"Through a Lens Darkly" — Superfund Spectacles on Public Participation at Brownfield Sites*

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Introduction

As noted by Ortwin Renn and his co-authors several years ago,[1] Americans increasingly question the hazardous waste management decisions of professional risk managers. Although citizen participation in such decisions began with the workers' health and safety movement of the mid-1960s,[2] it was the discovery of hazardous wastes in residential neighborhoods a decade later that galvanized public concern. At the Love Canal site, the startling broadcast images of a typical suburban community mired in toxic wastes presented a new, contemporary vision of hell, and helped lead to the passage of the federal Superfund law in 1980.[3]

Since that pivotal event, public demand for meaningful involvement in decision making at contaminated sites has intensified. As a result regulatory agencies have been forced to experiment with new

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1 Ortwin Renn et al., *Public Participation in Hazard Management: The Use of Citizen Panels in the U.S.,* 2 **Risk** 196 (1991).

2 Frances M. Lynn, *Public Participation in Risk Management Decisions: The Right to Define, the Right to Know and the Right to Act*, 1 **Risk** 95 (1990).

3 More formally, the Comprehensive Environmental Response, Compensation and Liability Act, or CERCLA, 42 USC §§ 9601-75.

approaches to accommodate public values through such mechanisms as citizen juries, focus groups and advisory committees.[4] More recently, groups, ranging from national research committees to grassroots organizations, have argued that public participation is a necessary condition for fair and competent environmental decision making.[5] The recent report of the National Research Council's Committee on Risk Characterization, for instance, unequivocally presses for a deliberate process of risk characterization, calling for "appropriately broad participation by the interested and affected parties."[6] In a remarkable passage, it notes that, particularly for regulatory agencies in which the public may have only limited trust, "it is usually wiser to err on the side of too broad rather than too narrow participation."[7]

Federal legislators have incorporated this idea of broad community participation into several recent bills which address hazardous waste. For example, in the Superfund reauthorization debate both Republicans and Democrats have, with widespread support, drafted public involvement titles in all major Superfund bills proposed over the past four years.[8] Also, stakeholders around the country have lobbied for increased local involvement in cleanup and reuse decisions at brownfield sites. These sites are contaminated industrial and commercial properties that have been abandoned or are underutilized, but are generally not eligible for Superfund-financed cleanups. Interest in promoting brownfield property recycling has exploded within the last five years, and brownfield programs have arguably become the linchpins of current efforts to devise more effective waste cleanup programs.

Here, we use the nearly two decades of experience with the Superfund program to reveal some potential difficulties with public participation in the much larger universe of brownfield sites. More

4 *See, e.g.,* Mary R. English *et al*., **Stakeholder Involvement: Open Processes for Reaching Decisions about the Future Uses of Contaminated Sites**, Final Report, Waste Management Research & Education Institute, University of Tennessee (1993).

5 National Environmental Justice Advisory Committee (NEJAC), **Environmental Justice, Urban Revitalization, and Brownfields: The Search for Authentic Signs of Hope** (1996).

6 Paul C. Stern & Harvey V. Fineberg, eds., **Understanding Risk: Informing Decisions in a Democratic Society** 23 (1996).

7 *Id.* at 87.

8 *See, e.g.,* H.R. 3800, H.R. 2500, S. 1285, and S. 8.

specifically, we argue that despite its enormous appeal, brownfield development is likely to complicate public participation in cleanup and reuse deliberations because of equity concerns, the reliance on private property controls to limit exposure to residual contamination, and the fragmented nature of local land use planning. To base this discussion on the ground, as it were, we will use details from one hazardous waste site, the Industri-Plex Superfund site near Boston.

Why use a Superfund site to illustrate obstacles to public participation at brownfield sites? According to many vocal critics both inside and outside of Congress, the Superfund program and its administrators fail to acknowledge the importance of reusing properties and often hinder such reuse. Brownfields redevelopment has become a popular and, some would say, useful corrective lens by which Congress can bring such Superfund problems into sharper focus. Our paper runs directly against this current. Within the Superfund program, we have found numerous examples of sites where cleanup decisions have accommodated, even facilitated, economic development. In the midst of the recent brownfield fervor, however, such development-friendly efforts at Superfund sites has been little noted. In particular, brownfield programs run the risk of having only ineffectual public participation, because the lessons on public participation that Superfund may offer to this newer area have not yet been sufficiently grasped.

This paper addresses this potential shortcoming by reviewing some of these lessons. The next part presents background on U.S. brownfield programs and reviews federal statutes that govern hazardous waste sites and state voluntary cleanup programs. It also discusses some potential difficulties with public participation at such sites. The third part of the paper describes the Industri-Plex Superfund site, considers how economic development and cleanup processes have interacted there, and briefly introduces major stakeholders. The fourth part further discusses stakeholder groups and individuals, focusing on their attitudes toward economic development and environmental risk and their views of the appropriate scale and pace of economic development. Last, the paper uses the Industri-Plex example to illustrate how demands for economic reuse and environmental objectives can shape public involvement at brownfield sites.

