

Marlboro Mall – Indoor Air Evaluation

Key Messages from Health Consultation

Our health consultation evaluates the indoor air exposures and potential risks to your health. This evaluation process uses assumptions on how long people were exposed. It is important to note your exposure depends on which space you were in and how long and how often you worked in your business. We encourage you to contact us so we can go over our document, explain our health evaluation process, and answer any of your questions.

For all questions, and to request an overview of the document please contact:

Christa Fontecchio or Somia Aluwalia at the NJDOH at 609-826-4984

or by E-mail at Christa.Fontecchio@doh.nj.gov and Somia.Aluwalia@doh.nj.gov

Background

In April 2021, the New Jersey Department of Health (NJDOH) became aware of concerns with indoor air in the Marlboro Mall. NJDOH then requested the New Jersey Department of Environmental Protection (NJDEP) to provide historical information and sampling data for this property. This information showed that from 2010 to 2015, a system was operating in the mall to stop hazardous chemicals from coming into the building from contamination beneath the building.

In November 2020 and February 2021, an environmental company sampled the air inside the following six spaces in the strip mall: Chinese food restaurant, bagel store, pizza restaurant, nail salon, insurance office, and the dry cleaner. The indoor air testing results showed high levels of tetrachloroethylene (PCE) and trichloroethylene (TCE), which are typical chemicals used in the dry-cleaning industry. These recent indoor air samples indicated that the source of PCE and TCE was from dry cleaning operations.

The dry-cleaning machine was removed in the beginning of April 2021. The air in each of the building spaces was sampled again a few weeks later to see if the levels were still high. The levels of PCE and TCE went down but were still above the NJDEP screening level (a level set to help protect people's health) in the nail salon, insurance office, and dry cleaner.

What is NJDOH's evaluation process?

The NJDOH compared the PCE and TCE levels to NJDEP screening levels. These screening levels are set to make sure that levels of chemicals will not harm people's health. The screening levels are based on scientific studies and they have safety factors built in to make sure they are

For all questions and to request an overview of the document, please contact: **Christa Fontecchio** or **Somia Aluwalia** at the NJDOH at 609-826-4984 or by E-mail at Christa.Fontecchio@doh.nj.gov and Somia.Aluwalia@doh.nj.gov



protecting public health. Just because levels may be above these screening levels does not mean a person will become sick. These screening levels are purposely set to be lower than the actual levels where studies have found people or animals have become sick. Making sure the levels of PCE and TCE are below the NJDEP screening levels means that people are safe.

NJDOH's evaluation follows a process used by the Agency for Toxic Substances and Disease Registry (ATSDR), which is a part of the Centers for Disease Control and Prevention (CDC). This process looks at the levels that are above these screening levels and compares them to the level where people or animals have experienced health effects. Our Health Consultation describes this process, but we encourage building occupants to call us so that we can explain what we did. We can also talk about your specific exposure and what this might mean for your health.

What were the overall findings of the NJDOH's evaluation of the Marlboro Mall?

The levels of PCE and TCE in all the spaces sampled were at one point above the NJDEP screening levels. After the removal of the dry-cleaning machine, the levels in three spaces remained above the screening levels. These elevated levels should be lowered to protect people's health.

PCE and TCE are hazardous chemicals and may cause harmful health effects. The levels in the building spaces varied with levels in some spaces being higher than others. Whether you will have harmful health effects depends on several things. These include how much PCE and TCE you were exposed to, which space you work in, how long, and how often you work in that space.

How can I get help in understanding the information in the document?

NJDOH is available to talk to you individually or, if you prefer, with your fellow building occupants. We would like to explain our process and go over the information in the document. Please email or call us so we can set up a time to talk to you.

Who can I contact if I have questions about my health or my child's health or my exposure?

You can call NJDOH with any questions that you have. We can also put your doctor, or your child's doctor, in touch with experts in environmental and toxicological medicine.

How long has this been going on? How long have I been exposed?

NJDOH became aware of this situation in April 2021. The available data show elevated TCE and PCE concentrations in the indoor air samples. We reviewed indoor air samples collected between 2010 and 2014 and November of 2020 and April 2021. The indoor air samples collected at those times reflect the levels at that point in time and PCE and TCE levels may have been higher or lower during other time periods. Your exposure depends on which space you were in and the

For all questions and to request an overview of the document, please contact: **Christa Fontecchio** or **Somia Aluwalia** at the NJDOH at 609-826-4984 or by E-mail at Christa.Fontecchio@doh.nj.gov and Somia.Aluwalia@doh.nj.gov



length of time you spent in that space (how long you worked there and how often you worked in your business).

I work in one of these spaces, what do the indoor air sampling results mean for my health? Will I get sick?

Whether or not you get sick depends on how much PCE and TCE was in the air in your space. It also depends on how long and how often you worked in that space. The screening levels that we use are protective of public health and are lower than where harmful health effects would be expected. If your space has PCE and TCE above the screening levels, it does not necessarily mean you will get sick. NJDOH staff can explain to you what your specific levels may mean.

I was pregnant while working here, is my child going to get sick?

There is an increased risk for fetal heart effects in pregnant women if you were exposed to high levels of TCE during a short timeframe where fetal heart development occurs. We have a fact sheet to help explain this risk and we can also refer your child's pediatrician to other pediatricians who specialize in environmental exposures to determine any next steps. Our fact can be found at: https://www.state.nj.us/health/ceohs/documents/tce_factsheet.pdf

How do I know if I've been exposed? Is there a medical test to measure my exposure to these chemicals?

Anyone working in these spaces is considered to be exposed to PCE and TCE by their breathing in these contaminants. Although PCE and TCE and their breakdown products (metabolites) can be measured in blood and urine, they are both difficult to measure in your body because they are so quickly eliminated. Additionally, the detection of PCE and TCE or their metabolites cannot predict the kind of health effects that might develop from that exposure. More information can be found at:

ATSDR PCE ToxFAQs: <https://www.atsdr.cdc.gov/toxfaqs/tfacts18.pdf>

ATSDR TCE ToxFAQs: <https://www.atsdr.cdc.gov/toxfaqs/tfacts19.pdf>

How can I protect myself from continuing exposures?

The levels have decreased significantly since the dry-cleaning machine was removed in April 2021. Additional sampling is planned to ensure that PCE and TCE levels continue to decrease. Increasing ventilation in your space as much as possible will help reduce the PCE and TCE levels in your space.

For all questions and to request an overview of the document, please contact: **Christa Fontecchio** or **Somia Aluwalia** at the NJDOH at 609-826-4984 or by E-mail at Christa.Fontecchio@doh.nj.gov and Somia.Aluwalia@doh.nj.gov

