

Defense Strategies For Vapor Intrusion Toxic Torts



Law360, New York (May 16, 2014, 1:24 PM ET) -- A great deal has been written about vapor intrusion issues lately. By and large, articles addressing vapor intrusion have focused on recent standards published or to be published by either regulatory agencies or ASTM. Many of those articles focus on the scientific basis for vapor intrusion, techniques to study it, or the necessity of evaluating it in the context of due diligence. This is not one of those articles. Rather, this article focuses on a relatively recent phenomenon of toxic tort lawsuits being brought against corporations and developers based, in whole or in part, on the existence of vapor intrusion issues affecting properties.

Recently, I had the occasion to speak to some very sophisticated in-house environmental counsel during a break at the Pennsylvania Environmental Law Forum in Harrisburg, Pennsylvania, at which I was speaking. The subject of vapor intrusion came up, albeit in the standard context — changing regulatory standards and the need to conduct vapor intrusion due diligence. I casually mentioned the fact that I am currently involved in defending a major corporation in a toxic tort lawsuit based in large part on vapor intrusion claims. Suddenly, the group got quiet. Eyes flew wide open and, at least as I recall it, jaws seemed to subtly drop. One in-house counsel remarked, “You just raised one of my worst nightmare scenarios!” Suffice to say, this issue appears to be on the minds of sophisticated in-house counsel — and for good reason.

Tort claims based on allegations of vapor intrusion are very likely to become a standard part of lawsuits alleging personal injury and property damage in situations in which groundwater and/or soil contains volatile organic compounds (“VOCs”). Because of the sheer number of sites that contain residual VOCs, the extremely conservative screening levels for assessing the potential for vapor intrusion, and the relatively undeveloped science regarding the health effects of exposure to VOCs through inhalation of vapors, developers, corporate risk managers and their counsel are well advised to look carefully at this issue.

The Context for Vapor Intrusion Toxic Torts

There are literally thousands of properties across the country that contain residual VOC contamination, both in groundwater and in soils. Many of these properties were sold for redevelopment many years or decades ago. Moreover, even in situations where the properties that are the source of the VOCs have not been sold, groundwater containing VOCs has migrated offsite to other properties that have been or are likely candidates for development.

Years ago, when remedies for sites containing VOC contamination were developed, exposure scenarios did not consider vapor intrusion into buildings. The first question assessed was whether anyone was drinking VOC-contaminated groundwater (or perhaps being exposed to vapors through showering). Where that was a possibility, developers and corporations spent considerable sums to bring in public water supplies. The second question focused on whether there was any exposure to soils containing VOCs. In this instance, the focus was typically on shallow soils and the potential for direct contact. Where there was deeper soil contamination, the focus was on whether the VOCs would reach groundwater and cause water supply concerns.

Seemingly safe in the belief that there was no exposure where public water had been secured and shallow soils did not contain VOCs, many developers and corporations allowed properties to be developed, oftentimes into residential properties. Ironically, given the push for brownfields redevelopment (leaving “greenfields” properties untouched), developing such properties was even viewed as environmentally beneficial.

Vapor Intrusion Basics

Vapor intrusion is generally defined as the migration of VOCs from contaminated groundwater or potential soils into overlying structures or buildings. That process occurs as a result of the natural tendency of VOC compounds, such as, but certainly not limited to, trichloroethylene (“TCE”) and tetrachloroethylene (“PCE”), to volatilize and migrate up toward the surface of the ground. Where buildings have been constructed over such areas, the vapors may collect under the slab of the building, eventually finding their way into the building through cracks in the foundation or through openings in the foundation used for utilities (water, sewer and electricity). In some cases, such migration can occur over relatively long distances as VOCs will travel in a preferential pathway along underground pipes.

As noted above, until relatively recently, vapor intrusion was not widely recognized as a source of environmental exposure in buildings. That is no longer the case. In fact, most states have begun to address vapor intrusion issues. Approximately 46 states currently address vapor intrusion issues in guidance documents or have vapor intrusion requirements in remediation programs. The United States Environmental Protection Agency has also recently begun to address vapor intrusion issues in the context of determining remedies at Superfund sites. This will undoubtedly continue. ASTM International, which has published standards incorporating vapor intrusion studies into due diligence, expects to publish additional standards addressing vapor intrusion issues at brownfields sites.

While the current focus of vapor intrusion activities is likely to adequately address future remediation of sites containing VOC contamination in groundwater and soils, it is unlikely to address the thousands of

sites across the country at which remedies have been completed and at which VOC contamination remains.

Types of Claims Based on Vapor Intrusion

There are two main types of claims that will typically be brought in cases alleging toxic torts based on vapor intrusion. Both are fairly typical toxic tort claims. The first is for personal injury. The second is for diminution of property value. While these claims are not novel or surprising, the vapor intrusion basis for causation adds a level of complexity that is unusual.

