state brownfield initiatives. The question then becomes, ‘Who should be eligible for release?’ While it is commonly accepted that potential purchasers should be eligible for releases from liability, the line is less clear when dealing with present owners, or even actual polluters. A drawback to disallowing PRP’s to participate in voluntary cleanups and to benefit from subsequent liability releases is that many sites will remain contaminated. In order to be effective, the law must retain liability for any later pollution caused by the party. However, the release from liability should protect the party from subsequently “tightened standards or reemergence.”


180. State voluntary cleanup programs vary as to who should be eligible for release. Some states’ voluntary cleanup programs, such as Ohio and New York, permit Potentially Responsible Parties (PRP) to be released from liability. See Michel, supra note 12, at 454 (Instead of focusing on the culpability of the participant, Ohio looks at whether the site is precluded from participation under an overriding federal or state statute.); Vogel, supra note 31, at 106. Because PRPs, as defined under CERCLA, include present owners of a property, a party who was in no way responsible for the contamination can be considered a PRP. Solo, supra note 5, at 293.

181. Solo, supra note 5, at 311. Solo suggests that those eligible for release could be categorized into three groups: (1) parties with some connection to the contamination; (2) parties who subsequently purchased the property after the contamination had taken place; and (3) prospective purchases who were not connected to the contamination on the site. Id.

182. Vogel, supra note 31, at 106. Allowing “polluters” to obtain a release from liability if a site is cleaned may “encourage cleanup of . . . mildly contaminated sites.” Solo, supra note 5, at 312. However a state may be “concerned that allowing a potentially responsible party to participate and gain a release from future liability, would preclude the state from seeking cost recovery from the same party.” Vogel, supra note 31, at 106.

183. If parties are not liable for later pollution, the release would amount to a license to pollute. See Solo, supra note 5, at 314.

184. Id. The release should protect developers in the event that the law subsequently changes requiring a more stringent level of cleanup, or cleanup of a substance not previously recognized as harmful. Id. Developers also fear later liability resulting from previously undiscovered contamination that “emerges” after the site has been cleaned and a release has been issued. Id.
State programs have also taken into account the effect that lender liability has had on brownfield development. States are explicitly and implicitly providing liability protection to lenders in order to encourage brownfield financing. Several states’ brownfield statutes offer protection to lenders by narrowing the definition that the courts have given to the phrase ‘participate in the management of the property.’

B. Comprehensive Redevelopment Framework: Structured Cleanup Standards & Administrative Controls

Although Brownfield redevelopment is at the forefront of many political campaigns, “few communities or cities have taken positive concrete steps toward implementing a meaningful brownfield strategy.” Developers and property owners seeking to remediate and redevelop brownfields must navigate through a complex web of federal, state, and local cleanup requirements. States can alleviate some of the confusion surrounding brownfield redevelopment by developing “detailed cleanup standards that offer guidance to the landowner . . . and lenders in evaluating the reuse and value of a particular site.”

Through a minor change to its state voluntary cleanup program, Minnesota has tried to lessen the uncertainty in order to encourage voluntary cleanup. Minnesota’s Pollution Control Agency provides technical advice to those interested in purchasing or cleaning a property. Since its inception, the program has successfully provided a

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185. Murphy, supra note 176, at 105.
186. Id. Pennsylvania, Ohio, Illinois, Michigan and Indiana have proactively taken steps to limit lender liability. Id. at 103-07. Illinois has implicitly limited lender liability by apportioning liability based on the degree of fault. This limits the joint and several strict liability that is traditionally applied to any entity that fell within the definition of owner or operator. Id. at 105. Michigan explicitly precludes parties from liability if they have become owners or operators merely through foreclosure and have completed an assessment within 45 days of foreclosure and have reported the results of the assessment. Mich. Comp. Laws Ann. § 20126(1)(c) (West 2000).
187. Murphy, supra note 176, at 105. For example Ohio’s statute defines “the key phrase ‘participate in the management,’ as actual participation in the management or operational affairs.” Id. at 104; OH. REV. CODE ANN. § 3746.26(A)(1)(b) (Baldwin, WESTLAW through 2000 portion of 123 G.A.).
188. Defining the Brownfields Problem, supra note 14, at 11.
189. As eloquently stated by one scholar, “[t]he typical business often needs a lawyer, scientist, engineer, and the patience of Job to digest and understand the literally thousands of pages of federal, state, and local statutes, regulations, guidelines, policies, and judicial opinions that set forth the environmental mandates for transacting business.” Wheller & Fox, supra note 79, at 496.
190. Tondro, supra note 28, at 794.
192. Id. The Program, known as the Minnesota Property Transfer Program, helps allay some
“fast and efficient way to identify environmental concerns and quantify any cleanup costs,” thereby removing some of the uncertainty and delay surrounding brownfield development.193

