

Frequently Asked Questions March 2023

Site-Specific Questions

What is the U.S. Environmental Protection Agency (EPA) doing at the Former San Francisco Cleaners and San Francisco Cleaners sites?

EPA is conducting sampling in the area of both the former dry cleaner facility, current dry cleaner facility and surrounding properties for chemicals that may enter buildings in vapor form. In the coming months, EPA will collect and analyze samples of indoor air, soil, gas that is in the soil, and groundwater at the former San Francisco Cleaners site and San Francisco Cleaners site, both located in San Juan, Puerto Rico. EPA is collecting samples because initial sampling of soil and soil gas, conducted in May 2022, revealed elevated levels of chlorinated compounds typically used by dry cleaners. EPA is determining if the community is being exposed to these compounds. There is no cost to the property owner, tenant, or business for EPA's planned sampling.

What is EPA sampling for?

EPA is looking to see if contaminants from the drycleaning operations have gotten into the environment near people's homes and other buildings and whether the vapors from the contaminants may be getting into the buildings themselves, posing a potential risk to people. EPA will collect and analyze indoor air, soil and/or groundwater in some locations, and the gases contained in soil for a group of chemicals called chlorinated volatile organic compounds (CVOCs), which are compounds that readily evaporate into air. These CVOCs include: tetrachloroethylene (PCE), trichloroethylene (TCE), 1,2-Dichloroethene, and vinyl chloride. Indoor air and sub-slab samples are collected in canisters that take in air for approximately 24 hours.

What are the contaminants of concern?

The primary contaminants of concern include PCE and TCE, which are typical chemicals used at dry cleaner sites. PCE is also used for degreasing metal parts and in manufacturing other chemicals. PCE can also be found in consumer products, including some paint and spot removers, water repellents, brake and wood cleaners, glues, and suede protectors. For more information on PCE, please check this fact sheet in Spanish: https://www.atsdr.cdc.gov/es/toxfaqs/es_tfacts18.html.

TCE is also used as a solvent to remove grease from metal parts and as a chemical that is used to make other chemicals. For more information on TCE, please check this fact sheet in Spanish: https://www.atsdr.cdc.gov/es/toxfaqs/es_tfacts19.html.

Where is EPA sampling taking place?

For this assessment, EPA is looking at properties, sidewalks and roads located within a 200-foot radius from the sites. These properties include schools, businesses, lodging facilities, religious institutions, and residential homes. EPA will be obtaining access agreements from property owners and tenants before any sampling begins. Based on the data received from samples collected during this assessment, EPA may sample properties outside of the initial radius.

What will the data be compared to?

EPA conducts many cleanups where CVOCs are the contaminants of concern, and we have certain values we use to assess levels of these chemicals. To determine if there is a significant exposure to chemicals within the indoor air space, data will be compared to the [EPA Regional Removal Management Levels \(RMLs\)](https://www.epa.gov/risk/regional-removal-management-levels-rmls-chemical-contaminants) (www.epa.gov/risk/regional-removal-management-levels-rmls-chemical-contaminants) for chemical

contaminants. These values are based on risk information used to determine if levels of contaminants can cause adverse health effects in humans and are tailored to property occupancy to ensure protectiveness. School and residential data will be compared to residential RML values while businesses and other properties may be compared to commercial/industrial RML values used to protect workers.

How long does it take to collect these types of samples from my property?

EPA will first identify certain features such as floor coverings, ventilation and air conditioning equipment, work and storage areas, drainage and building construction features, and identify household products (e.g., paints and cleaners) that could affect the sampling results. On the same day, EPA will then install a device called a port in the foundation or basement floor of the property. The number of ports installed will depend on the size and use of the property.

Contractors will use an electric drill to make a 1.25-inch diameter hole in the foundation and a port will be installed, cemented, and allowed to cure for approximately 24 hours. Next, EPA will connect a calibrated air canister to the port that will collect air from below the foundation or basement floor for approximately 24 hours. At the same time this sample is being collected, a co-located indoor air canister will also be collecting air for 24-hours from the inside of the building or home. After this 24-hour timeframe, the canisters are collected and sent to a laboratory for analysis. The port may or may not be removed, due to the potential for future sampling events.

A total of three visits will be necessary to collect vapor intrusion samples from each property, with several EPA contractor personnel present. As every property is unique, it may be necessary to modify the procedures listed above and EPA will communicate throughout the sampling process.

What should I do before sampling begins?

EPA will contact you to schedule the sampling at your property. The sampling equipment is very sensitive and can pick up chemicals from other sources. To avoid any interference with the sample collection, starting at least 48 hours before the sampling begins, please **do not**:

- Bring fresh laundry or dry-cleaned items into the property.
- Use cleaning products (e.g., bathroom cleaners, furniture polish, appliance cleaners and floor cleaners).
- Use paints, varnishes or solvents (nor participate in indoor hobbies using these products).
- Open windows, doors, vents, or fireplace openings for extended periods of times.
- Use air fresheners or odor eliminators.
- Apply insecticides or pesticides.