In the case of personal injury, plaintiffs will likely allege that VOC vapors from underlying contaminated groundwater and/or soils have migrated into the home or workplace building and caused various health effects to the residents or workers. As noted above, the extremely conservative screening levels for assessing the potential for vapor intrusion, and the relatively undeveloped science regarding the health effects of exposure to VOCs through inhalation of vapors, make addressing such claims complicated.

Moreover, because of the presence of building materials, furniture, paints, cleaners, scented candles and even lawn mowers containing gasoline, testing of the interior of homes and buildings can often lead to false positive results. Sophisticated plaintiffs will likely find both an environmental expert willing to opine on the nexus between underlying environmental conditions and exposure, and a medical expert who is willing to opine that exposure to detected levels of VOCs (or any level of VOCs for that matter) has (or probably has) caused health effects. As a result, such claims may easily survive motions to dismiss and oftentimes may survive motions for summary judgment.

In the case of property damage claims, plaintiffs typically allege diminution of property value. Such allegations are based on either the actual presence of vapor intrusion, or the potential for future vapor intrusion given the presence of underlying contaminated groundwater and/or soils that contain VOCs. They may also allege damages based stigma. Again, sophisticated plaintiffs will likely find an expert willing to opine that the presence of or the potential for vapor intrusion has negatively affected property values. As in the case of personal injury claims, property damage claims may easily survive motions to dismiss, although as noted below, they may be more susceptible to motions for summary judgment.

Defense Strategies for Vapor Intrusion Suits

Considerable thought and effort is required to effectively defend against vapor intrusion toxic tort suits. While the facts of each case will be different, there are several defense themes to keep in mind.

- **Testing.** It is critical to carefully evaluate current site conditions — both groundwater/soil and, if necessary, interior air. However, there are protocols that will be important to adhere to. (Note that different states can have different accepted protocols.) For example, groundwater and soil should first be assessed against published screening levels. Where groundwater levels are not present above published levels that would be expected to result in the potential for vapor intrusion, there may be a clear basis to defeat such claims. Where such groundwater/soil levels exceed such “screening levels,” testing should first be conducted under the basement slab (in

existing soils). When the results of such sub-slab testing do not indicate likely intrusion into the building, there may be no basis to test the inside air. If, however, it becomes necessary to test indoor air, it will be important to conduct a strict inventory of the contents of the building and to remove any materials that could possibly contribute to VOC vapors before testing is conducted. Rushing into indoor air sampling can be a very big mistake. Finally, all such protocols should be carefully documented.

- **Environmental Experts.** Given the complex nature of the testing, it is critical to engage an environmental consultant that is very knowledgeable and experienced in both vapor intrusion testing and correctly interpreting the results. It will also be important to critically examine plaintiff's expert report and depose the expert on experience and methodologies (where such expert depositions are allowed).
- **Medical Testing.** Where there are personal injury claims, it will be critical to have such plaintiffs assessed by doctors who are knowledgeable and experienced with the effects of VOC inhalation. Such experts will also be critical in examining plaintiff's expert reports and assisting in any depositions of such experts.
- **Property Valuation Experts.** Where there are diminution of property value claims, it will be critical to engage property valuation experts that are knowledgeable and experienced in assessing the value of properties allegedly impacted by environmental contaminants, and, in particular, vapor intrusion. Not surprisingly, there are not many experts who fit the bill. Moreover, any expert report provided by plaintiffs must be carefully evaluated against applicable rules of evidence. Careful focus on the expert's methodology and rationale is important. Because many expert reports may seem valid on their face, it will be critically important to carefully and methodically depose the expert. Daubert challenges based on methodology, reliability and fitness have proven to be successful.

The Best Defense is a Good Offense

Given the potential for claims and the considerable expense in defending against such claims, developers and corporations are well advised to review their portfolios of properties that have been developed or were sold for development purposes. Such review should include an assessment of known groundwater conditions, comparison against published vapor intrusion screening levels, and consideration of whether additional studies are warranted. Consideration should be given to conducting such reviews under privilege.

Oftentimes, the costs of remedying vapor intrusion problems are relatively modest (individual home treatment systems may only cost a few thousand dollars) — far less than the cost of defending against toxic tort suits. Therefore, assessing and addressing potential vapor intrusion issues may make good business sense. If such activities are undertaken, it will be important to implement a robust public outreach/relations strategy.

Conclusions

As noted above, when it comes to dealing with the potential for future vapor intrusion claims, the best defense may be a good offense. If, however, you are sued for such claims, a careful and methodical defense, consistent with the principles discussed above, will be necessary.

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