



CENTER FOR PUBLIC ENVIRONMENTAL OVERSIGHT

A project of the Pacific Studies Center

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## **Final Report: “Community to Community” Brownfields Assistance Project October, 2013**

The Center for Public Environmental Oversight (CPEO), a project of the Pacific Studies Center, is concluding its five-year “Community to Community Brownfields Assistance Project, supported by a Research, Training, and Technical Assistance Cooperative Agreement (#TR-83415001) from U.S. EPA’s Office of Brownfields and Land Revitalization. Among other accomplishments, under this project CPEO has conducted 116 field visits to 71 communities in 20 states, published 28 on-line field visit reports, circulated nearly 2,700 messages on its Brownfields Internet Forum, maintained its Technology Tree remediation/characterization technology data base, and provided scholarships enabling more than 210 environmental justice participants to attend the last three national Brownfields Conferences. CPEO Executive Director Lenny Siegel spoke at numerous conferences and provided information to a large number of reporters, conveying community concerns and clarifying technical issues.

The objectives of CPEO’s Brownfields program are 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. CPEO Executive Director Lenny Siegel is often viewed as an expert when he visits brownfield communities, but he also brings the cachet of an experienced organizer from a community that has experienced many of the same problems. As such, he is generally trusted by the environmental justice and other communities where CPEO targets its work.

Field visits are the best way to communicate complex procedural and technical issues, and they are also a great way to understand the intensity of community concerns. Visits are often the best way to get the lay of the land, even in this age of Google Maps. For example, Lenny Siegel was able to conclude that a former dry cleaner in the Bronx, New York was unlikely to pose a vapor threat to a school located several hundred feet uphill, but in Asheville, North Carolina he called for sampling to delineate better a

groundwater plume that may be headed toward a building proposed for a new school, situated downhill from the source.

Sometimes the benefits of conducting site visits according to CPEO's model are overwhelming. In 2011, Lenny Siegel visited Kekaha, Kaua'i, Hawai'i at the invitation of local activists. Kekaha, a non-self-governing district of the County of Kaua'i, is home to more than 3,000 residents, largely of Asian and Native Hawai'ian descent. A significant fraction speak Hawai'ian at home, and at least two schools teach in the native language to serve Kekaha's large Ni'ihauan population.

Local residents wanted to accelerate the cleanup and shape the reuse of the former Kekaha Sugar Mill, an abandoned eyesore in the middle of their community. Most immediately, a state agency proposed to place electrical generators on the former herbicide mixing area across Kekaha Road from the main mill buildings, with no active remediation planned.

When he first visited, local leaders gave him a tour of the neighborhood including Kula Aupuni Niihau A Kahelelani Aloha (KANAKA PCS), a dual-language Hawai'ian charter school which leases space in the former plantation administration building. They were concerned about how close it was to the contamination site, but they did not know how decisive that would be in the cleanup process. Regulators in Honolulu and San Francisco did not realize that the school was so close, but they responded quickly once we pointed it out.

### **Vapor Intrusion**

Over the past five years, CPEO's biggest focus area has been vapor intrusion, the migration of toxic volatile substances from the subsurface into overlying buildings. In part this is because CPEO has unique expertise in this area, based upon EPA's decade-long vapor intrusion investigations in Mountain View, but it's also because vapor intrusion is rising to the surface, literally, all across the country. While vapor intrusion is a larger issue than brownfields, addressing it is one of the key challenges facing brownfields projects across the country.

More and more developments, located on or near shallow groundwater plumes containing compounds such as trichloroethylene and tetrachloroethylene, are designing vapor mitigation—at least vapor barriers and passive depressurization—into their projects. The cost of including mitigation in original construction is minor compared to the long-term sampling that might otherwise be required. The city of Mountain View actually requires mitigation in suspect areas as part of its building permit process. When a new arm of the regional TCE plume was discovered in late 2012, the residents and developer of the Classics project, in the midst of new toxic discoveries, could rest at ease because the new homes were built to be protective.

Sometimes vapor intrusion threatens existing homes downgradient from property with groundwater contamination. When that property is proposed for development, it's

essential to sort out responsibility. If there's a viable responsible party, it is held accountable for remediating the plume on and off site, but if the developer is a cleanup volunteer, responsibility isn't so clear. It's essential that regulatory agencies establish strategies for protecting off-site building occupants as well as those who will live and work in the new project.

CPEO has taken the lead in helping people in impacted communities offer input on sampling, mitigation, and long-term management strategies. Though initially few people understand the complexity of vapor intrusion investigations, over time community leaders have developed expertise and contributed positively to the discussions.

