

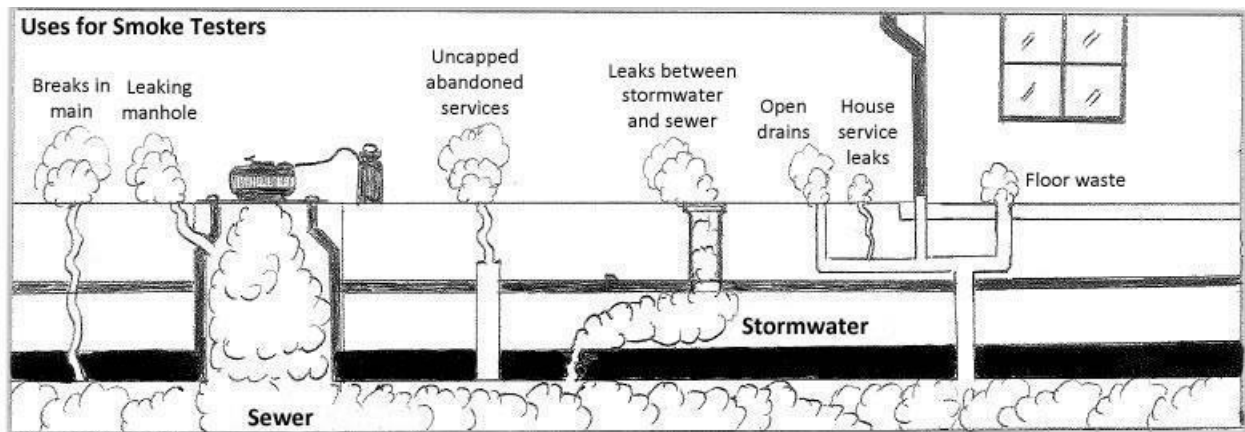
Sewer Smoke Testing

Frequently Asked Questions

What is smoke testing?

Smoke testing is conducted within the public portion of the sanitary sewer system to find potential points of inflow and infiltration that could lead to high flows during storm and extreme weather events. Smoke testing can also help locate the following:

- Points of groundwater or surface water intrusion into the sewer
- Cross connections between sanitary sewers and storm drains
- Defective sewer connections leading to sewer gases entering a building



How does smoke testing work?

During smoke testing, field crews blow air and smoke into the sanitary sewer system through manholes in the street to monitor where smoke escapes the system. The smoke will fill the main line and any lateral connections and then follow the path of any leak to the ground surface, quickly revealing any problems. If you have any doubt as to the source of the smoke in your home or yard, call 911 immediately.

What are the benefits of smoke testing?

Smoke testing is the most efficient and cost effective way to locate and identify leaks in the sewer system and locate areas within the sewer system that need improvement. Smoke testing is also helpful in identifying plumbing leaks in buildings. Sewer gases can cause health problems for building occupants.

Smoke testing is becoming more common for locating water infiltration problems that are negatively impacting the ability to properly treat wastewater and costing residents millions of dollars to treat additional water. Smoke testing will benefit in protecting the waters of the Commonwealth by reducing discharges during extreme weather events.

Is the smoke harmful to me or my pets?

No. The "smoke" is not true smoke, but rather a mist that is highly visible at low concentrations. The smoke is not harmful to your health, nor will it leave a stain, and will disappear rapidly without leaving an odor. Since any vapor can be an irritant, direct contact with the smoke may cause minor respiratory irritation in some people. Individuals with respiratory problems such as chronic asthma or emphysema should avoid direct exposure to the smoke.

Smoke may enter your home, but the smoke is non-toxic, non-staining and odorless, harmless to humans, pets, plants, food and material goods, and creates no fire hazard. Residents are encouraged to leave windows open and any smoke that enters the building will dissipate in a few minutes.

You may see the smoke outside your home as displayed in the image below.



Will smoke testing of the sewers allow smoke to get into my home?

Provided that your plumbing is installed and functioning properly, and all "traps" are filled with water, no smoke will enter your home. To ensure no sewer gases enter your home, simply run water down the drain for a minute to ensure that the trap is not dry. Dry traps are most commonly found in floor drains and bathroom drains that are used rarely. Please thoroughly check your home.