Background on Brownfields

At the outset, it is important to recognize that the overwhelming majority of brownfield sites are not Superfund sites, a distinction that often is muddled. Most Superfund properties are more contaminated, although the extent or severity of contamination at brownfield sites often has not been thoroughly assessed. Superfund sites also are far fewer in number. Even if we take the lower end of the estimate of brownfield sites that the U.S. General Accounting Office recently reported (130,000 to 425,000 nationwide),[9] this estimate exceeds nearly 100 times the number of Superfund sites. Moreover, unlike brownfield properties, Superfund sites have been subjected to a lengthy screening and evaluation process before being placed on the National Priorities List. Listed sites pose the most significant threats to human health and the environment, and their cleanup is based on a polluter pays principle — that is, those responsible for generating, transporting, or disposing of hazardous waste must pay for cleanup. If responsible parties cannot fund the cleanup, a site is eligible to receive money from the "Superfund," a special trust funded from the crude petroleum tax, chemical feedstock tax, and environmental income tax.[10]

For many involved in brownfield cleanup and development, Superfund liability is the "gorilla in the closet." Under the Superfund statute, liability for cleanup as interpreted by numerous court cases is retroactive, strict, and joint and several. This means that the responsible parties can be liable for cleanup even if their activities took place before the 1980 enactment of Superfund and even if the parties were not negligent. Joint and several liability means that the government can hold one or more responsible parties liable for the entire cost of cleanup, even if others are liable.[11] Before these provisions came into effect in 1980, property transfers were governed by state legislation and the common law doctrine of "buyer beware" guided transactions.[12] Prospective purchasers and developers of commercial and industrial

9 U.S. General Accounting Office (GAO), **Community Development: Reuse of Urban Industrial Sites** (1995).

10 Katherine N. Probst *et al.*, **Footing the Bill for Superfund Cleanups: Who Pays and How?** (1995).

11 *Id.* at 13-14.

12 *See, e.g.,* Elizabeth Geltman, *Recycling Land: Encouraging the Redevelopment of Contaminated Property*, 10 **Nat. Resources & Env't** 3 (1996).

property typically did not have legal recourse against previous owners if contamination at a property was discovered after the transfer of ownership. Under Superfund, however, owners and operators of properties have recourse against previous owners, and at the same time themselves can be liable for cleanup under certain conditions even if they were not responsible for generating, transporting, or disposing the hazardous wastes. It is this onerous liability, critics argue, that "chills" potential development activities. Both current and prospective owners and operators are reluctant to transfer or develop property, for fear that it may lead to expensive litigation and site cleanups.[13]

The central premise of most brownfield programs is that regulatory flexibility is necessary to remediate contaminated properties and bring them back onto the tax rolls. For example, the U.S. Environmental Protection Agency's (EPA) Brownfield Initiative and the 100 or so pilot projects funded by the agency in the last few years[14] have sought to add flexibility to brownfield cleanups in two ways: first, cleanup standards are explicitly tailored to the future use of a site so that "Cadillac" cleanups for residential uses are not undertaken at sites where industrial or commercial uses are planned; second, brownfield programs offer present owners and prospective purchasers a cap on liability for less stringent cleanups, in contrast to Superfund where liability for cleaning up a property extends to all costs of restoring it to a pristine state.[15] For many parties engaged in site cleanups — including regulators, site owners/operators, developers, local economic development corporations, and planners — this regulatory flexibility is warranted as a way to stimulate economic development in poor and minority neighborhoods, creating jobs, and adding tax revenues to improve local services.

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13 The conventional wisdom that the Superfund liability provisions impose high barriers to site redevelopment has not gone unchallenged. *See, e.g.*, Public Policy Associates, **Hazardous to Your Wealth: Does Superfund Create Barriers to Capital for Small Business?,** Working Paper 96-02, Washington, DC: Small Business Foundation of America and the Research Institute for Emerging Enterprise, [1996]). Although the evidence is mixed concerning whether the Superfund statute actually imposes significant barriers, the perception that it does so is widely held.

14 U.S. EPA, **Brownfields Pilots — Assessment and Revolving Loan Fund** (1997).

15 Terry J. Tondro, *Reclaiming Brownfields to Save Greenfields: Shifting the Environmental Risks of Acquiring and Reusing Contaminated Land*, 27 **Conn. L.Rev.** 789 (1995).