When will I be notified of results?

Results will take about six to eight weeks from the time sample canisters are retrieved. Additional time may be needed to review the data to determine if more sampling is needed, if a cleanup system needs to be installed, or if the air is currently acceptable at a property. EPA will send a letter with the results to the business owner, property owner and/or tenant. Residential data will not be shared with the public as it may contain sensitive information, such as names and addresses. Data collected from school samples will be shared with the appropriate officials. Once EPA and school officials review the data, a decision will be made on how to communicate results to parents, teachers, and school staff. This may be done through home mailings, parent-teacher meetings, or independent meetings.

What will be done if contamination is found within the indoor air space of my property?

Depending on the level found, EPA and the Puerto Rico Department of Natural and Environmental Resources (PRDNER) will work together to address the contamination, which may include installing a vapor mitigation system, similar to those used to reduce concentrations of radon within the interior space. If EPA and PRDNER decide a property needs a system installed, it will be done at no cost to the property owner, business, or tenant. EPA will coordinate with PRDNER to maintain the systems long-term.

Why is my property NOT being sampled?

Your property may not be sampled right now for several reasons:

- If your property is outside of the 200-foot radius, it is out of the current study area.
- It could also be that the property is not suspected of having impacts from the former dry-cleaning operations.
- Vacant structures or unoccupied areas may not be sampled.
- Businesses where CVOC chemicals or interfering chemicals are being used may not be sampled.
- Structures with increased ventilation, such as industrial kitchens or open-air environments may not be sampled.
- Areas exposed to the outdoors such as parking lots, lawns, and vegetated lands.
- Certain elevated floors of properties are not at risk for impacts of vapor intrusion from the subsurface.

What is being done at the schools?

School buildings that are located within the 200-foot radius will be evaluated based on their current use and occupancy. Classrooms may be sampled, as well as rooms often used, such as offices, teacher lounges, and libraries. Samples may also be collected in hallways. Samples to be collected include under the foundation and indoor air. Areas where chemicals are used heavily, such as a laboratory, janitorial room and gymnasiums will not be sampled because these chemicals would interfere with the assessment.

What is being done at the businesses?

EPA will collect information about the type of business being conducted and will make every effort not to interrupt any operations if it plans to sample a business. If a business already uses some of the chemicals that we are looking for, it may not make sense for EPA to sample there. For those businesses being sampled, the number of samples collected will depend on the size and layout of the structure. EPA will take one sample under the foundation slab and one indoor air sample at small businesses. Larger properties may require additional samples. It is preferred that sample collection times are performed when the business is not in use, either during evening hours or a typical day of closure. Sub-slab ports can be installed several days or evenings before business closure, but sample collection activities should be conducted during closing hours if possible. Sampling activities will be performed at no cost to the business owner(s).

What exactly are you looking for in the residential properties?

EPA is looking at whether chemical vapors from the soil may be getting into people's homes. Residential properties will be evaluated first. Contractors will collect one indoor air sample from most properties. If the residential dwelling is located on street level (and does not have a basement), a sample will be taken from under the foundation slab. This will involve installing a port to collect samples. For residential properties located above businesses or other properties, only indoor air samples will be collected. If the property has a basement, ports will be installed in the foundation and sub-slab samples will be collected along with indoor air samples. Sample activities will be conducted at no cost to the property owner.

Vapor Intrusion Questions

What is Vapor Intrusion?

When chemicals leak into the shallow groundwater, they can give off gases, or vapors, that can seep inside buildings. These vapors move through the soil and through cracks in basements, foundations, sewer lines, and other openings. The primary chemicals of concern at the site, **PCE and TCE**, can be hazardous above certain concentrations.

For more information on vapor intrusion, visit:

- www.epa.gov/vaporintrusion
- https://www.atsdr.cdc.gov/docs/atsdr_intrusion_de_vapores.pdf
- https://www.atsdr.cdc.gov/docs/atsdr_investigiar_vapores.pdf

How can PCE and TCE affect my health?

Any health effects depend on the amount of time in which people are exposed.

Exposure to high levels of PCE may affect the nervous system, liver, kidneys, and reproductive system, and may be harmful to unborn children. If you breathe in air containing a large amount of PCE for a short period of time, you may become dizzy or sleepy, develop headaches, and become uncoordinated or unconscious. If you are exposed to PCE, continuously, over a long period of time, you may also be at a higher risk of developing certain types of cancer. EPA considers PCE likely to cause cancer to all people, no matter how the person is exposed.

