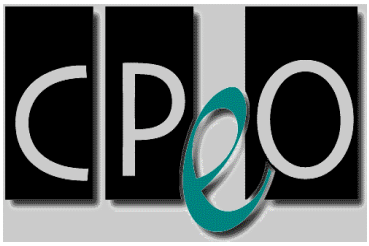

CENTER FOR PUBLIC ENVIRONMENTAL OVERSIGHT
A project of the Pacific Studies Center
278-A Hope Street, Mountain View, CA 94041
Voice: 650-961-8918 or 650-969-1545 Fax: 650-961-8918 <lsiegel@cpeo.org> http://www.cpeo.org

January 13, 2011

U.S. EPA
Superfund Docket
Docket ID No. EPA-HQ-SFUND-2010-0894
By E-Mail at superfund.docket@epa.gov

Dear Sirs/Mmes:

On behalf of the Center for Public Environmental Oversight, I would like to express my appreciation for the opportunity to comment on the Interim Final guidance, "A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites." I consider the Guide straightforward, comprehensive, and valuable, as well as long overdue.

The most important take-away message I got from reading the new institutional control (IC) guide, however, was that planning, implementing, maintaining, and enforcing institutional controls is complex and difficult. At some sites, ICs are unavoidable, because it may be impossible to remove or treat hazardous substances quickly. However, the uncertainty, costs, and other challenges associated with "cleanups" that do not allow unrestricted use or unlimited access suggest that active cleanup should remain the first choice of decision-makers, and that they should think twice before relying primarily on institutional controls to protect human health and the environment.

I appreciate that EPA recognizes that robust IC planning is not only important for implementing the controls themselves, but it may also influence the selection of environmental responses: "For example, an accurate estimate of the full costs to all parties (e.g., EPA, the State, local government, property owners, federal agencies, and responsible parties) can help evaluate the cost-effectiveness of alternative remedies during response selection, where ICs are an important component of total remediation and/or removal." (p. 8)

It is good that the Guide states that cost estimates should consider the long long-

term: "In addition, IC maintenance, and enforcement costs may extend beyond the 30-year period traditionally used in many response cost calculations. These continuing costs should be acknowledged when developing response cost estimates and can be important in evaluating long-term effectiveness." (p. 8) However, because long-term cost estimates are uncertain, I suggest that they be revisited periodically, perhaps as part of the five-year (or other required) review of remedies.

Appropriately, the document acknowledges the need to be aware of and possibly ask local governments to modify cumulative zoning ordinances. (p. 21) The permissiveness of certain industrial zone classifications is not always recognized.

The Guide's suggestion (p. 25) that institutional controls be reviewed annually in the absence of information supporting a different period is good, as is the option of more frequent monitoring. But I would go further. Monitoring and inspection timetables should be *tiered*, with some activities conducted continuously with the use of Internet-based communications. Other activities, such as visual inspection, might be conducted daily, because there is already someone conducting inspections for other purposes. Other monitoring may take place weekly, monthly, or quarterly, while some would be required after unusual events such as fires or major storms. In this framework, the annual review would pull together all the information generated during the year for certification by the regulators and release to the public.

I would like to reinforce the importance of tailoring local government's role to match its will, capability, and resources. Many local governments for small communities are unwilling or unable to take major responsibility for institutional controls that apply to only a fraction of their jurisdictions, even if they support the objectives of the ICs. My own city, Mountain View, opposed the use of zoning to implement EPA's proposed remedy for vapor intrusion at the MEW Superfund Study Area, but as it explains in Attachment 3 of its letter to EPA (see http://www.cpeo.org/pubs/MV-VIPolicy.pdf), it already uses the California Environmental Quality Act and its planning and building permit processes to pursue the same goals. (See my discussion of vapor intrusion, below.)

I fully support the Guide's language on the importance of community involvement, not only in establishing institutional controls, but also in conducting long-term monitoring: "Because community members who live or work near the site will often have a vested interest in ensuring compliance with the ICs, they are generally the first to recognize changes at the site. Although local residents should not be relied upon as the primary or sole means of monitoring, the site manager should encourage local stakeholders to become involved in monitoring ICs." (p. 26)

However, most communities cannot easily assume this role. The planning, implementation, maintenance, and enforcement of institutional controls are legally complex and technically challenging. For example, most engaged community members would have difficulty reading the Interim Final Guide. To bridge the capability gap, it may be necessary to continue to provide independent technical assistance to community members even after remedial decisions are made.

Furthermore, tools that simplify long-term site management for the public are essential. Site Managements Plans, Institutional Control Implementation and Assurance Plans, and similar documents are typically lengthy and difficult to understand. I recommend the routine preparation of simple tools, such as the "Report Card" (see http://www.cpeo.org/pubs/MottHavenGuide.pdf) that my colleague and I developed for the Mott Haven Campus in the Bronx, New York. Such tools should enable continuing oversight by community members who care about a site and who are in a position to monitor the project, directly and indirectly.

Vapor Intrusion

Vapor intrusion responses raise a particular set of issues for institutional controls that should be addressed in this guidance, the final Vapor Intrusion Guidance, or both. ICs are typically used to *prevent* activity, such as construction, excavation, drilling for water, or even access. However, in vapor intrusion responses, ICs are necessary to *require* activity, such as sampling, mitigation (engineering controls), monitoring, and notice. That is, it is unusual for regulators to restrict land use based upon vapor intrusion risk. Instead, where there is a potential for vapor intrusion, exposure is prevented through engineering controls, such as sub-structure depressurization systems and vapor barriers. Institutional controls may be needed to ensure that such controls are applied where necessary, that they are operated successfully for the duration of the potential exposure, and that building owners and occupants are aware of the potential risk.