Federal cleanup standards usually require that brownfield land be returned “to an unreasonably pristine condition.”194 Because this level of cleanup creates a cost barrier that is difficult to overcome, many states have developed “risk-based corrective action standards.”195 A risk-based standard directly ties the level of cleanup required to the intended future use of the site, ensuring that proper levels of cleanup will be attained to a level that minimizes health risks.196

Developers in states that have adopted risk-based standards have more flexible means of dealing with contamination at certain sites.197 In non-residential brownfield redevelopment, environmental engineering controls may be used instead of traditional “permanent” cleanup techniques.198 Capping is an environmental engineering method of containment that is used to prevent the contamination from spreading or of the concerns created by the potential for Superfund liability. Id. The property owner must still pay the agency for its services. Id.

193. Id. at 4. Pennsylvania has developed a similar program entitled the Pennsylvania Land Recycling Program. Chihak, supra note 19, at 260. The Land Recycling Program (Program) is revolutionary in that it provides “developers a clear understanding of how to gain governmental approval for their projects.” Id. at 261. Pennsylvania publishes a 250 page technical manual on cleanup guidelines for use by developers and lenders. Id. at 263. The Program is also administratively advanced in that it has created an information database in order to track brownfield sites and cleanup efforts. Id. The database can be used by developers and planners as they decide which sites to address. Id. The database is also used as a measurement device to illustrate the benefits brownfield redevelopment can have by tracking the number of jobs and the increase in tax revenue created by brownfield redevelopment. Id. Louisville, Kentucky has a similar database “containing information on ownership, property characteristics, zoning, land use, permits, environmental history and tax measures” for over 20,000 parcels. Id. at 268.

194. Solo, supra note 5, at 308.

195. Robertson, supra note 8, at 1103.


197. See Espinosa, supra note 15, at 26. By allowing the cleanup standards to be determined on a site by site basis according to the risks at a particular site, states “speed[] the process of redevelopment” and decrease the overall costs. Chihak, supra note 19, at 261-62. The money saved can be spent toward the remediation of other state sites. Id.

198. Tondro, supra note 28, at 795.
seeping into the groundwater.\textsuperscript{199} Where containment is not possible at sites intended for industrial use “on site treatment alternatives such as vapor extraction\textsuperscript{200} and soil washing\textsuperscript{201} may be utilized,” in lieu of excavation and removal of contaminated soil.\textsuperscript{202} These alternative treatments are not only cost effective, but they can also be completed in less time than traditional contamination removal procedures.\textsuperscript{203}

Flexible cleanup standards allow cleanup to “be based on actual threats to human health and the environment.”\textsuperscript{204} Future commercial or industrial uses usually will be permitted to have higher contamination levels than sites that are intended for future residential use.\textsuperscript{205} If variable cleanup standards are permitted limits must be placed on the future use of the land.\textsuperscript{206}

Proponents of risk-based uses point to the numerous sites that would have remained severely contaminated were it not for the risk-based standards, which allowed the property to be put back into

