

**SEPTEMBER 2023**

The U.S. Environmental Protection Agency (EPA) will assist New York State Department of Environmental Conservation (NYSDEC) in reducing elevated levels of volatile organic compounds (VOCs), particularly trichloroethylene (TCE), that are entering into the 543 Union Street building in Brooklyn, New York. EPA will also provide input on the design of the long-term system to prevent the buildup of harmful TCE vapors. EPA is doing this work at the request of the NYSDEC and the New York State Department of Health (NYSDOH), which installed stand-alone carbon air purifying units in each occupied business unit and a temporary basement air extraction system with blowers to immediately address the contamination while longer term plans are being developed.

### What contamination has been found at 543 Union Street?

NYSDEC and NYSDOH evaluated 543 Union Street and determined that there is widespread trichloroethylene (TCE) contamination entering the property's indoor air via vapors from groundwater. If the contamination were left unaddressed, people in 543 Union Street would be at an increased health risk associated with exposures to TCE.



### Contaminants

**Volatile Organic Compounds (VOCs)** in shallow groundwater can give off gases, or vapors, that can move through the soil and seep into buildings through cracks in slabs and foundations, sewer lines, and other openings. For more information on vapor intrusion, visit: [www.epa.gov/vaporintrusion](http://www.epa.gov/vaporintrusion).

**Trichloroethylene (TCE)** is used as a solvent for cleaning metal. Exposure to very high concentrations of TCE vapors can cause dizziness, headaches, sleepiness, incoordination, confusion, nausea, unconsciousness, and even death. For more information on TCE, visit: [www.atsdr.cdc.gov/toxfaqs/tfacts19.pdf](http://www.atsdr.cdc.gov/toxfaqs/tfacts19.pdf)

### Have the interim measures to address the TCE contamination been successful?

Interim measures to decrease TCE levels in the indoor air have been partially successful. However, levels of TCE in the certain portions of the building remain above the NYSDOH standard. EPA is assisting NYSDOH and NYSDEC to enhance these interim measures which should result in a decrease in TCE levels.

### How did trichloroethylene (TCE) get into the air in the building?

The source of the TCE contamination in the building is vapors from historic groundwater contamination in the area.

### What are the next steps?

EPA is actively working to:

- Obtain access from the building owners.
- Evaluate the existing NYSDEC's interim mitigation measures.

- Design and install mitigation measures to enhance or replace the existing interim mitigation measures employed by the NYSDEC.
- Provide technical support to NYSDEC on their design for the long-term mitigation system.

## EPA Contact Information

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For general information or questions about EPA's Superfund program, please contact the EPA Regional Public Liaison: Jim Haklar, [haklar.james@epa.gov](mailto:haklar.james@epa.gov) or (732) 906-6817 or toll free at (888) 283-7626.