To promote more flexibility, both sides of the aisle have introduced legislation in the past 104th and current 105th Congresses to stimulate redevelopment of brownfields. In the current Congress, for example, Senator Lautenberg of New Jersey and other Democratic senators have proposed the Brownfields and Environmental Cleanup Act of 1997 to provide funding for site inventories and characterizations, establish a revolving loan fund to help support cleanups, and promote additional liability exemptions for brownfield development.[16] In the House, Democrat and Republican members have jointly introduced the Brownfields Remediation and Economic Development Act of 1997 and the Brownfield Economic Revitalization Act of 1997, and Democrats have sponsored the Community Revitalization and Brownfield Cleanup Act of 1997.[17] While none of the legislative proposals have been adopted at the time of this writing, the flurry of activity demonstrates an interest in the nexus of environmental risk and urban revitalization that was absent or muted as little as five years ago. On the Executive side, several years ago EPA launched its "Brownfields Initiative," and, more recently, the Clinton Administration proposed tax incentives to accelerate cleanup and stimulate redevelopment.[18]

In addition to federal legislation to promote brownfield redevelopment, some 35 states have established voluntary cleanup programs to encourage cleanups at contaminated sites.[19] In contrast to the federal Superfund and the various state Superfund programs which rely primarily on enforcement and liability to initiate cleanups, voluntary programs allow site owners and developers to approach the state to initiate cleanups. Many of these programs include specific incentives to encourage developers to identify potential valuable sites in inner cities. The major incentive used to encourage developers to cleanup contaminated sites under these voluntary programs is some

16 S. 18, 105th Cong., 1st Sess. (1997).

17 H.R. 990, 105th Cong., 1st Sess. (1997); H.R. 1049, 105th Cong., 1st Sess. (1997).

18 Charles Bartsch et al., **Federal Legislative Proposals to Promote Brownfield Cleanup and Redevelopment in the 105th Congress** (1997) and Charles Bartsch et al., **Coming Clean for Economic Development: A Resource Book on Environmental Cleanup and Economic Development Opportunities** (1996)(available from the Northeast-Midwest Institute, 218 D Street, SE, Washington, DC 20003).

19 GAO, **Superfund: State Voluntary Programs Provide Incentives to Encourage Cleanups** (1997).

form of liability release for cleanups certified by the state. The release essentially means that the state will not require or impose additional cleanup requirements at a later date if the use of the property is unchanged. Liability releases, whether in the form of covenants-not to-sue, no-further-action-letters, or certificates of completion, can greatly reduce uncertainty about long-term liability and thus encourage property transactions.

All of the foregoing federal legislative proposals include language to promote community involvement or public participation in brownfield development. The Senate's Brownfields and Environmental Cleanup Act of 1997 and the House's Brownfield Economic Revitalization Act of 1997, for example, both would require the development of a plan that "demonstrates meaningful community involvement."[20] The Brownfields Remediation and Economic Development Act of 1997 provides for certification of state brownfield programs that allow for liability releases only if such programs provide for public participation, and the Community Revitalization and Brownfield Cleanup Act of 1997 includes language to "provide meaningful opportunities for public participation on issues that affect the community."[21]

Unfortunately, because brownfield development is too recent a phenomenon we can not assume that the proposed language in the federal brownfield bills actually would result in effective public involvement. The odd alliance on the brownfield legislative bandwagon and in the field suggests that an effective, inclusive public involvement campaign must meld together diverse agenda and accommodate possible conflict among competing stakeholders: responsible parties may be anxious to reduce cleanup costs; municipal governments may seek to recover blighted areas and increase tax collections; health departments may focus on the protection of human health and environment; political interests may be intent on devolving regulatory authority to more local levels; and grassroots advocates may be interested in restoring the social vitality of local communities. While the Superfund program gives these groups a statutory right to comment

20 Section 102(b)(2)(D), S. 18, 105th Cong., 1st Sess. (1997); § 102(b)(2)(D), H.R. 1049, 105th Cong., 1st Sess. (1997).

21 Section 4(2), H.R. 990, 105th Cong., 1st Sess. (1997); § 127(f)(3), H.R. 1120, 105th Cong., 1st Sess. (1997).

on proposed cleanup plans — and to participate more effectively, community groups at a site can request a technical assistance grant from EPA to help them better understand the complexities of the cleanup issues[22] — no such explicit provisions exist in the proposed brownfield legislation. Moreover, according to a recent report, one half of the state voluntary cleanup programs limit opportunities for public participation.[23]

Difficulties in promoting effective public participation are hardly unique to brownfield programs, of course, but the twinning of economic development and environmental risk reduction at brownfield sites is likely to complicate such participation for three reasons.

First, brownfield cleanups can raise sensitive equity issues. Many brownfield sites lie in poor and minority communities. Cleanups tailored to industrial or commercial end uses are typically less stringent than those based on "ideal" standard that would permit unrestricted use of the site. Both grass roots activists and national environmental organizations have argued that differential cleanup standards at brownfield sites could lead to a dangerous double standard and to a concentration of redeveloped sites in the inner cities where contamination has not been removed but rather contained on site;[24] moreover, citizens groups have stated concerns that industrial or commercial development could generate more pollution.[25] One obvious policy mechanism to address equity issues is to encourage early and sustained public participation in discussions about cleanup alternatives. Yet calls for strong community involvement (or control) of cleanup and reuse decisions are likely to run squarely into a distinct and buoyant market for brownfield remediation, spurred by private sector entrepreneurs who may believe that limited publicity will facilitate quicker sales and redevelopment and involve less uncertainty.[26]

A second complication for broad public participation is the increased reliance on private property controls to manage residual contamination at brownfield sites. Private property restrictions, such as

22 42 U.S.C. § 9617.