\begin{itemize}
  \item \textsuperscript{199} Capping usually involves encapsulating, or covering the polluted ground, with an “an impermeable barrier such as concrete.” \textit{Id.} at 795. Capping is only permissible when it can be justified by a cost benefit analysis. \textit{Id.} In order for capping to be justified it must be significantly less expensive to cap the site relative to traditional cleanup measures, and the risks to human health and the environment cannot be “significantly greater” than traditional cleanup remedies. \textit{Id.}
  \item \textsuperscript{200} The vapor extraction technique is used to remove volatile organic chemicals (VOCs) from the soil. Edward J. Cichon, \textit{Remediation Strategies for Brownfields Redevelopment, in Brownfields: A Comprehensive Guide to Redeveloping Contaminated Property} 273, 280 (Todd S. Davis & Kevin D. Margolis eds., 1997). Most commonly vapor extraction is achieved through the “the placement of a subsurface network of collection pipes through which vapors are extracted by vacuum to an above-ground treatment system.” \textit{Id.}
  \item \textsuperscript{201} Soil washing may be accomplished “in-situ,” meaning the soil can be “washed” without removal, or “ex-situ,” which requires that the soil be removed from the site in order to be treated. \textit{Id.} at 278. Soil washing separates the silts, clays, and humic materials, which usually contain the contaminants, from the other components of soil. \textit{Id.}
  \item \textsuperscript{202} Espinosa, \textit{supra} note 15, at 26.
  \item \textsuperscript{203} \textit{Id.}
  \item \textsuperscript{204} Robertson, \textit{supra} note 8, at 1103-04, citing Brian Hill & Joanne Denworth, \textit{Pennsylvania Envtl. Council, Report on Reuse of Industrial Sites Roundtables} 2, 4 (1993). However, once legislators decide to adopt flexible risk based cleanup standards, the question becomes: ‘How clean is clean?’. Robertson, \textit{supra} at 1104.
  \item \textsuperscript{205} Cichon, \textit{supra} note 200, at 276. For example, in the MidTown project in Cleveland the developer of an industrial site “was required to test the groundwater 150 feet deep.” Garson, \textit{supra} note 30, at 181. While this may have been an appropriate inquiry if the site was to be used for non-industrial use, “it is much too stringent an exercise for industrial development.” \textit{Id.}
  \item \textsuperscript{206} Tondro, \textit{supra} note 28, at 799-800. One way to limit the use of the land is to create covenants restricting the use that run with the land. \textit{Id.} at 799. Massachusetts employs a form of restrictive covenant known as an “Activity and Use Limitation.” \textit{Id.} at 799-800. However, one of the drawbacks to restrictive covenants is that lenders would be reluctant unless the covenant contained a clause that absolved the lender of liability if the owner breached the covenant and the lender forecloses on the property. \textit{Id.} at 800.
\end{itemize}
Opponents of risk-based standards argue that cleanup levels should not be compromised. They fear that the health of the community is at risk, especially in urban neighborhoods where industrial uses are co-located with residences. Opponents note that zoning laws may change, and that covenants with the land will not always relieve the risk of future inappropriate uses. Additionally, cleanup standards that are tied to the end use limit the redevelopment potential of a property.

C. Funding and Financial Incentives

Most brownfield projects are too costly for private developers to undertake without financial assistance of some form. The cost of audits and assessments alone may be enough to deter a developer from considering a brownfield site. If a developer does decide to pursue redevelopment of a brownfield, a lack of willing lenders may prevent the project from coming to fruition. The EPA pilot program illustrates that a relatively small sum can be expended in order to select candidate sites for remediation, conduct initial audits and assessments to determine the feasibility of a project, and to formulate a plan based on the input of the various stakeholders. Funding can be used to alleviate some of the

207. For instance, in Michigan a site specific cleanup compromise between Chrysler Corporation and the state enabled Chrysler to build a plant in a poor section of Detroit, creating badly needed jobs. Solo, supra note 5, at 308. Chrysler had investigated building a Jeep manufacturing plant on a vacant brownfield that was contaminated with “traces of gasoline and metals.” Id. The company was deterred, however, by the nearly one million dollar cleanup price tag that accompanied the property. Id. Because returning the land to stringent Federal Superfund levels of clean did not comport with the final use of the land, Michigan relaxed the cleanup levels. Id. Because of the flexible cleanup standards, the plant was built providing 3,000 jobs to the city’s residents. Id.


209. Solo, supra note 5, at 309. This is the underlying concern propelling the environmental justice movement. See supra note 119, and accompanying text.

210. Solo, supra note 5, at 309.

211. Garson, supra note 30, at 181. This is a valid concern if the land was vacant when the cleanup took place, and later a structure is placed on the site. If only minimal cleanup was undertaken while the land was vacant, the cost to demolish the structure in order to remove contamination below it will cost far more than total original cleanup would have cost. Id.


