

Vapor Intrusion

What Minnesota Commercial/Industrial Building Owners, Prospective Purchasers, Developers and Their Lenders Should Know

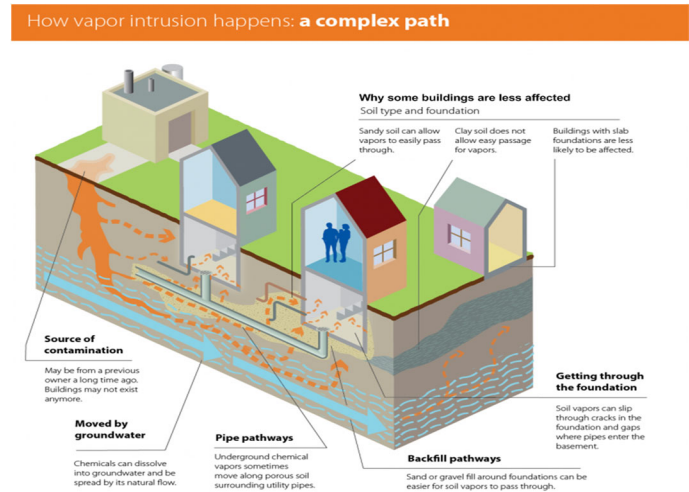
Vapor intrusion is an environmental issue that has emerged in Minnesota and elsewhere across the country in recent years. This Information Sheet discusses how vapor intrusion occurs and ways in which it can affect ownership, use, development and transfer of commercial and industrial properties. Every property is unique, and you should contact your attorney, environmental consultant or other professional advisors for advice on your particular situation.

What is vapor intrusion?

Vapor intrusion occurs when chemical vapors (from petroleum, solvents or other contaminants) move through the soil and enter basements or building foundations through cracks, utility conduits or other openings. These contaminant vapors may present increased health risks to people who spend time the building.

Why should I be aware of vapor intrusion?

Building owners may incur liability for vapor mitigation and other costs, absent a professional investigation and issuance of MPCA liability assurances. They could also face increased exposure to potential claims by employees, tenants and other building users for vapor intrusion-related health concerns.



How can vapor intrusion affect a property or a transaction?

- Vapor intrusion risks can affect a commercial property's value and operating costs (e.g., utility charges and maintenance of vapor mitigation systems), and the availability of financing, the closing date, assumption of liability and other aspects of real estate transactions.
- Awareness regarding vapor intrusion risks has only become common in recent years; you therefore should not assume that past investigations or cleanups on your property addressed vapor intrusion risks.
- The source of vapor intrusion (contaminants in soil or groundwater) can be on your property and/or originate from a neighboring or other nearby property.
- Regardless of the source of the contaminant vapors, each property owner is responsible for assuring and documenting that buildings are not adversely affected by vapor intrusion risks.

How do I know if I have a vapor intrusion issue on my property?

- Inspection and testing by an environmental consultant is necessary to determine whether there is a risk of vapor intrusion; it is typically not possible to see or smell vapors entering a building.
- To assess vapor intrusion risks, the consultant may collect and test samples of a variety of media present inside and around your building, including soil, groundwater, soil gas, soil gas collected from beneath the building slab (sub-slab sampling) and indoor air.
- Test results typically take up to 2 weeks to come back from the laboratory.
- Results of soil gas, sub-slab and indoor air testing are compared to MPCA established criteria called Intrusion Screening Values (ISVs) to evaluate vapor intrusion risk.
- The MPCA requires vapor testing in two different seasons (heating and non-heating) to account for seasonal variability in subsurface vapor concentrations; again, this can affect the timing of real estate transactions.

What should I do if vapor intrusion risk is identified on my property?

- Vapor mitigation may be necessary if contaminant vapors are present at levels above applicable screening criteria.
- Industry-proven techniques are available to address vapor intrusion, including sub-slab depressurization (SSD) and sub-slab ventilation (SSV) systems and specially designed HVAC controls.
- Vapor mitigation systems can enhance a building's indoor air quality by:
 - preventing intrusion of contaminant vapors
 - reducing naturally occurring radon
 - reducing moisture in the lower levels of the building.

Ongoing obligations and maintenance

- Vapor mitigation systems must be maintained to be effective.
- Consultants develop long-term operation and maintenance (O&M) plans, which include checklists and schedules for monitoring and maintenance of system components (e.g., fan motors, piping, vapor barriers, etc.).
- MPCA currently requires owners to file an Environmental Covenant on title to properties with vapor mitigation systems to provide notice to future owners and ensure continued operation and maintenance of those systems.
- Mitigation systems must operate as long as the vapor intrusion risk is present; eliminating the source (i.e., cleaning up soil and/or groundwater contamination) is the most effective path toward shutting down the system.
- MPCA then determines, based on post-cleanup testing, whether the vapor mitigation system is still necessary.

What technical assistance tools and assurances are available?

- Parties that investigate and mitigate vapor intrusion can obtain technical assistance and liability assurance letters from the MPCA Brownfield Program. Examples of available assurance letters include:
 - No Association Determination (non-responsible voluntary parties only)
 - Completion of Soil Vapor Assessment (where no mitigation is necessary)
 - Completion of Vapor Mitigation Response Actions
 - No Further Action (all affected media must be investigated and addressed)

MPCA and the Minnesota Department of Health can also assist in communicating with tenants, employees and other building users regarding vapor intrusion risks. Numerous information sheets on vapor intrusion and specific vapor intrusion chemicals are available via the following links:

Minnesota Pollution Control Agency:

General vapor intrusion page: <https://www.pca.state.mn.us/waste/vapor-intrusion>

Brownfield page: <https://www.pca.state.mn.us/waste/brownfields>

Minnesota Department of Health:

<https://www.health.state.mn.us/communities/environment/hazardous/topics/vaporintrusion.html>

<https://www.health.state.mn.us/communities/environment/hazardous/topics/visitequestions.html>

United States Environmental Protection Agency:

<https://www.epa.gov/vaporintrusion>

Contact information for State agencies:

Minnesota Pollution Control Agency

MPCA Vapor Hotline, 651-757-2040
vaporinfo.pca@state.mn.us

Minnesota Department of Health

Site Assessment and Consultation Unit, 651-201-4897 or 1-800-657-3908
health.hazard@state.mn.us

This Information Sheet was prepared by Cushman and Wakefield in consultation with Minnesota Brownfields, Gray Plant Mooty and Northeast Bank. . It is intended for general informational use only and may not be relied upon for any other purpose. Please contact your attorney or environmental consultant for advice on your particular situation.