23 GAO, *supra* note 19, at 6.

24 NEJAC, *supra* note 5.

25 Barbara Ruben, *Fields of Dreams*, 12 **Envtl. Action** 12 (1995).

26 GAO, *supra* note 19.

restrictive covenants, are crucial to brownfield remediation: these legal instruments are used to prevent persons from coming into contact with hazardous substances left on site and are thus attractive because they ostensibly reduce risk to a safe level without the expense of removing or treating site contamination. Deed restrictions may proscribe post-cleanup activities such as excavation of contaminated soil or well drilling in contaminated aquifers; they are also used to prohibit the conversion of a site from industrial to residential use (without additional cleanup). The emergence of private property controls presents a challenge to public involvement at hazardous waste sites because the legal basis of deed restrictions evolves from an individual's rights associated with private ownership of property inscribed in each state's property law, not in environmental statutes. These controls are likely to be worked out in detail during the latter stages of site cleanup, at negotiations that bring together current owners, liable parties, prospective purchasers and regulatory agencies. Because these discussions about future land use and reuse issues often turn on proprietary information, the public is typically not involved in these negotiations. Thus, an important component of the cleanup decision and arguably of site reuse can be shielded from public deliberation, even though involved community residents could help identify those safeguards that would be necessary to maintain the effectiveness of a long term remedy.

A third complication for public participation is that industrial site reuse may take place as part of a local land use and economic development strategy but the impacts related to reuse and cleanup might extend beyond the jurisdiction of one locality. The fragmented character of local land use planning might make it more difficult for public agencies to identify an affected public and mechanisms to include them in site deliberations.

In view of these possible complications, the lessons we can distill from properties where the public has been involved in cleanup and economic reuse — the twin pillars of brownfield development — are likely to be illuminating. The Industri-Plex site in Massachusetts is such a property. Although it is not literally a brownfield property as the proposed brownfield legislation would define it (because it already has

been placed on the National Priorities List), for two decades remedial investigation, cleanup, and development have constituted a long-running script that no brownfield site and few if any Superfund sites can match. As one senior official from the EPA recently noted, the property in all but name is the Agency's first brownfield site.

Industri-Plex[27]

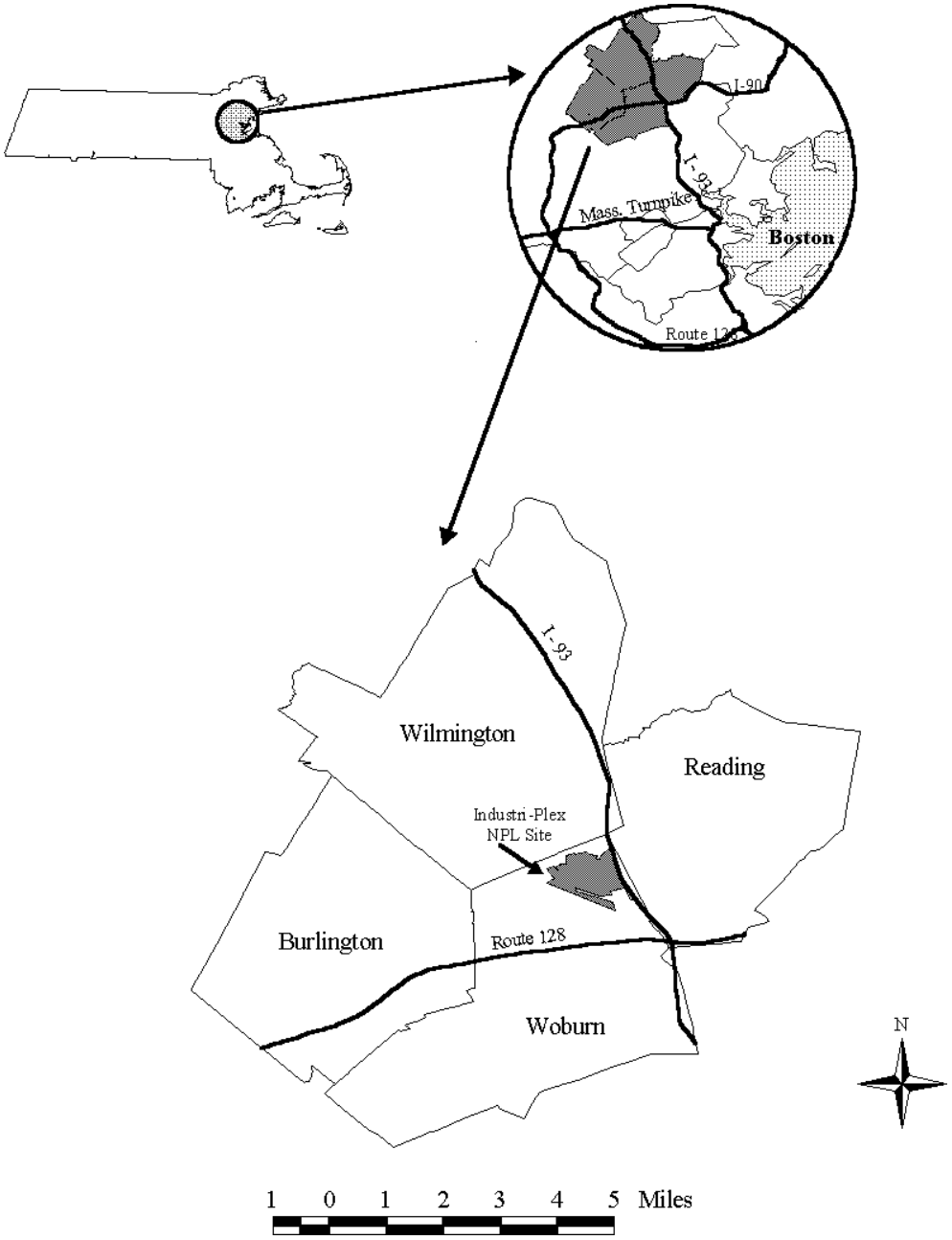
The Industri-Plex Superfund site occupies 245 partially developed acres in Woburn, Massachusetts, a blue-collar suburb twelve miles north of downtown Boston. The Boston-Lowell commuter rail line runs through the property, while Route 128 (Interstate 95) lies roughly one mile to the south and Interstate 93 forms the eastern boundary of the site (see Figure 1). Woburn's sanitary landfill and commercial and light industrial facilities surround the site on the other three sides. The nearest residential development lies roughly one-half mile away, but nearly 10,000 employees work within one-half mile of the site. Roughly one-fourth of the National Priorities List site itself is developed, and the remainder of the property has been the focus of considerable development interest from the private sector and from a variety of Massachusetts state agencies. This reflects in large part its large size and prime location near the intersection of the two major highways.

