



CENTER FOR PUBLIC ENVIRONMENTAL OVERSIGHT

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The Brownfields Assistance Project: Final Report

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The Center for Public Environmental Oversight (CPEO) is concluding its four-year-plus Brownfields Assistance Project, supported by a Research, Training, and Technical Assistance Cooperative Agreement (#TR-83132102) from U.S. EPA's Office of Brownfields and Land Revitalization. During the first two years of this project, CPEO was affiliated with the Tides Center. In September 2005, when CPEO moved to the Pacific Studies Center (PSC), it filed an Interim Report summarizing its activities at Tides. Therefore, this final report focuses on Project activities for CPEO while at PSC, but the lessons it draws are also based on its earlier activities at Tides.

The objectives of the Brownfields Assistance Project, building upon CPEO's earlier work in this area, have been to educate community stakeholders about the brownfields cleanup and revitalization process, to empower them to participate effectively, and to learn and communicate concerns expressed by those stakeholders to government officials and other brownfields professionals. In pursuing those closely related objectives, CPEO emphasizes field work: visits to communities and continuing communications with community representatives.

Over the past two years, CPEO staff have visited 32 communities, some more than once. We have organized, with local partners, seven regional workshops. We have taken part in numerous other conferences and meetings, including Brownfields 2006, where we once again facilitated the Environmental Justice/Community Caucus. Most of those activities are documented on CPEO's Brownfields web page at <http://www.cpeo.org/brownfields/brown.html#general>. In addition, those reports have been circulated via CPEO's Brownfields Internet Forum listserve, which published more than 1100 messages over the two-year period.

While much of our work is designed to enable community participation in brownfields revitalization in general, we have found that community interest is greatest when the related health issues of school exposure, vapor intrusion, or off-site migration are involved, or when there is an opportunity to increase the community benefits associated with a major brownfields project.

Community Health

Though the brownfields concept originated in environmental protection programs, most brownfields professionals see it primarily as a form of economic development. Even impacted communities are often more concerned about the future impact of brownfield redevelopment than about the health impacts of exposure to past contaminant releases. Cleanup is necessary, they believe, to enable the community improvements associated with brownfields projects.

However, in many instances those direct health concerns are front and center. This is particularly true where schools are built on contaminated property, where contaminated groundwater may be releasing toxic vapors into overlying structures through the vapor intrusion pathway, or where contamination is migrating to or from properties being addressed as brownfields. At some sites, all three conditions occur simultaneously.

As CPEO has previously documented, in many parts of the U.S. the only property available that is large enough for school construction is former industrial property or sandwiched among industrial parcels. This is particularly true in New York City as well as other parts of New York state. For example, in January 2007 Lenny Siegel visited the Mott Haven campus, a site in the Bronx where four new schools are being constructed in a former railyard. Two existing schools are next door. Parents, teachers, and neighbors are concerned about potential past, current, and future exposures.

In October 2007 Siegel visited the Information Technology High School (ITHS) campus in Queens. Built within the shell of a former metal-plating factory, ITHS has multiple state-of-the-art treatment system. But when a Fox-5 television news series featured its contaminated history this September, parents and teachers appeared unaware of its past or current condition—including underlying contamination with the organic solvents, perchloroethylene (PCE) and trichloroethylene (TCE). When community representatives sought assurances that the air in the school was safe, school authorities offered sampling results from equipment entirely incapable of measuring contamination anywhere near levels of potential concern for those compound.

After reviewing other data, Siegel met with parents, teachers, community members, and elected officials. He assured them that the school air was relatively safe—that is, it was no more contaminated than ambient air in that section of Queens, but that long-term monitoring and management was necessary. The episode illustrates well what CPEO has found elsewhere: Where schools are involved, parents and teachers need access to independent technical experts that they can trust. Authorities are generally so reluctant to admit potential health risks that they make assurances that are difficult to believe. The public remains concerned, which is why Congress incorporated school safety language into the 2007 Energy Bill.

CPEO heard from community members at other locations—such as Middleport, New York; Ithaca, New York; East Fishkill, New York; and Providence, Rhode Island—that they wanted officials to err on the side of caution. That is, even where groundwater contamination contours do *not* show a need for indoor air testing, they want it done, if there is known volatile organic contamination in the neighborhood. In at least one such case, in a former supermarket building next to a new school in Providence, they prevailed. Indoor air sampling demonstrated unexpectedly high levels of toxic vapors in the building.

These are all cases where there is suspicion that vapor intrusion is taking place. That is, even where other pathways are not complete, structures on or above contaminated groundwater may contain toxic vapors, exposing the occupants. While vapor intrusion has been more widely recognized and addressed in existing residential neighborhoods, it is emerging as one of the principal obstacles to brownfields redevelopment. Lenny Siegel's February 2007 visit to Douglas, Michigan, pointed out that there was no process there for determining whether homes should be built above a significant TCE plume.