What does it mean if smoke enters my house?

If smoke enters your home during the test, it may indicate there are deficiencies in the plumbing that may allow potentially dangerous sewer gas to enter. If this happens, you are encouraged to contact your plumber immediately to identify proper appropriate repairs.

How may smoke enter my house?

Plumbing fixtures in your home or business are connected to the sanitary sewer system and therefore, there is the potential for the smoke to enter if the drains are not connected properly. A few reasons for this could be:

- The vents connected to your building's sewer pipes are inadequate, defective or improperly installed

- The traps under sinks, tubs, basins, showers and other drains are dry, defective or improperly installed
- The pipes, connections or seals in the wastewater drain system in and/or under your building are damaged, defective, have plugs missing or are improperly installed

What should I do if smoke gets into the house?

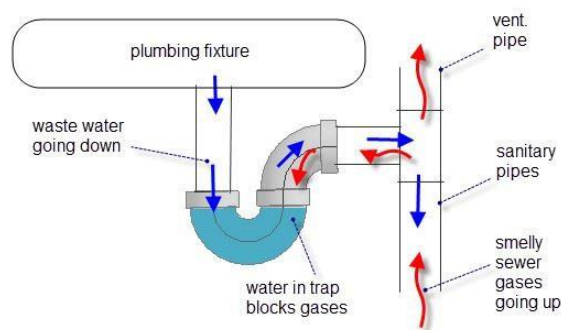
- Do not become alarmed
- Open windows to allow ventilation and note the location of the smoke emission; smoke will clear within a few minutes
- Exit the home and notify smoke testing personnel in the area

If the smoke is not harmful, why do you recommend exiting the building?

We recommend evacuating as a precautionary measure in case the smoke is due to a real fire rather than a test. Also, smoke in your house from this test indicates other sewer gases may also be entering the building, which could be harmful to your health.

How is a plumbing “trap” supposed to work?

The “gooseneck” or “snake” section of your drain pipe is called a “trap.” Water fills this portion of the pipe completely to trap gas in the sewer portion of the pipe. The vent pipe on your system prevents the gas from becoming pressurized and allows it to escape outside the structure. These two systems function together to keep potentially harmful sewer gases from entering your home. If there is no water in the trap, the trap is not functioning properly. We recommend dumping water into building drains and fixtures prior to testing.



How long will the testing take?

While crews might be in your area for a few hours, each smoke test setup takes approximately 15 minutes to complete. Most houses will only be within the testing area for one or two tests.

What should I do in preparation for smoke testing?

Smoke testing in the wastewater service area will take place during the month of December of 2018. Notification that smoke testing will take place near your home will be within 48 hours prior to testing. At this time, you should:

- Check to see that all drain traps contain water
- Flush all toilets and pour water into all drains, including unused fixtures and floor drains

Do I have to be home during testing?

No. Inspection crews will not need to enter your home without permission. If smoke is present, you may invite the crew inside to help identify the defect. You are not required to allow entry to our crews.

How will I know if smoke enters my house if I am not home during testing?

There is no way to know if smoke entered the home once it has dissipated. Smoke testing is conducted within the public portion of the sanitary sewer system to find potential points of inflow and infiltration that could lead to high flows during storm and extreme weather events. While it is also beneficial to note deficient plumbing connections on private property, this is not the main intent of the smoke test. It is the homeowner's responsibility to maintain private plumbing connections.

Why can't you tell me in advance exactly what date my home will be tested?

This testing cannot be conducted during rainy periods or very windy conditions, so it can sometimes be delayed. Also, other activities in the project may take less time than anticipated, so it can sometimes be sooner than expected. A one week window will be provided for your information.

Can the smoke testing activate the smoke alarms?

Yes, smoke alarms may be activated during smoke testing. If possible, open windows and/or doors for ventilation. If you have any doubts about the origin of the smoke, call 911 immediately.

Can smoke plug the sewer?

The smoke is made of a vaporized substance and cannot plug the sewer.

Where does the smoke appear?

Smoke will be seen coming from roof vents on homes. This is normal and indicates that smoke has filled the sewers. Smoke may be seen coming from building foundations, manhole covers, or yard cleanouts.