Your Environmental Assessment Identified
A Vapor Intrusion Condition; Now What?

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If you are planning to purchase or lease commercial real estate, you may also be planning to complete an environmental assessment. The hope is that the assessment does not identify any environmental issues or concerns. However, you may be surprised to receive an environmental assessment that identifies vapor intrusion concerns related to the property. Vapor intrusion has been at the forefront of current government agency attention and has been the focus of increased litigation in recent years. For these reasons and with the help of more technical guidance to assist environmental professionals with the identification of potential vapor intrusion issues, more and more environmental assessments are identifying vapor intrusion concerns and listing them as recognized environmental conditions or recommending further assessment. This article will provide some basic information to help property owners, landlords and tenants understand a vapor intrusion finding in an environmental assessment and why they should be concerned about it. In addition, this article will discuss some steps an owner, landlord or tenant can take in response to a vapor intrusion finding.

Understanding a Vapor Intrusion Finding
Vapor intrusion is the term generally used to describe the pathway by which chemicals in soil or groundwater migrate to indoor air. It is a concern for building owners and occupants because certain concentrations of vapors from hazardous chemicals can cause health problems or can accumulate to a point where they could cause a fire or explosion hazard. Vapor intrusion issues can start in many different ways. For example, they may originate with a release of chemicals into the environment from a dry cleaner, a petroleum underground storage tank, a nearby landfill or solvents used in automotive repair shops. The chemicals may have been released to soil or groundwater under the subject building, or they may have been released at a nearby property and migrated in soil or groundwater to areas beneath the subject building. The vapor (gas) form of the chemicals migrates from soil or groundwater into the building through cracks in the foundation; heating, ventilation and air-conditioning (HVAC) systems; sanitary sewer pipes; or other subsurface structures and may present a serious risk to human health. An environmental assessment may identify a vapor intrusion condition if circumstances exist that suggest vapors are present and could get into the building and cause occupants to be exposed to chemical vapors.

For example, if the site was a former dry cleaner that used dry cleaning solvents, then the environmental assessment will identify
this as a vapor intrusion condition and should recommend additional investigation. It is important to keep in mind that even if the environmental assessment identifies a vapor intrusion condition, it is not necessarily confirmation that occupants of the building are at risk. In order to make that determination, further assessment must be completed.

Why Should Owners and Tenants Be Concerned About Vapor Intrusion?
Owners and tenants should be concerned about vapors coming into a building due to the potentially serious health and safety effects associated with certain hazardous chemicals. Chemical vapors that accumulate and reach certain concentrations within a building can cause symptoms such as eye and respiratory irritation, headaches and nausea and even an increased risk of some cancers. See the United States Environmental Protection Agency webpage at: http://www.epa.gov/region06/6pd/rcra_c/ca/index.html. The buildup of methane gas from former on-site or nearby landfills may result in an explosion hazard, and significant concentrations of gasoline or other flammable liquids released from an underground storage tank can pose a fire or explosion hazard to construction or utility workers. In addition to the potential health and safety concerns, a building owner should also be concerned because significant costs may be incurred to investigate and remediate a vapor intrusion condition and the current property owner can be held responsible for these costs, even if they are not responsible for the release of hazardous chemicals.

The recent case of Voggenthaler v. Maryland Square, LLC, illustrates a situation in which the property owner appealed a ruling by the United States District Court for the District of Nevada, stating that it was liable for environmental cleanup costs because it did not take any steps to further investigate a vapor intrusion condition and prevent exacerbation and human exposure. See Voggenthaler v. Maryland Square, LLC, 724 F.3d 1050 (9th Cir. 2013); also featured in Retail Law Strategist, Vol. 14, Spring 2014. In its defense, the property owner claimed that it had completed an environmental assessment that complied with the “All Appropriate Inquiry” requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and that qualified it as a Bona Fide Prospective Purchaser under the law. The property owner claimed that it had a defense to liability for the environmental condition of the property and should not be responsible for cleanup costs. In the most recent action related to the case, the 9th Circuit Court of Appeals reversed the District Court’s decision and remanded the issue; thereby giving the property owner an opportunity to correct the deficiencies in its “bona fide prospective purchaser” submission and presumably provide evidence that it did meet its obligations regarding further investigation and prevention of exacerbation and exposure. See Id. at 1068. The outcome of this issue will be important for property owners who purchase contaminated property, since it could provide a basis to guide environmental site assessments. For example, should all environmental site assessments include a specific vapor intrusion assessment? And if a potential vapor intrusion condition is identified, should additional investigation be completed to satisfy the All Appropriate Inquiry requirements of CERCLA? In addition, the outcome of the issue will likely have an impact on the affirmative due care actions that a property owner, landlord or potentially a tenant should take with respect to existing contamination.

