

2012 Vapor Intrusion Stakeholder-Involvement Forum

Summarized by Lenny Siegel

March, 2012

On March 19, 2012 U.S. EPA sponsored the 2012 Vapor Intrusion Stakeholder-Involvement Forum to hear input from affected communities on community engagement practices and policies at vapor intrusion sites, as part of the development of its Final Vapor Intrusion Guidance, scheduled for release this November. On behalf of EPA, I invited public stakeholders from ten communities that have experienced vapor intrusion investigations. Eight presented, all but one via Webinar:

Kelly King Lewis, parent of former students at Bronx News School/PS51x (Nessen Lamps site), Bronx, New York

Lisa Riggiola, Concerned Citizens of Pompton Lakes, DuPont site, Pompton Lakes, New Jersey
John “Buddy” Andrade, Old Bedford Village Community Development Corporation, Morse Cutting Tools site, New Bedford, Massachusetts

Ken Deschere, Ithaca-South Hills Industrial Pollution organization, Morse Chain/Emerson Power site, Ithaca, New York

Barry Durand, CTS/Mills Gap Road site, Asheville, North Carolina

Laura Ward, Family Oriented Community United Strong, American Beryllium/Lockheed-Martin site, Tallevast, Florida

Mary Moore (with technical advisor Richard Rushworth), Lindon Park Neighborhood Association, Motorola 52nd Street site, Phoenix, Arizona

Jane Horton, member of local community advisory boards, MEW Superfund Study Area, Mountain View, California

Their presentations may be downloaded from <https://iavi.rti.org/WorkshopsAndConferences.cfm>

I began the session by outlining three central themes:

- Vapor Intrusion *is* rocket science.
- **Trust** is the key to cooperation.
- The cooperation of impacted building owners and occupants is essential.

I underscored how positive community relations are essential at most vapor intrusion investigations, because the cooperation of building owners and occupants is necessary to conduct sampling and/or mitigation. In fact, at many sites a majority of buildings designated for sampling are not sampled because residents do not provide permission.

In describing their experiences at their sites, the presenters reinforced these themes. Most of them expressed frustration with the government agencies with whom they work, but many also indicated optimism that recent improvements were providing them with opportunities to see that their communities would be better protected. Seven key issues emerged over the course of the afternoon.

1) Trust is the key to cooperation. Many of the speakers described situations in which community members do not trust regulators, responsible parties, and their consultants.

Regulators arriving on scene to address vapor intrusion should not expect to be viewed as “white-hat” saviors at sites, such as CTS Asheville or DuPont Pompton Lakes, where the community is frustrated with a long history of inaction and delay, or where nearby sites, such as the New Bedford Harbor Superfund site, have soured community confidence in the regulatory system. Regulators and other parties should carefully consider the history of the community’s experiences and work to build trust, both in the form of their communications and by responding substantively to community concerns.

2) People have a **right to know** about confirmed or even possible vapor exposures. At the Bronx New School (PS51x), the New York City Department of Education waited several months to notify parents and staff that unacceptably high levels of TCE had been documented in the school building. At Tallevast residents were not told about the TCE plume under their homes. Not only does failure to disclose accentuate mistrust, but it also prevents stakeholders from playing constructive roles in studying and resolving difficult situations.

While regulators are right to mask the exact location of private-home sampling data, they should enable residents to voluntarily share their information. In Ithaca, residents near Morse Chain compiled their individual results and published them on the Web. At other sites regulators could publish similar information after obtaining suitable privacy waivers from residents.

3) **Technical assistance** is essential. Community stakeholders do not disagree with the “multiple lines of evidence” approach to vapor intrusion evaluation, but they generally find it hard to understand. Those communities with EPA-sponsored (or otherwise subsidized) technical advisors are better able to cope with the complex sampling reports than those that are on their own.

4) Talk to people in their **own language and environment**. Presenters emphasized the need to translate both documents and oral presentations into languages spoken in the community. The need for translation is obvious in neighborhoods such as Lindon Park, which is predominantly Spanish-speaking, but it is often valuable for engaging impacted groups, such parents at a day care center in Pompton Lakes, where most residents of the community speak English. Not only does translation enable people to understand the information, but it also makes them feel more comfortable with the process.

Similarly, regulators and others should recognize that not everyone is used to coming to meetings and viewing PowerPoint. Sometimes the best communication takes place across a kitchen table.

5) Conduct *more* **sampling** over time and space (including **radon**)/or *less*. A number of presenters were aware that vapor intrusion sampling results are subject to variability over time and space. Consequently, they advocated more sampling rounds and/or locations. In response to the questions supplied in advance, some (all who responded) indicated support for the use of radon measurement as a proxy for the sampling for volatile organic compounds, particularly if it makes it possible to conduct additional (and even continuous) sampling.

Some presenters, however, advocated routine or *blanket* mitigation. Under this approach subslab depressurization systems are supplied as a cost-effective, health-protective *alternative to repeated sampling*. Radon sampling could be used to monitor the continuing reliability of such systems.

6) Communicate risk to residents and homebuyers independent of remedy selection. In Mountain View, for example, residents and prospective residents learn about the contamination (through news articles and Web searches) and wonder if specific homes are at risk. This has continued even after the vapor intrusion remedy was selected. EPA responds to such queries, but it would be helpful for EPA's Final Vapor Intrusion Guidance to help regulators anticipate such questions as well as to provide a framework and clear procedure for addressing them.

Most of the presenters expressed concern that many people who had been exposed to toxic vapors had contracted cancer or, in the case of the Bronx New School, acute illnesses as a result of that exposure. While it is generally not the responsibility of environmental regulators to evaluate health claims, some type of response is essential for building trust, because health is what many people want to hear about. At the very least, regulators should share information about the conceptual site model and sampling results that would allow people to reconstruct past exposures. For example, the finding of TCE in soil beneath PS51x, which was established inside a former factory, suggests that students and staff were exposed to TCE vapors for the entire 19-year life of the campus.

7) Be prepared to discuss property values and taxes. Many community members are concerned that information about contamination will drive down the value of their homes, yet often their property taxes are not reduced. This is a major reason that homeowners are often reluctant to allow outsiders to collect samples on their property. Even though it is not within regulators' scope of work to resolve these issues, they should be prepared to discuss them with residents. Remediation, as well as mitigation, often helps property values recover. Routine mitigation, in which the installation of systems is not necessarily linked to findings of unacceptable exposures, may actually reverse stigma while protecting occupants from exposures to volatile organic compounds and radon.

Public stakeholders should be treated as partners in vapor intrusion responses. It may take extra effort to inform and engage them, but their participation is integral to successful outcomes.