213. For instance, in Cleveland a newspaper company spent $60,000 conducting “its environmental assessment, only to find that the costs of cleanup would be prohibitive.” Solo, supra note 5, at 297.

214. See supra note 104, and accompanying text.

costs associated with the initial stages of development in order to attract private investors.\textsuperscript{216}

New York passed a bond act in 1996,\textsuperscript{217} similar to Ohio’s Issue One, that allocated 200 million dollars for brownfield remediation within the state.\textsuperscript{218} The Act, known as Title V, provides grants to assist in brownfield restoration by reimbursing municipalities\textsuperscript{219} for cleanup expenses, and by providing liability releases once the site is cleaned.\textsuperscript{220} Title V is intended to compliment New York’s voluntary cleanup program.\textsuperscript{221}

\textbf{D. Community Involvement}

A key ingredient to a successful brownfield initiative that is often overlooked is involving those members of the community that will be affected.\textsuperscript{222} A study conducted in 1997 revealed that “non-environmental factors” were primarily responsible for brownfield development failures.\textsuperscript{223} Citizens, concerned with the quality of their environment regardless of the cost, are at odds with developers who are

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  \item \textsuperscript{216} For instance, the EPA pilot program does not allow its grants to be used for actual cleanup; instead the funds are used to conduct assessments, and gather information on the best course of action and reuse of the property. See supra note 140.
  \item \textsuperscript{217} Title V of the New York State Clean Water/Clean Air Bond Act of 1996, N.Y. ENVTL. CONSERV. LAW §§ 56-050 - 56-0511 (1996).
  \item \textsuperscript{218} Vogel, supra note 31, at 85.
  \item \textsuperscript{219} Id. Title V is limited because it only applies to municipally owned sites. However, one property, the Irvington Village Waterfront Park, was jointly owned by a municipality and a private owner and therefore was able to benefit from funds under Title V and assistance through the state voluntary cleanup program. Id. at 101. Such an outcome would suggest that private developers could benefit from Title V if they are willing to join forces with a local municipality.
  \item \textsuperscript{220} Releases are not available for responsible parties. Id. at 98.
  \item \textsuperscript{221} Although both programs share the common goal of brownfield restoration, the two programs differ in several respects. Id. at 86. Title V has a more rigorous cleanup standard requiring property to be cleaned to pristine state Superfund standards. Id. at 99. Originally, flexible cleanup standards were considered under Title V, but pressure from environmental activists caused the legislature to revert to rigid Superfund standards. Gerrard, supra note 208, at 21. Title V sites are only allow municipalities to participate, but the voluntary cleanup program encourages private parties to participate. Vogel, supra note 31, at 85. While the voluntary cleanup is an open program, Title V projects are chosen based on four criteria. Id. at 98. Title V projects are chosen based on the site’s potential economic benefit, economic benefit, “potential use for public recreation,” and whether other funding is available for the project. Id.
  \item \textsuperscript{222} See Editorial, Bond Offer Potential to Clean, Preserve Ohio, DAYTON DAILY NEWS, July 2, 2000, at 10B (listing the issues that should be considered when developing a brownfields program).
  \item \textsuperscript{223} Espinosa, supra note 15, at 30. These non-environmental factors included: “local circumstances, market demand for the product, and extraordinary non-environmental costs.” Id.
driven by “market-oriented goals.” Developers must be cognizant of, and responsive to, community concerns and work with community members to successfully achieve the common goal of revitalization. Members of the affected community should be involved in, or at least made aware of, brownfield development plans.