Furthermore, a property owner should consider the potential costs of defending
third-party claims related to vapor intrusion issues. Finally, tenants could also find themselves in the position of having to investigate and remediate vapors migrating into a building simply in the interest of protecting their employees and customers and avoiding employee complaints and claims regarding working conditions.

**Vapor Intrusion—Next Steps**

As a result of an environmental assessment, one of the most valuable things the property owner, landlord or tenant wants to know regarding vapor intrusion is whether the occupants of the property or of the nearby building are being exposed to hazardous chemicals. Therefore, if the environmental assessment identifies a vapor intrusion condition, the next step will be to further assess whether the vapor intrusion pathway is complete and determine the risk to building occupants and/or nearby properties. The property owner, landlord or tenant should further evaluate the finding in light of its risk tolerance and the circumstances. Some issues that the owner, landlord or tenant should consider are:

- Does the original scope of work for the environmental assessment include a specific vapor intrusion assessment? If a specific vapor intrusion assessment is not requested, then the vapor intrusion finding may be based on a cursory review of limited database records.
- Consider that a low-risk vapor intrusion finding or one that was given a historically low ranking on a state database may not be accurate given the current understanding of vapor intrusion conditions. Many states and the federal government did not consider vapor intrusion issues when ranking sites in the past. Therefore, sites with a release of petroleum or solvents may not have received a high ranking due to the perceived low potential that humans would be exposed to chemicals. However, if vapor intrusion were considered, the risk rating may have been much higher.
- Look at previous environmental assessments for the property and ask the environmental professional to explain a “new” finding of a vapor intrusion condition clearly. Was there a new release that created the condition, or was an old condition reviewed with vapor intrusion concerns in mind, now causing it to be listed as a vapor intrusion condition?
- Review site-specific conditions with the environmental professional and provide up-to-date information about the utilities, the site history, the building foundation and construction materials and the HVAC system.
- Ask other tenants in the building if they are aware of any environmental concerns or testing that has been performed. However, be wary of the response. Many long-term tenants or building owners may not be aware of potential vapor intrusion conditions because the condition is from an off-site source or because the original environmental assessment did not raise concerns about a vapor intrusion condition.
- Conduct additional investigation, including soil gas sampling. The sampling will likely be conducted near the source area (if it is at the subject property), near the property boundary (if the source is off-site) and near the building.
- Beware of indoor air sampling. Some vapor intrusion guidance and some consultants recommend indoor air sampling to further assess the health and safety risks from vapor intrusion conditions. Due to interference from indoor vapor sources (such as cleaning chemicals or new carpeting and furniture), indoor air sampling can be inaccurate and should only be used as a last resort. It should
only be performed if other factors have been fully considered, soil gas sampling has been completed and levels of hazardous chemical vapors above applicable state or local standards are found.

- Work with an environmental professional and legal counsel who are familiar with the standards and guidance used in the state where the property is located. Many states have developed their own vapor intrusion guidance and standards.
- Discuss the need for groundwater sampling and modeling (in addition to soil gas sampling) with the environmental professional. A soil gas sample is only a snapshot in time. Even if current soil gas samples do not indicate that a vapor intrusion condition exists, as soil or groundwater continues to migrate beneath the property, it could present a vapor intrusion risk in the future. Therefore, depending on the property conditions and other information, additional data may be necessary to understand fully the current and future risks at the property.

**Conclusion**

Vapor intrusion is becoming a more frequent recognized environmental condition or finding in environmental assessments. Property owners and tenants should pay close attention to these findings, due to the potential health and safety impacts on building occupants and due to the present and future costs associated with investigation and remediation of a vapor intrusion issue. However, it is important to keep in mind that even if the environmental assessment identifies a vapor intrusion condition, it is not necessarily confirmation that occupants of the building are at risk. In order to make that determination, further assessment such as soil gas sampling, groundwater sampling or possibly indoor air sampling must be conducted. Property owners and tenants can further assess the risks associated with vapor intrusion conditions at their property by working with an experienced environmental professional and legal counsel who is familiar with the vapor intrusion guidance and standards in the state where the property is located. By equipping themselves with a basic understanding of what vapor intrusion is and by following some of the steps outlined in this article, building owners and tenants can put themselves in a better position to head off potential problems associated with buying or leasing space at a property with a vapor intrusion condition and to properly manage the associated risks.

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