Exposure to moderate amounts of TCE may cause headaches, dizziness, and sleepiness. Exposure to high levels can also result in changes in the rhythm of the heartbeat, nerve damage, liver damage, and evidence of kidney damage. EPA has characterized TCE to cause cancer to all people, no matter how the person is exposed. There is strong evidence that TCE can cause kidney cancer in people and some evidence for TCE-induced liver cancer and malignant lymphoma.

Is there a medical test to show whether I've been exposed to PCE or TCE?

PCE and TCE can be measured in blood and urine with special tests. However, the detection of PCE or TCE cannot predict the kind of health effects that might develop from the exposure. Because PCE and TCE can leave the body rapidly, people should take the tests within days after known exposure. If you believe you or your children have symptoms that you think are caused by PCE or TCE exposure, you and/or your children should see a health care provider. You should tell the health care provider about the symptoms and about when, how, and for how long you think you and/or your children were exposed to PCE or TCE.

Where can I get more health information?

If you have any questions or concerns, please contact [Puerto Rico Department of Health](http://www.prdoh.gov):

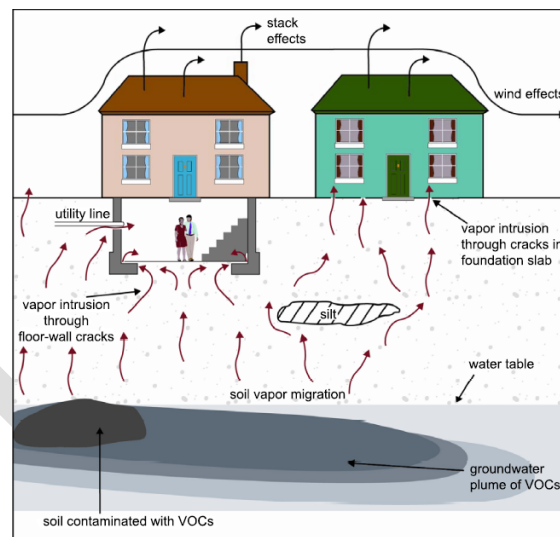
Phone: 787-765-2929

Email: contactus@salud.pr.gov

North Medical Center

Inner Peripheral Street

Bo. Monacillos Río Piedras, PR



What can I do to improve my indoor air quality?

The type of chemicals for which EPA is sampling near these drycleaner operations are often commonly found in indoor air. You can take steps to lower your exposure to chemicals:

- Don't buy more chemicals than you need.
- Store unused chemicals in appropriate tightly sealed containers.
- Don't make your home too airtight. Fresh air helps prevent chemical build-up and mold growth.
- Fix all leaks promptly, as well as other moisture problems that encourage mold growth.
- Check all appliances annually.
- Install carbon monoxide detectors in your home.

Superfund Questions**Do all sites have to be on the EPA's National Priorities List before you can clean them up?**

No. EPA's Superfund program has a number of different elements. This includes the long-term cleanups of sites placed in the National Priorities List, but EPA can conduct shorter-term cleanups using other Superfund authorities that address smaller scale issues that present an immediate risk to people's health. EPA sometimes uses several programs under Superfund to address a site, combining smaller scale short term cleanups with an eventual longer-term solution for sites if they are placed on the National Priorities List.

What is the National Priorities List (NPL) and Superfund?

The NPL is a list of sites that have the most serious releases or threatened releases of hazardous substances, pollutants, or contaminants. The NPL is intended to guide EPA in determining which sites warrant further investigation for a cleanup. These actions are financed under a law called the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as the Superfund law.

Who is responsible for the cleanup? Who will pay for the cleanup? Will residential property owners and tenants be required to pay?

One of EPA's top priorities is to get those responsible for the contamination to investigate and cleanup the site. If Potentially Responsible Parties (PRPs) cannot be found, are not viable, or refuse to cooperate, EPA may clean up the site using Superfund money. EPA may seek to recover its costs from those parties that do not cooperate.

PRPs are defined as:

- Current owners or operators of a facility;
- Former owners or operators of a facility at a time of disposal;
- Those who arranged for treatment or disposal of hazardous substances at a facility (in most cases, the generators); and
- Transporters of hazardous substances who selected the disposal site.

Tenants and owners of single-family residences are not generally considered to be PRPs, particularly where their property is not the source of contamination. Hence, EPA would not pursue them in order to recover the cost of investigating and cleaning up the contamination at the site. Similarly, EPA may exercise enforcement discretion to not pursue landowners, business operators or tenants for contamination that migrated from other properties.

How will the site's contamination be addressed if the site does not get added to the NPL?

EPA will coordinate with Commonwealth officials to determine decisions on next steps. For properties that are impacted by vapor intrusion, mitigation systems may be installed to restrict contaminated air from entering the interior space. EPA and PRDNER may evaluate the option of recommending the site to the NPL.

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For more information about the sites, visit EPA's websites:

Former San Francisco Cleaners: response.epa.gov/fsfc

San Francisco Cleaners: response.epa.gov/sfc