In CPEO's December 2006 paper, "Homes, Schools, and Parks," we concluded:

It is much easier and less expensive to investigate and remediate vapor intrusion before buildings are constructed, and it's much easier and less expensive to build mitigation, such as vapor membranes or ventilation/depressurization systems, into the original design of structures, rather than to retrofit.

The current extent of contamination, as well as its anticipated fate and transport, should be understood before structures are sited and designed. In addition, shallow contamination should be removed, or systems should be in place to reduce contamination quickly to remedial action objectives. Mitigation designed to reduce indoor exposures below health-based standards should be incorporated into each new building.

Regular monitoring should prove those levels are being achieved once the buildings are completed, beginning with sampling prior to occupancy. Long-term management, reinforced by funding and continuing regulatory enforcement, including institutional controls, should be used to maximize the extent of effectiveness.

Homes and schools should only be built on likely vapor intrusion sites where there are no safer alternatives.

In some instances, however, the potential source of vapor intrusion is not the property being investigated, but another nearby property. In the case of the South Hill Elementary School in Ithaca, New York, some of the experts believe that the property is being impacted by a plume emanating from a successful, complete, upgradient

brownfields redevelopment, the former NCR property. At the Mott Haven campus in the Bronx, much of the environmental response—a grout wall and Waterloo barrier—is designed to prevent contamination from migrating onto the site from contamination sources that are *not* undergoing remediation. At Info Tech High School in Queens, remediation may need to continue indefinitely because there is an unknown upgradient source of groundwater contamination.

These cases and others suggest that the prevailing brownfields model of addressing contaminated properties one parcel at a time is often insufficient. Cleaning up a property for reuse does not fully protect occupants if contamination continues to arrive from adjacent properties. Conversely, making a property safe for reuse does not necessarily protect occupants of properties that receive contamination migrating from the brownfield property.

This does not mean, of course, that brownfields cleanup is undesirable. Rather, it suggests that many areas should be addressed on a neighborhood-wide basis, not just one property at a time. This could slow initial reuse of some properties, but it would reduce the chance that cleanup issues would be re-opened after new occupants are in place. As an additional benefit, neighborhood-wide strategies make it easier to involve the local community in a sustained, constructive way.

Community Benefits

Since the earliest days of EPA and state Brownfield programs, community groups have been suspicious that developers are taking advantage of blight, poverty, and racial inequity to extract substantial subsidies. Environmental justice organizers in Clearwater, Florida, for example, expressed concern that others were using of ghetto statistics to get rich. In 2006, CPEO's Brownfields Internet Forum reported about how a Michigan developer was exaggerating environmental obstacles to qualify for state funding. This report triggered a vibrant Brownfields Internet Forum discussion of the suitability of subsidies for various types of brownfields projects.

As a result, CPEO, in cooperation with the Center for Environmental Policy and Management and the Urban Land Institute, convened a multi-stakeholder discussion in Washington, DC in March 2007. The overall question facing the participants was, "How can we generate the best possible public returns to provision of subsidies for investments in brownfield redevelopment?" From the community perspective, the question was, "How can we benefit?"

Historically, community groups have pursued two general approaches. Often, through organizations such as Community Development Corporations, they have obtained ownership of property and managed development themselves. This is viable for small projects, but rarely has it been carried out on a large scale.

For larger projects the Community Benefits Package or Community Benefits Agreement is emerging as a viable alternative. Under this approach, community activists

back subsidies for profit-making developers conditioned on specific community benefits. Lenny Siegel documented such a package following his September, 2006 visit to the Gates Rubber site in Denver, Colorado. He originally visited the transit-oriented redevelopment project to evaluate vapor intrusion in the adjacent neighborhood, but the significance of the Community Benefits approach, pursued by the Campaign for Responsible Development, was apparent. Later, in September 2007 CPEO led a “Brownfields 101” workshop in Denver, in cooperation with local community activists—to help spread the message of successful community involvement.

CPEO brought in Denver activist Tim Lopez, as well as Cherokee Denver’s (the Gates developer) Ferd Belz, to describe the how a broad community coalition influenced the planned development. The Subsidies Forum report explained:

The Denver case study was particularly illuminating because detailed descriptions from two perspectives, developer and community activist, sculpted a three-dimensional image of the project. In the hope of public funding, Cherokee agreed to a series of conditions requested by a broad coalition of 55 community groups, the Campaign for Responsible Development. In return, the community backed, and Cherokee received \$85 million in tax-increment financing and \$41 million in other bonding authority. Cherokee's plan is to build as much as 7 million square feet of office space and 4,000 housing units.