For more than a century, tanneries, chemical plants, and other manufacturers at the Industri-Plex site released or buried large volumes of hazardous wastes, resulting in extensive soil and groundwater degradation. In the 1970s, construction activities by a private developer on the site released noxious odors (when the wastes of previous tannery and glue operations were exposed to air) and led, ultimately, to the site's placement on the National Priorities List in 1983. The Record of Decision outlining the preferred cleanup remedy was signed in September 1986.

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27 A more complete description and discussion of the site iappears n Kris Wernstedt & Katherine N. Probst, *Land Use and Remedy Selection: Experience from the Field--Industri-Plex Site*, RTF Discussion Paper 97-27 (1997) and sources cited.

Figure 1
Location of Industri-Plex Superfund Site in Massachusetts



Site contamination principally includes arsenic, lead, chromium, benzene and toluene in the surface subsoil, and groundwater. The remedy includes several types of soil caps (to prevent exposure to arsenic, lead and chromium), the capture and treatment of noxious odors, and the capture and treatment of groundwater contaminated with benzene and toluene. In addition to these engineering measures, the cleanup also depends on "institutional controls." These controls will proscribe what activities can take place across the site, as well as outline the conditions by which landowners can disturb and reinstate the soil caps. They are likely to include deed restrictions that would run with the land, as well as new zoning regulations by the City.

The first two remedial actions – the soil cap and air system — are largely in place, but, at the time of our study and more than a decade after the Record of Decision was signed in 1986, the groundwater remedy still has not been fully implemented. No adequate remedy had yet been designed and implemented for the benzene and toluene, nor for chromium and arsenic that ongoing investigations discovered were also present in the groundwater. Moreover, the institutional controls had not been implemented and still existed only in draft form.

Despite the history of contamination and uneven progress on cleanup, the site has continued to attract considerable development interest since its placement on the National Priorities List. This interest has been accommodated in part by the 1989 settlement agreement among the principal parties at the site. As part of the consent decree among the property developer, EPA, the State of Massachusetts, and other responsible parties, the previous developer was released from all liability in return for transferring title of its holdings (roughly one-half of the 245 acre site) to a Custodial Trust set up under the consent decree. The Custodial Trust, an unusual entity for a Superfund site, was charged with managing the holdings and arranging the sale of as much of this largely uncontaminated parcel as possible. The Trust also distributes proceeds from such sales to the City of Woburn, the Remedial Trust that represents the responsible parties, and the EPA. Under the agreement, the trustee of the Custodial Trust also will also be released from liability, unless negligence, bad faith, or willful misconduct in carrying out its responsibilities is found.

In addition to the Custodial Trust, responsible parties, and federal and state regulatory agencies, several other stakeholders have played active roles. Non-regulatory state agencies, including the Massachusetts Bay Transportation Authority, Massachusetts Port Authority and the Massachusetts Highway Department, have negotiated with the Remedial Trust regarding the remedy for the contaminated soils that would underlie a proposed state regional transportation center that is targeted for the northwestern part of the property. The City of Woburn has strongly supported development efforts at the site, particularly through its former 12-year mayor and the Woburn Redevelopment Authority. The most active local environmental group, For a Cleaner Environment (FACE), has participated vigorously since the early 1980s. This group was highly successful in bringing media attention to Industri-Plex and Wells G & H, another Superfund site that lies several miles away. It also commented widely on documents during the remedial investigation and earlier phases of cleanup.