On source properties, the institutionalization of investigation, mitigation, long-term monitoring, and notice is relatively simple. Institutional controls on existing or new structures can require sampling, operation and maintenance of mitigation systems if necessary, and long-term monitoring to ensure that mitigation systems are operating or that indoor air contamination is below unacceptable concentrations. Unfortunately, at buildings occupied by non-owners such as tenants, employees, and students, there are few examples of informed notice. But that can easily be provided.

However, where volatile organic compounds migrate under nearby properties, there is a vapor intrusion risk to parties who are not responsible for the release. Accordingly, regulators normally do not force homeowners—or any other property owner for whom the risk is limited to the owner and his/her family—to accept sampling, mitigation, or monitoring. For a number or reasons, including the belief that the detection of vapor intrusion will reduce property values, many homeowners decline to cooperate. This is unfortunate, but understandable.

Here in Mountain View, homeowners adjacent to the MEW Superfund Study Area asked that their neighborhood be excluded from the vapor intrusion study area, because they were worried about the impact of that designation on their property values. EPA acceded, partly because all but one home—with unusual construction—tested had come up clean. I understand why my neighbors don't want to suffer financially from off-

site pollution, but response programs must be designed carefully so the cost and/or health risk is not simply transferred to new owners and occupants.

Where property owners above an off-site plume agree to testing or mitigation, institutional controls can be used to require responsible parties to continue operation, maintenance, and monitoring. Again, that's relatively simple. In such cases, regulators are reluctant to require the off-site owners to continue to cooperate, but at the time of initial participation the owner should be required to agree to notify potential buyers or renters at the point of marketing of the vapor intrusion condition of the structure. This seems both fair and legal.

But what happens when a property owner refuses to cooperate at the outset of a vapor intrusion investigation? How can future buyers and tenants be warned and offered the response (sampling, mitigation, and monitoring)? A deed notice might let potential buyers know of the potential for exposure, but there is no comparable mechanism for potential tenants. Furthermore, a deed that identifies the potential risk does not let people know what they can do about it.

The same problem occurs where an owner initially cooperates but later "unplugs" a mitigation system. How can a new resident re-start mitigation and monitoring?

Moreover, there may be properties where the acknowledged risk of vapor intrusion increases because of continuing plume migration or the tightening of exposure standards. There needs to be a way to offer owners and occupants of those properties the same response offered to those initially believed at risk.

Therefore, I recommend that institutional controls at hazardous waste sites with a potential for off-site vapor intrusion require the responsible parties to continue offering vapor intrusion services (sampling, mitigation, and monitoring) as long as the potential for exposure continues.

Second, owners of existing rental property—including single family homes—with potential vapor intrusion should be required to accept sampling (and mitigation and monitoring if required). They should be required to notify prospective tenants of the potential for vapor intrusion, and they should be required to notify regulators whenever the tenancy changes—so regulators can offer additional information and guidance. Residents of owner-occupied homes who choose not to cooperate initially still should be required to cooperate and to notify prospective tenants, as well as regulators, whenever such a home is offered for rental. Since the obligations of landlords vary enormously across the country, implementing this condition will require legal research.

Third, residents of owner-occupied homes who choose not to cooperate initially still should be required to notify prospective buyers, as well as regulators, whenever such a home is offered for sale. That would give the buyers the opportunity to request vapor intrusion services. Disclosure requirements are also all over the map, so this too will require legal research.

If conditions require mitigation where new construction or building additions are proposed, property owners should not have the choice of opting out. There are several possible legal mechanisms for accomplishing this. Here in Mountain View, for large projects (over 10,000 square feet) the city has required mitigation as Conditions of Approval under the California Environmental Quality Act (CEQA). Even projects too small for CEQA review may be required, through the building or planning permit processes, to mitigate.

Furthermore, if conditions at a new building require mitigation, potential renters and buyers should be notified at the point of marketing of the potential for vapor intrusion and the steps that are being taken to address it.

Finally, in determining whether conditions require mitigation at sites where new construction is planned, regulators should err on the side of caution because the cost of mitigation during design and construction is very low compared to the cost of retrofitting mitigation if vapor intrusion is discovered after construction. One way to do this is to require passive mitigation that can be made active (with the installation of a blower fan on an existing vent pipe) if post-construction sampling shows unacceptable contaminant levels indoors. That is, either site-specific institutional controls or building codes, as an alternative, should require mitigation in all new construction above or near any identified or suspected plume of TCE, PCE, or similar compounds. In cases, it may be possible for the builder to recover the additional expenses from the responsible parties. (In much of the country, there may be an additional reason to require vapor mitigation: the presence of naturally occurring radon in the subsurface.)

EPA and other government agencies have worked hard over the past several years to understand vapor intrusion: how to measure it and how to address it. Vapor intrusion investigations and responses are underway at a rapidly growing number of sites. But there are relatively few sites where institutional controls have been developed to ensure the long-term protection of off-site building occupants.

Sincerely,

(submitted electronically)

Lenny Siegel
Executive Director