Community participation can take several different forms, including public dialogues and working groups. The public dialogue concept emerged from the efforts of the National Environmental Justice Advisory Council (NEJAC). Public dialogue allows developers and planners to gather input from the community in order to address the citizens’ fears and incorporate citizens’ ideas into the project. But some argue that public dialogue does not involve the community enough to make a difference. Working groups allow for more actual

225. Espinosa, supra note 15, at 30. A brownfield redevelopment project must address the needs of the developer, the local community, and the environment in order to be successful. See Humphrey, supra note 43, at 5. These participants must work together to combine their collective goals which may include: increasing the employment opportunities and spurring economic growth in the area; strengthening the local tax base; creating a “healthier, safer, more attractive neighborhood”; and ensuring a profitable venture for the developer. Id.
226. Hawley, supra note 179, at 1043. Many states’ programs are lacking in the area of community involvement, including Ohio, whose VAP has been criticized for the lack of public involvement. Id. Eisen, supra note 8, at 972; See also Edwards, Taft to Piggyback, supra note 11, at 01A; Lang, supra note 163, at 312.
228. Garson, supra note 30, at 189. NEJAC was developed to address the environmental justice issue. Espinosa, supra note 15, at 16-18. The NEJAC, in a collaborative effort with the US EPA, sponsored public dialogues in five large U.S. cities to strategize with citizens about the brownfields problem and possible solutions. Id. at 18. The dialogues were designed to: “(1) provide a forum for local citizens to ask questions of federal administrators, (2) air grievances of past agency practices, and (3) suggest new policies and encourage responsible and inclusive brownfield redevelopment.” Id.
229. Hawley, supra note 179, at 1044. Community input can increase the chance of a project’s success. The Homan Square Project in Chicago is an example of the success that can be realized by listening to the residents. See Espinosa, supra note 15, at 23. In Chicago, Illinois, a developer intended to situate low to moderate income housing on a former commercial site. Although housing was needed in the area, the residents were concerned that the development was a guise for gentrification of the area. Id. at 24. The developer met with concerned community members and used their input to incorporate commercial and community service elements into the development plan. Id. The community service elements included: “green areas, a community park, a local bank branch, a family healthcare center, an 800 officer police station, a day care center, and job training facilities.” Id. at 25.
involvement of citizens. Working groups are comprised of a few community leaders who work closely with government officials “to represent the community’s interests” in the remediation and redevelopment process.

VII. CONCLUSION

State activism is necessary if brownfield sites are to be transformed into productive facilities that bring jobs to blighted areas. However, a state’s plan for brownfield redevelopment must be carefully tailored in order to properly address the myriad complex issues surrounding brownfields. A concerted effort must be made between developers, municipal officials, community members, environmentalists, and lenders. The success of a brownfield project is dependent on the cooperation and input of all stakeholders in order to creatively develop a solution unique to the property.

The passage of Issue One will provide Ohio with $200 million to spur the reclamation and redevelopment of Ohio’s many brownfield sites. If the EPA’s pilot grants of $200,000 can create a significant improvement and spark private investment, then certainly Ohio can do much to improve the current brownfield situation with $200 million earmarked for that purpose. Ohio is in a good position, as it currently has in place one of the country’s most thorough voluntary cleanup statutes. However, the Ohio VAP still has room for improvement. It must increase public participation to the point that the EPA is willing to issue a Memorandum of Agreement, which will allow the state to assure VAP participants that they can be absolved from federal liability as well.

Instead of indiscriminately handing out the money collected from the bond issue, the state should follow the example set by the EPA pilot program grants. The report concluded that more meaningful participation can be achieved through citizen advisory boards involving community members “from beginning to end,” and by providing open access to information throughout all stages of the project. See Chambers & Meertens, supra note 117, at 191.

231. See Chambers & Meertens, supra note 117, at 191.
232. Id.
233. See STATE ECONOMIC DEVELOPMENT, supra note 34, at 11 (Charles Bartsch et al. eds., 1991). States naturally are better equipped than the federal government to remedy their brownfield problems. States are motivated to return brownfields to productive use in order to generate revenue, and the states are “in a better position to evaluate their unique environmental situations and to encourage cleanup of toxic substances within their borders.” Lang, supra note 11, at 286.
234. See BROWNFIELDS: CLEANING AND REUSING, supra note 18, at 4.
235. See supra notes 42-45, and accompanying text (noting the difference that the EPA brownfield pilot program grants can make in a community’s brownfield redevelopment effort).
program and use a portion of the funds to target and investigate those sites requiring immediate attention. Once potential sites have been identified, the state and local governments must encourage development in those areas that would benefit most from redevelopment. If the most successful elements of other brownfield plans are studied and implemented, Ohio’s brownfield problem could be improved.

_Faith R. Dylewski_