The Odd Couple: Economic Development and Environmental Quality at Industri-Plex

Given the importance of manufacturing in Woburn's economy since the 1600s, business interests have long played prominent roles in the City's development and local politics. In the latter part of this century, even as most of the City has been almost wholly built out, local redevelopment authorities have been active in promoting industrial parks in the area. At Industri-Plex itself, this business lineage has been very much in evidence, not only in the already-noted development efforts that catalyzed site listing, but also in the public comments on the 1986 Record of Decision, many of which came from advocates of post-remediation commercial or industrial reuse of the site. Even FACE, the local environmental group, has supported development more than one might expect. When opposition has materialized, it has generally centered on the pace and timing of development, rather than on the question of how development might impede site remediation or lead to a less stringent cleanup.

One of the consistent themes surrounding redevelopment at Industri-Plex has been traffic management which usefully illustrates

differences among the stakeholders with respect to site redevelopment and reuse. A 1993 traffic management study anticipates having over 40 acres of land available for industrial or office development at Industri-Plex after remediation. Full development on this acreage and in the vicinity is predicted to add 12,000 new jobs to the area and increase peak hour traffic counts by 7,000 to 8,000 vehicle trips. The city has responded quickly to the traffic management challenge by developing plans to improve and extend several roads through Industri-Plex to link up with existing roads north and west of the site. Furthermore, the Woburn Redevelopment Authority funded an environmental impact study and preliminary design for a new interchange from Interstate 93 that would provide ingress and egress to the heart of the site. In addition, many city officials have vocally supported the planned state regional transportation center. As envisioned at the time of this writing, this transportation center would offer a 3,500 square foot commuter rail station, 1,500 parking spaces for commuter rail and park-and-ride users, and 900 parking spaces for the airport express bus service.

Not surprisingly, opinions about the transportation center have been divided at several levels, and these differences have spilled over into questions about the site cleanup. Although state agencies publicly support the facility – pointing out that it would help the state comply with federal Clean Air Act requirements and provide twenty-five percent of the mass transit improvements required to be implemented as part of the Central Artery/Third Harbor Tunnel project in downtown Boston — some state officials are privately adverse to locating the facility on the contaminated site. They believe that expansion at other nearby properties is preferable, even while acknowledging that advocates for building the transportation center at Industri-Plex have skillfully made the siting a near *fait accompli*. The Industri-Plex location has too much momentum and too many supporters. While several Woburn City Council members have questioned whether the city should force the state to go through the local permitting process for the project, most officials have vigorously pushed for the transportation center leaving few city roadblocks to its siting.

Probably the strongest public opposition to the project came during the public hearing held in 1995 on a proposed waiver from an Environmental Impact Report requirement for the project. In the written comments leading up to the hearing and in the hearing itself, local citizens expressed concern about the adequacy of the remediation at the site where the transportation center would be located. In particular, members of FACE challenged the decision to grant the waiver when questions about the adequacy of institutional controls and groundwater remediation remained unanswered. In addition, local residents and business operators alluded to increased traffic, crime, and insurance rates that might result from the transportation center. They objected to Woburn having to bear negative impacts of the transportation center while commuters in other parts of the Boston commuting shed would garner the benefits. It is fair to say, however, that many others in the community viewed site development and associated infrastructure improvements as a way to manage existing and future traffic congestion more efficiently and to provide the foundation for new development.

A second twining of economic reuse and environmental quality relates to a thirty-acre parcel at the site that required rezoning from Industrial Park to Business Interstate (for retail use). During the public hearings leading up to the unanimous Woburn City Council vote to rezone the property, some citizens, while not necessarily opposing the proposed redevelopment per se, questioned the timing of the rezoning request. Several citizens complained that the rezoning would allow the Industri-Plex site to develop in a piecemeal fashion without an overall, comprehensive plan. Others feared potential increases in traffic and competition with downtown retail areas. Woburn officials, on the other hand, pointed out that the city would quickly receive back taxes and augmented annual property tax revenues from the sale and reuse of the parcel. More recently, the actual purchaser of the same thirty-acre parcel agreed to co-fund (with the Custodial Trust) the actual design work for the planned interchange on Interstate 93 that would provide highway access to the site. As a condition for closing the sale, this agreement includes a provision that the developer will receive a prospective purchaser agreement from the EPA – a legal device that has

been identified as a critical component in several of the proposed brownfield bills.[28] This agreement will state that the developer will not be held liable for past contamination at the site.