The most significant emerging issue is *notification*: At locations such as the artists' workspace at 2350 Fifth Avenue in Harlem, New York, and the Future Stars indoor athletic facility in Dracut Massachusetts, building occupants were unaware not only of the potential for vapor intrusion but also confirmed exposures. At PS51x (Bronx New School) in the Bronx, school officials learned in January 2011 that students and teachers were being exposed to unacceptably high levels of TCE from the subsurface, but they notified no one until August, during Summer break. Even in Mountain View, where Lenny Siegel has been involved for more than three decades, occupants of commercial buildings and residential tenants were not fully aware of their potential risk. Particularly at the above two New York City examples, failure to notify became a public scandal, with media coverage and contentious public meetings.

CPEO has strongly recommended that all vapor intrusion responses include robust, target public notification activities, not just because people have a role to play in advising regulators, responsible parties, and building owners, but also because they may wish to make personal risk management decisions. This in particular applies to women who might become pregnant, because of EPA's findings that exposure to low levels of TCE during the first trimester of pregnancy may trigger cardiac birth defects. Such women, including those who have just discovered that they are pregnant, may take personal steps (such as working from home) to avoid exposure.

### **Schools**

Schools, day care centers, and youth athletic facilities represent an important intersection of brownfields revitalization and environmental justice, for two key reasons. First, at youth-oriented facilities with a history of contamination the primary concern is health. Parents in West Los Angeles, Atlantic Highlands, and the Bronx have expressed concern about whether they should even send their children to public schools.

Second, schools are almost everywhere. The Kekaha case study (above) illustrates how close schools may be to sources of contamination. In New York City, all but two of the dozen or schools where CPEO has been involved appear to overly PCE contamination of unknown origin. (The other two have TCE plumes of known origin.) In DeLeon Springs, Florida, where the principal community interest is revitalization of the central commercial strip, there is a school one block north of a major petroleum spill. The Jordan

Downs redevelopment project in Watts is bounded by Jordan High School, and some soil removal has already been conducted on the campus baseball field.

In urban areas with growing school populations, such as Los Angeles and New York City, it is often difficult to find suitably large properties for new schools without a history of industrial use and contamination. California, as a result of the Belmont Learning Center debacle in the late 1990's, carefully assesses each proposed school site. New York City, on the other hand—which actually places schools in old factory buildings—found a loophole to create new schools on leased property without any environmental review. Since the PS51x outrage in 2011, the New York City School Construction Authority conducted and released a large number of environmental reviews of existing leased schools, but to our knowledge there is no regulatory requirement or review.

In general, in a fiscal environment where uncertainty about the physical environment can undermine the ability to fund school construction, school districts should conduct environmental site screening *before* final site selection, and that screening should be overseen by environmental regulators.

Even where cleanup is conducted under regulatory oversight, such as the new, modern Mott Haven Campus in the Bronx, residual contamination often remains in place. While New York State does require a long-term Site Management Plan, that plan was weak and poorly implemented. Strong community involvement forced better site management, but still officials are unwilling to fully notify students and their families about the potential for exposure. At the Manhattan Center for Science and Mathematics, originally constructed as Benjamin Franklin High School in the early 1940s, parents of incoming students wondered why they were not told of site contamination and why cleanup plans were not posted on the web site they used to decide which high school to send their children too.

### **Climate Change**

Climate change is the overarching environmental issue of our time, and the communities around brownfields are intensely aware of the challenge. In fact, people often want to take small steps toward sustainability, such as using solar power to run remediation treatment systems, as part of site cleanup. Communities tend to support the conduct of sustainability analysis in feasibility studies or the equivalent.

In Hartford, Connecticut we worked with the Connecticut Coalition for Environmental Justice to promote the installation of a photovoltaic array on a large local landfill, and we've studied similar efforts in Massachusetts. In rural Mississippi, where there is legacy of unregulated dump sites, communities see an environmental and economic opportunity in solar landfills. EPA was receptive to our comments suggesting a greater emphasis on community engagement in *Best Practices for Siting Solar Photovoltaics on Municipal Solid Waste Landfills*.

On a broader scale we believe not only that communities are not only *not* a obstacle to the development of renewable energy on landfills and brownfields, but that they can be powerful source of support. We propose to create a network of environmental justice community groups to promote solar and other renewable development on contaminated lands, recognizing that the issues go beyond cleanup and land use planning to include the creation of incentives that will make such investment competitive with other forms of energy.

Other communities, particularly those impacted by Superstorm Sandy in 2012, are organizing to create climate change resilience. While it is more obvious that infrastructure and homes must be protected against unusual storm events, Sandy showed that many contaminated waterfront properties lay directly in the path of floodwaters. Climate-change-related storms threaten toxic releases from both unremediated and remediated properties. In some regions, such as the San Francisco Bay Area, there are many landfills along the coastline. Adapting to climate change means protecting such properties against flood events and/or the establishment of programs to rapidly assess and address storm-related releases.