Cherokee agreed to provide more units of affordable housing—rental as well as ownership—than generally required by the city of Denver. It agreed to clean the site’s contamination to residential standards, and to cooperate with the Voluntary Clean-Up Advisory Board. It agreed to prevailing (union-level) construction wages for infrastructure development, and it agreed to first source (local) hiring for its other direct (public facilities) hiring—at a “living wage.” It promised to make payments to the local school system, in lieu of taxes, after build-out, and it even agreed to a novel profit-sharing plan. If, as the result of the city-backed development, it makes more money than originally expected, it will pay a share back to the city—on a continuing basis. It’s notable, however, that with one exception—a promise not to bring in a big-box retail store—Cherokee did not directly make promises to the grassroots coalition. Though it met with the coalition for three years, in the final analysis it dealt directly with the city. Therefore, activists call the outcome a Community Benefits Package, not a Community Benefits Agreement.

In a subsequent (May, 2007) visit to Baltimore, Maryland, Siegel learned how local activists had struck a similar deal with the East Baltimore Redevelopment Project, a massive revitalization effort centered around bioengineering and Johns Hopkins University. This project may serve as the cornerstone of the revitalization of wide swaths on blighted, depopulated Baltimore.

Robert Hersh of CPEO took the Gates message to Milwaukee, Wisconsin, where the Good Jobs and Livable Neighborhoods Coalition is working to influence the cleanup and redevelopment of the A.O. Smith/Tower Automotive site, an industrial complex of similar magnitude and historical economic significance to the Gates site in Denver. CPEO brought in Tim Lopez from Denver to explain how the community organized to extract promises of significant local benefits at Gates Rubber.

CPEO believes that emerging success stories, such as those in Denver and Baltimore, help resolve the subsidies dilemma. If community groups work out among themselves what they want from major brownfields projects, they can use their political clout to ensure that the projects move forward in a way that benefits the community as a whole.

Sustainability

Over the final year of the project, CPEO found growing awareness, among the public and brownfields professionals alike, of the challenges of climate change and energy dependence. Significantly, there is growing interest in integrating brownfields revitalization, traditionally seen as an offshoot of the cleanup of sites with hazardous waste contamination, into efforts to overcome what is widely considered the most momentous environmental challenge of our time.

First, since brownfields strategies generally favor infill development, brownfields activity promotes development patterns that require less new infrastructure and create transportation efficiencies. For example, in Mountain View, California, where CPEO is based, environmental activists actually testified in support of a new brownfield housing development that was opposed by many of its neighbors, because it will provide residential opportunities near employment centers and public transit.

Second, both developers and community groups are including and supporting renewable energy generation and energy efficiency in brownfields projects. Increasingly, such developments are qualifying for Leadership in Energy and Environmental Design certification. Other, more contaminated sites, are seeing reuse as solarfields and wind farms.

Third, environmental justice groups have seen job training for cleanup and safe construction as a way to assure that the neighbors of urban redevelopment benefit from projects and have the capacity to resist gentrification. Now many such groups see green construction and the installation of renewable energy systems, such as rooftop photovoltaic panels, as employment opportunities at brownfields sites.

Education and Empowerment

In its field visits, workshops, and electronic communications with community members, CPEO has consistently found that activists hunger for information, not only about technical issues associated with cleanup and reuse, but about decision-making and

funding. They seek that assistance whether or not they already have a “seat at the table,” because knowledge makes it easier for them to be heard.

CPEO organized several general-purpose “Brownfields 101” workshops over the course of this project. At each event, we brought together a well qualified set of presenters from diverse perspectives. The programs were well received, but in some case attendance was disappointing. We believe this is because most people want to be educated only **when** issues are coming to a head, not because they might. Only the most dedicated community members recognize ahead of time what they’ll need to be effective when the time comes.

Targeted events, such as the Milwaukee workshop focused on the A.O. Smith/Tower Automotive site or the regional vapor intrusion workshop in Albany, New York seem to generate more enthusiasm. More important, site visits with follow-up communications—timed to meet community needs—reach slightly smaller groups of people at times where they find assistance particularly useful.

Still, it is important to recognize that the brownfields vocabulary is foreign to most communities. People care about housing and jobs, or the cleanup of pollution, but with a small number of significant exceptions, “brownfields” is primarily a term used by government officials, real estate professionals, environmental consultants, and attorneys for all of the parties. To engage the public fully in the brownfields endeavor, it’s essential to find a way to describe it in terms that most people find familiar.

Overall, brownfields revitalization has been integrated into the nation’s environmental protection and redevelopment activity. A small but growing number of impacted communities are shaping that activity to protect their health and serve their long-term interests. But more effort is necessary to recruit affected communities to serve as *bona fide* partners, and enhanced training and technical assistance is essential if they are to communicate constructively and effectively. When they are able to do so, everyone benefits.