Thus, at Industri-Plex, development is pushing forward even though the remedy is still underway. Somewhat ironically, in light of the assumed pall that is cast on Superfund properties, the agreed-upon purchase price for the property included in the agreement significantly exceeds the top price that any other unimproved parcel has commanded in the Boston real estate market in recent years. The unit price of the thirty-acre parcel (i.e., the cost per acre) is reportedly four times the unit price of other available land. The skillful and successful advocacy by the Custodial Trust and other players for redeveloping the site has made it a compelling success story promoting the reuse of a contaminated property.

Turning the Lens on Brownfield

The momentum for reuse at Industri-Plex reflects the prime location of the property, as well as the fact that years of remedial investigation and cleanup have reduced the uncertainty about possible contamination that prospective buyers of other properties may face. The fact that prospective purchaser agreements are available and that the responsible parties are on the hook for any additional remediation of past contamination likely have helped to make the site a surprisingly attractive development alternative. To this degree, Industri-Plex offers a welcome antidote to the view that the Superfund law puts up insurmountable roadblocks to economically beneficial reuse and that the Superfund program is devoid of any successful property reclamation.

But what lessons does the Industri-Plex story offer for brownfield sites which, as was distinguished in section 2, differ from Superfund properties? After all, brownfield properties are generally less contaminated and less visible than Superfund sites and, by virtue of the

[28] Prospective purchaser agreements are between a regulator and a purchaser of a property to enter into a covenant not to sue the purchaser of a contaminated property for past site contamination. Since 1989, EPA has had a Superfund policy that allows prospective purchaser agreements, where the Agency enters into a covenant not to sue a prospective purchaser of a contaminated site in return for the purchaser's providing either funds for cleanup or the cleanup itself.

fact that they have escaped placement on the National Priorities List, they typically lack the complex and adversarial entanglement of regulators, responsible parties, and community groups found at Superfund properties. What public participation lessons can we glean from the Industri-Plex experience that may apply to brownfield properties? We offer five observations.

First, the successful redevelopment of Industri-Plex and the active participation of local government and business interests rest in no small part on the familiar real estate adage — location matters. Without question, the redevelopment of Industri-Plex would not attract as much public and private interest and involvement if it were situated in a less commercially strategic location. This point may be obvious, but it bears noting precisely because the brownfield bandwagon often fails to adequately temper the development enthusiasm with an appropriate dose of real estate reality. Existing contamination of a property is not the only factor that shapes a firm's decision to develop the property. Clearly, a host of other concerns related to the competitive advantage of the site, such as the skill of a local labor force, proximity to customers and suppliers, existing transportation infrastructure, amenities, and other quality of life issues like security, may play an equal or larger role in the decision.[29] The most well intentioned brownfield program of site cleanup and redevelopment cannot transform a site devoid of any real estate potential into a moneymaking, job-generating property which attracts public attention, particpation, and scrutiny.

A perverse corollary of this brings us to our second observation, namely that the economic development potential of a property may hinder environmental quality objectives and mute public concern about cleanup or environmental risk. At Industri-Plex, public interest is fixed on development rather than cleanup and the environment. While this partially reflects the fact that the cleanup process has been going on for more than a decade, with active public participation in the early stages of site discovery, investigation, and remedy selection, it is nonetheless troubling that in a program whose goal is the protection of human health and the environment, enthusiasm for development seemingly

[29] *See, e.g.,* Michael E. Porter, *The Competitive Advantage of the Inner City*, 73 **Harvard Bus. Rev.** 3, 55-71 (May-June, 1995).

swamped the public's interest in remediation. Clearly, those interested in potentially large payoffs anticipated from site re-use are legitimate members of the public, and thus merit representation in any public involvement process. At the same time, however, there may well be a public that, despite its silence, has concerns about health and larger quality-of-life issues. This is a public that is less able to maintain sustained interest in the site compared to the powerful federal, state, and city agencies that, together with the responsible parties and the Custodial Trust, have dominated the debate. As one central figure notes, a person identified as a strong ally of redevelopment and the Custodial Trust's work, there is a broad public "out there" who needs to be involved and listened to but who remains on the sidelines.

Why might this be a problem in the brownfield context? To the extent that reuse becomes the primary goal at brownfield sites (arguably the emphasis that has evolved in most brownfield circles) it would seem that cleanup and questions of environmental risk would receive less attention. This does not necessarily mean that the health of the public or the natural environment would be compromised, but it should give pause to all that are concerned with both the environmental and economic aspects of brownfield legislation. Is it possible to sustain a robust public interest in site remediation in the face of an active and potentially lucrative redevelopment agenda? The Industri-Plex experience casts some doubt on this. The ponderous pace of the groundwater remediation at the site invites speculation that the lack of progress is due to the fact that no strong constituency appears to be pushing vigorously for the groundwater remedy.