### **National Brownfields Conferences**

CPEO played an active role in the three National Brownfield Conferences that took place during the grant period: New Orleans (November, 2009), Philadelphia (April, 2011) and Atlanta (May, 2013). In addition to presenting at each event and helping to organize the Environmental Justice caucuses, CPEO provided scholarships to more than 210 attendees total. In addition to hotel scholarships, CPEO covered all but \$25 each of the registration charges for Atlanta participants, many of whom would not otherwise have been able to attend the conference in their own backyard. For Atlanta, funding from the grant was supplemented with private contributions.

We believe that the presence of environmental justice and other community participants in national brownfields conferences—as well as other national environmental meetings—is not just important for those participants. It enhances the experience for other attendees who represent entities who need to hear the perspectives of the people who live, work, study, and play on or near brownfields and redevelopment projects.

After the Atlanta conference many of the scholarship recipients asked CPEO to create a vehicle for continuing communications. We believe community members across the nation would benefit from a discussion list or similar medium through which they can share ideas, re-tell lessons, and make announcements to each other. In general, while not all brownfields communities are aware of brownfields and plans to revitalize them, those who are informed clearly benefit from both disclosure and more detailed background and technical assistance.

### **Site Visits Conducted under this Project**

<b><u>Community</u></b>	<b><u>State</u></b>	<b><u>Date</u></b>	<b><u>VI</u></b>	<b><u>Kids</u></b>	<b><u>Other</u></b>	<b><u>Person</u></b>
Ambler	PA	March, 2010			asbestos	Siegel
Asheville	NC	December, 2012	x	x		Siegel

<b>Community</b>	<b>State</b>	<b>Date</b>	<b>VI</b>	<b>Kids</b>	<b>Other</b>	<b>Person</b>
Atlantic Highlanda	NJ	April, 2009	x	x		Siegel
Atlantic Highlanda	NJ	June, 2009	x	x		Siegel
Atlantic Highlanda	NJ	July, 2009	x	x		Siegel
Atlantic Highlanda	NJ	October, 2009	x	x		Siegel
Bethpage	NY	June, 2011	x			Siegel
Bethpage	NY	August, 2012	x			Siegel
Bethpage area	NY	February, 2011	x	x		Siegel
Brisbane	CA	January, 2010	x			Siegel
Brockton	MA	July, 2010			solar	Hersh
Bronx	NY	April, 2009	x	x		Siegel
Bronx	NY	March, 2010	x			Siegel
Bronx	NY	May, 2010	x	x		Siegel
Bronx	NY	June, 2010	x	x		Siegel
Bronx	NY	July, 2010	x	x		Siegel
Bronx	NY	February, 2011	x	x		Siegel
Bronx	NY	July, 2011	x	x		Siegel
Bronx	NY	November, 2011	x	x		Siegel
Bronx	NY	October, 2012	x	x		Siegel
Bronx	NY	April, 2013	x	x		Siegel
Brooklyn	NY	April, 2013			climate change	Siegel
Canoga Park	CA	Narch, 2009	x			Siegel
Canton	MS	May, 2013		x		Siegel
Chatsworth	CA	Narch, 2009	x			Siegel
Chatsworth	CA	January, 2010	x			Siegel
Dayton	OH	April, 2009	x			Siegel
DeLeon Springs	FL	November, 2012	x	x		Siegel
Detroit etc.	MI	September, 2010			auto	Lopez
Downey	CA	April, 2009	x			Siegel
Dracut	MA	October, 2012	x	x		Siegel
Eatontown	NJ	October, 2012	x			Siegel
Endicott	NY	October, 2012	x			Siegel
Evansville	IN	May, 2011	x	x		Siegel
Fair Lawn	NJ	June, 2011	x			Siegel
Fridley/New Brighton	MN	February, 2013	x			Siegel
Garnet, etc.	MT	October, 2009			mining	Lopez
Gowanus, Brooklyn	NY	May, 2009				Siegel
Gowanus, Brooklyn	NY	July, 2010				Siegel
Gowanus, Brooklyn	NY	February, 2011				Siegel
Gowanus, Brooklyn	NY	April, 2013				Siegel
Greepoint, Brooklyn	NY	November, 2008	x			Siegel
Greepoint, Brooklyn	NY	January, 2009	x			Siegel
Harlem, Manhattan	NY	March, 2011	x			Siegel
Harlem, Manhattan	NY	May, 2012	x			Siegel
Harlem, Manhattan	NY	August, 2012	x			Siegel
Harlem, Manhattan	NY	October, 2012	x			Siegel
Hartford	CT	March, 2010			solar	Siegel
Hartford	CT	July, 2010			solar	Siegel
Hopewell Junction	NY	March, 2012	x			Siegel
Hopewell Junction	NY	October, 2012	x			Siegel
Houston	TX	August, 2009		x		Siegel
Indianapolis	IN	May, 2009				Siegel
Jersey City	NJ	July, 2009			chromium	Siegel
Jersey City	NJ	June, 2010				Siegel

