



Rickett's Dry Cleaning Update: Air Data from 50 Properties Show No Human Health Concerns from Vapor Intrusion Due to Contaminated Groundwater

Community Update No. 2

May 2017

WHAT IS VAPOR INTRUSION?

Vapor intrusion is a term used to identify a process by which chemicals in contaminated groundwater can produce vapors which migrate through the soil and potentially enter buildings through cracks or other openings in basements or foundations (see reverse for additional information).

If you have general questions or would like additional information regarding the site, please contact one of the following:

Larisa Romanowski
Community Involvement
Coordinator
187 Wolf Road, Suite 303
Albany, NY 12205
518-407-0400
romanowski.larisa@epa.gov

Don Graham
On-Scene Coordinator
2890 Woodbridge Avenue
Edison, NJ 08837
908-420-4506
graham.don@epa.gov

For health related questions,
please contact:

Nick Mazziotta
Human Health Risk Assessor
290 Broadway, 18th Floor
New York, NY 10007
(212) 637-3920
mazziotta.nicholas@epa.gov

In February 2017, the U.S. Environmental Protection Agency (EPA) collected air samples at 50 properties located near the Rickett's Dry Cleaning facility located at 2017 Doubleday Avenue in the village of Ballston Spa. The air samples were collected to determine if any of the properties have been impacted by *vapor intrusion* (see reverse for more information) as a result of chemicals being released into the environment at the Rickett's Dry Cleaning facility.

Based on EPA's assessment of the February 2017 sampling data, **no corrective actions for vapor intrusion are required at any of the properties sampled.** A total of 15 *chemicals of concern* were analyzed for, with the primary chemicals being trichloroethene, tetrachloroethene, and vinyl chloride. The concentrations of chemicals detected at the sampled properties were significantly below EPA's established target levels which were developed to be protective of human health.

Based on the data, EPA:

- Does not see a need for any restrictions to be placed on the normal use of any of the properties sampled; and
- Does not plan on expanding the vapor intrusion investigation area at the present time; but
- Does not rule out the possibility that additional vapor intrusion sampling may be conducted in the future.

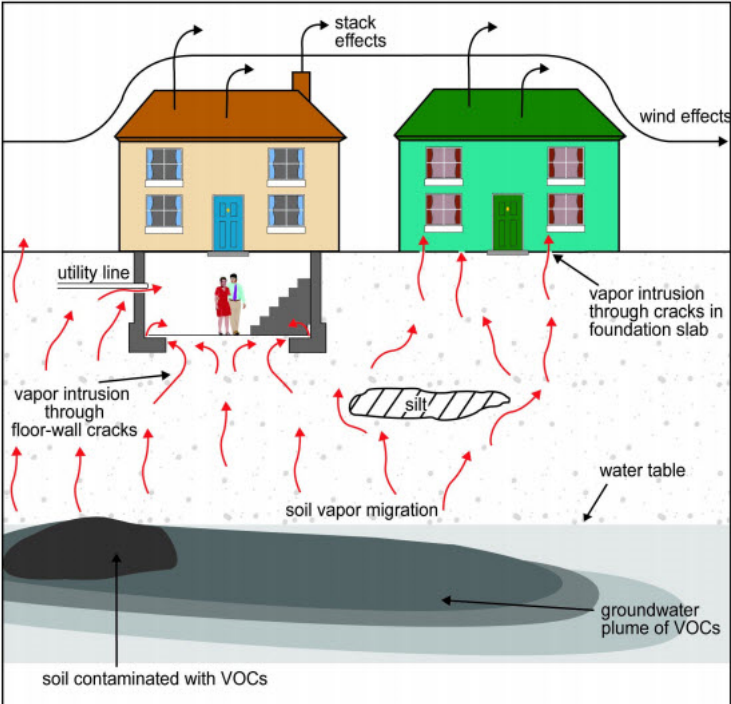
Air Sampling Process and Results

Air samples were collected from 50 properties located in the vicinity of the Rickett's facility. The majority of the properties sampled are in the neighborhood located southeast of the facility in the direction of area groundwater flow. Several properties located adjacent to the Rickett's facility were also sampled. Where possible, indoor air samples were collected from the basement and first floor areas, and sub-slab air samples were collected from beneath the basement at each property.

The concentrations of chemicals detected in all of the indoor and sub-slab air samples were significantly below EPA's target levels for undertaking corrective measures, and do not present a health concern to occupants of the properties. Air sampling results for the properties sampled are being provided to the property owners. Publicly available information will be placed on EPA's Rickett's Dry Cleaning webpage as it becomes available:

<https://www.epa.gov/ny/ricketts-dry-cleaning-site-village-ballston-spa-ny>.

General Questions and Answers about Vapor Intrusion

Question	Answer
<p>What is vapor intrusion?</p>	<p>When chemicals or petroleum products are spilled on the ground or leak from underground storage tanks, they can give off gases, or vapors that can get inside buildings. Common products that can cause vapor intrusion are gasoline or diesel fuel, dry cleaning solvents and industrial de-greasers. The vapors move through the soil and seep through cracks in basements, foundations, sewer lines and other openings. Vapor intrusion is a concern because vapors can build up to a point where the health of residents or workers in those buildings could be at risk.</p>  <p>VOCs = Volatile Organic Compounds. The chemicals found in the groundwater at the Rickett's site are VOCs.</p>
<p>What are health concerns related to vapor intrusion?</p>	<p>When vapor intrusion does occur, the health risk will vary based on the type of chemicals, the levels of the chemical found, the length of exposure and the health of exposed individuals. Prolonged exposure to chemical concentrations exceeding EPA target levels over many years may raise the lifetime risk of cancer or chronic disease. More information on the chemicals at the Rickett's site can be found at: https://www.atsdr.cdc.gov/toxfaqs/index.asp.</p>
<p>How is vapor intrusion discovered?</p>	<p>Samples of gas in the soil or groundwater are first collected near a contaminated site. If no contamination is found near a site, then vapor intrusion should not be a problem. If contamination is found, depending on the type, the search may be widened to include samples closer to or on individual properties. The next step is to take vapor samples from the soil under the home's foundation; these are called slab, or sub-slab samples. These samples are often co-located with indoor air samples to assess potential transport into the interior of the home.</p>
<p>What happens if a problem is found?</p>	<p>The most common solution is to install systems often used to reduce naturally occurring radon that seeps into homes in some geographic areas. These systems, called radon mitigation systems, remove soil vapors from below basements or foundations before they enter homes. Vapors are vented outside of the homes where they become dispersed and harmless. These systems use minimal electricity and do not affect heating and cooling efficiency. They also prevent radon from entering homes – an added health benefit especially in radon prone areas. Once the source of the vapors is eliminated, the systems should no longer be needed.</p>
<p>For additional information: https://www.epa.gov/vaporintrusion</p>	