Third, redevelopment efforts at Industri-Plex have led to widespread interest in the site, thus making the "affected" public a larger group of people than just Woburn residents. Impacts from development, most notably those associated with the regional transportation center, are likely to bring more commuter traffic to Woburn and neighboring towns, thereby enlarging the scope of impacts from cleanup decisions. This presents a challenge for EPA and others to foster more wide-ranging public participation. The Superfund program already seeks to involve the public in cleanup. Section 117 of the Superfund statute requires that the public be given the opportunity to

comment on the proposed remedial plan and it provides for grants to local groups to help them interpret technical information. Economic development considerations may make the long-standing difficulty of adequately defining the public and the public interest even more problematic. These latter considerations can greatly enlarge the sphere of affected stakeholders.

For example, the former mayor of Woburn acknowledges that Woburn will reap the profits of an office park adjacent to Industri-Plex, while the adjacent city of Wilmington will bear much of the increased local traffic. To what extent do people affected by impacts that extend beyond political boundaries have some standing or claim on public involvement in decisions made outside of their local jurisdiction? In the case of Industri-Plex, some stakeholders in cleanup and reuse have dismissed the comments of at least one outspoken individual by noting that that person is not a citizen of Woburn. However, given that the individual in question lives in an adjacent community and in closer proximity to the Industri-Plex site than many Woburn residents, her residency status appears arbitrary. The lesson is that in the mixed currents of re-use and cleanup at the site, there is no template available to EPA or others to define the affected public or to steer public involvement efforts appropriately. This is particularly problematic given that EPA has long been criticized for the efficacy of its existing efforts to involve the public in the Superfund program.[30] More regional-scale decision processes may need to be established to account for the potential regional impacts of brownfield development, yet proposed brownfield legislation has largely been silent on this point.

Fourth, Industri-Plex provides brownfield enthusiasts a critical lesson concerning institutional controls. Institutional controls are an important part of the Industri-Plex remedy, making reuse possible at the site. These controls provide some degree of protection for contamination left on a site by controlling the kinds of land use activities that will be permitted on the site and, therefore, the potential for exposure. Such controls can also be important features at brownfield sites. To the extent that institutional controls are not merely technical appendages of a remedy, but are mechanisms that rely on complex

[30] *See, e.g.,* GAO, **Superfund: EPA's Community Relations Efforts Could be More Effective** (1994).

social and legal processes, such as local zoning, enforcement regimes of local, municipal, or county governments, and interpretation of private property laws, they are dynamic and vulnerable to changing societal preferences. Their effectiveness can be limited because local governments, who have the authority to impose controls, may have little incentive to restrict land use or may face strong political pressure calling for unrestricted use of a site. Moreover, local governments may not have the technical or financial capacity to monitor and enforce the controls. Other forms of controls that depend on private property-based restrictions must bind both current and successive users of the site to the restrictions specified in the deed, and yet the question of authority — on what legal basis can the government or some other entity challenge non-compliance with the restriction, for example — is open to interpretation. Community participation in the development and enforcement of these controls has not been thought through and, based on the Industri-Plex experience, defies easy solution.

Finally, embedded in Industri-Plex and, we would argue, at many other sites where remediation and reuse mingle, are profound questions that relate to the political economy of local communities and the processes by which a wide cross section of the public can participate in decision making. Development pressures at Industri-Plex brought powerful public and private economic interests into cleanup deliberations, and negotiation among these interests will fundamentally shape the community in which the contamination lies. Decisions about cleanup and development at the site have shifted the costs and benefits of economic revitalization and environmental remediation across space to other jurisdictions and across time to future generations. The decisions have provided economic opportunities, even windfalls, to some actors while having rather more deleterious effects on others.

Conclusions

The promise of brownfield programs is enormous. Successful brownfield redevelopment can bring increased tax revenues to local governments, as well as needed jobs and other benefits of economic activities to inner city neighborhoods. On the environmental side, the programs can lead to the cleanup of contaminated properties that

might otherwise remain untreated and a concomitant reduction in the potential risks to human health and the natural environment.

At the same time, the enthusiasm for brownfield development needs to be tempered. As we have seen at Industri-Plex, when economic development considerations become entangled with site remediation, the objectives of site cleanups are likely to change as different interests get involved in the fray. Without an all-inclusive public participation strategy to identify and sustain the involvement of affected communities over the long term, some segments of the population may be unable to participate in framing the tradeoffs between brownfield remediation and redevelopment. A broad enfranchisement of the public to weigh these tradeoffs and decide upon acceptable cleanup and redevelopment objectives requires that public participation be promoted vigorously and addressed more rigorously in brownfield legislative or regulatory language. How exactly this can be done remains to be seen, but the first step is to acknowledge that effective public participation at sites with both redevelopment and environmental objectives is more problematic than is assumed.

By shifting resources from one set of users to another, the balancing of environmental protection and economic development that lies at the heart of brownfield programs inevitably creates winners and losers. This inescapable fact must be kept in mind as Congress continues to debate brownfield legislation. Providing equal opportunities for all and promoting conditions for fair and competent environmental decision making in brownfield programs requires a thoughtful consideration and open discussion about the role and form of public participation in such programs. Without diligence, the public participation mentioned in the vague language of current brownfield legislative proposals could suffer the same ill fate as efforts in analogous federal programs also designed to shape the physical, social, and economic development of communities.