<u>Community</u>	<u>State</u>	<u>Date</u>	<u>VI</u>	<u>Kids</u>	<u>Other</u>	<u>Person</u>
Jersey City	NJ	July, 2011				Siegel
Jersey City	NJ	May, 2012			chromium	Siegel
Jersey City	NJ	August, 2012			agriculture	Siegel
Kekaha, Kauai	HI	August, 2011			agriculture	Siegel
Kekaha, Kauai	HI	October, 2011			agriculture	Siegel
Lake Charles	LA	August, 2009	x			Siegel
Madison	WI	May, 2012	x			Siegel
Manhattan	NY	November, 2008	x	x		Siegel
Manhattan	NY	May, 2009	x	x		Siegel
Manhattan	NY	June, 2009	x	x		Siegel
Manhattan	NY	October, 2009	x	x		Siegel
Manhattan	NY	February, 2011	x	x		Siegel
Manhattan	NY	June, 2011	x	x		Siegel
Manhattan	NY	October, 2012	x	x		Siegel
Merced	CA	July, 2009			chromium	Siegel
Middleport	NY	October, 2008	x	x		Siegel
Mountain View	CA	October, 2009	x	x		Siegel
Mountain View	CA	March, 2013	x			Siegel
Neptune	NJ	October, 2012	x			Siegel
Nevada City	CA	September, 2010			mining	Siegel
Nevada City	CA	November, 2010			mining	Lopez
New Bedford	MA	October, 2009	x			Siegel
New York	NY	July, 2010	x			Siegel
Newburgh	NY	October, 2012				Siegel
Northwest Bronx	NY	July, 2011	x	x		Siegel
Northwest Bronx	NY	October, 2011	x	x		Siegel
Northwest Bronx	NY	March, 2012	x	x		Siegel
Northwest Bronx	NY	April, 2013	x	x		Siegel
Odenton area	MD	May, 2011			coal ash	Siegel
Orlando	FL	November, 2011	x			Siegel
Palo Alto	CA	November, 2010	x			Siegel
Park Slope, Brooklyn	NT	June, 2009	x	x		Siegel
Park Slope, Brooklyn	NT	July, 2009	x	x		Siegel
Philadelphia	PA	January, 2009	x			Siegel
Philadelphia	PA	June, 2010				Siegel
Phoenix	AZ	February, 2010	x	x		Siegel
Pompton Lakes	NJ	April, 2009	x			Siegel
Port Jefferson	NY	June, 2011	x			Siegel
Providence	CA	March, 2010	x	x		Siegel
Richmond	CA	November, 2008	x			Siegel
Rockaway Park	NY	May, 2010				Siegel
Skyland	NC	September, 2008	X			Siegel
Skyland	NC	March, 2012	x			Siegel
Torrance	CA	April, 2009	x			Siegel
Upper Manhattan	NY	October, 2009	x	x		Siegel
Upper Manhattan	NY	November, 2010	x	x		Siegel
Upper Manhattan	NY	February, 2011	x	x		Siegel
Victor	NY	October, 2008	x			Siegel
Watts	CA	October, 2013	x	x		Siegel
Watertown	NY	October, 2012	x	x		Siegel
West Los Angeles	CA	January, 2010	x	x		Siegel
Westhampton	NY	February, 2011	x	x		Siegel
Westhampton	NY	March, 2012	x			Siegel

<b><u>Community</u></b>	<b><u>State</u></b>	<b><u>Date</u></b>	<b><u>VI</u></b>	<b><u>Kids</u></b>	<b><u>Other</u></b>	<b><u>Person</u></b>
Westport, Baltimore	MD	November, 2008			benefits	Siegel
Westport, Baltimore	MD	September, 2009	x			Siegel/Lopez
Westport, Baltimore	MD	June, 2010				Siegel
Westport, Baltimore	MD	May, 2011	x			Siegel
Weymouth	MA	October, 2009				Siegel
Williamsburg, Brooklyn	NY	October, 2011	x	x		Siegel
Wright Township	PA	October, 2008	x			Siegel
Yazoo City	MS	May, 2013			solar	Siegel