



## Sewer Smoke Testing Frequently Asked Questions

Each day Burgess & Niple will notify the local fire and police departments as to where sewer system smoke testing will be conducted. **If you have any doubt as to the source of the smoke in your home or yard, immediately phone 911. To ensure your safety, local fire crews will respond as if you have an actual fire.**

**Q.** How does smoke testing work?

**A.** The City has notified the building owners by mail and will inform the local fire and police departments of where they will be conducting smoke testing each day. During smoke testing, field crews blow air and smoke into the sanitary sewer system in the street and monitor where smoke escapes the system. The smoke under pressure will fill the main line as well as any connections and then follow the path of any leak to the ground surface, quickly revealing the source of the problem. For instance, if smoke permeates up through a yard, it indicates breaks in the sewer line. Only enough force to overcome atmospheric pressure is required, and smoke should escape from building roof vents.

**Q.** What is the purpose of smoke testing?

**A.** To find possible leaks in the sewer system allowing clear water to enter the sanitary sewer system (waste water system). Leaky sewer pipes have the potential to create downstream overflows and basement backups.



Figure 1. Leaky Pipe Found by Smoke Testing

**Q.** Is the smoke harmful?

**A.** NO. The "smoke" is not true smoke, but rather a mist

containing a large percentage of atmospheric moisture that is highly visible at low concentrations. It will not harm your health or 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, emphysema or other respiratory conditions should avoid direct exposure to the smoke.

If the smoke enters your home, it may make you cough, but the smoke is

- Non-toxic
- Non-staining and odorless
- Harmless to humans, pets, plants, food and material goods
- Creates no fire hazard

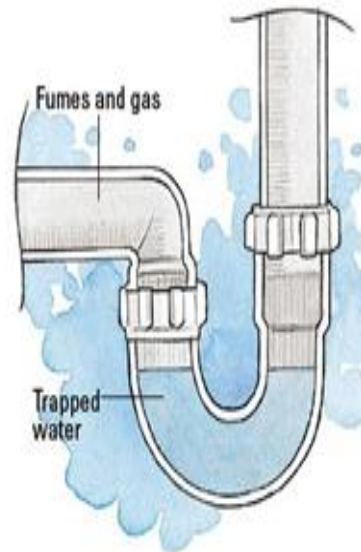


Figure 2. Typical plumbing trap that prevents sewer gas (and smoke from entering homes).

**Q.** What should you do if smoke gets into your house?

**A.** To help prevent smoke from entering your home, open windows for proper ventilation. Also make sure all your drain pipes have had water run through them recently.



Simply flush toilets and pour one gallon of water into all drains, including floor drains in the basement floor. This will ensure that the traps in the pipes contain water, which will help prevent smoke from flowing into your home (see Figure 2). If the traps are full of water and the house properly plumbed, the test smoke should vent out through the sewer vent stack on your roof (See Figure 3).



Figure 3. Properly Vented Home.

- Q.** I'm not going to be home during smoke testing and have pets in the house, what should I do?
- A.** Although the smoke is not harmful to pets, leave several windows partially open for their comfort. If you have proper plumbing connections and all of the water traps in your pipes have water in them, there should not be any smoke inside your home.
- Q.** Can the smoke testing activate the smoke alarms?
- A.** Yes, smoke alarms may be activated during smoke testing. Make sure to open windows and/or doors for ventilation. If you have any doubts about the origin of the smoke, please call 911.
- Q.** What happens to the information inspection crews find?
- A.** This information will be documented and used by PRIME AE and Burgess & Niple to identify needed repairs that will reduce the inflow and infiltration of clear water into the sanitary sewer system.

- Q.** If smoke gets into my home, how long will it take for the smoke to dissipate?
- A.** It depends upon how much smoke enters the building. Providing ample ventilation allows the smoke to dissipate more quickly.

If you have any questions prior to smoke testing please call:

City of Wilmington  
Wastewater Treatment Plant  
at  
(937) 382-2413

*Potential inflow/infiltration sources illustrated at right. Smoke testing assists with locating underground connections and defects that are otherwise difficult to detect.*

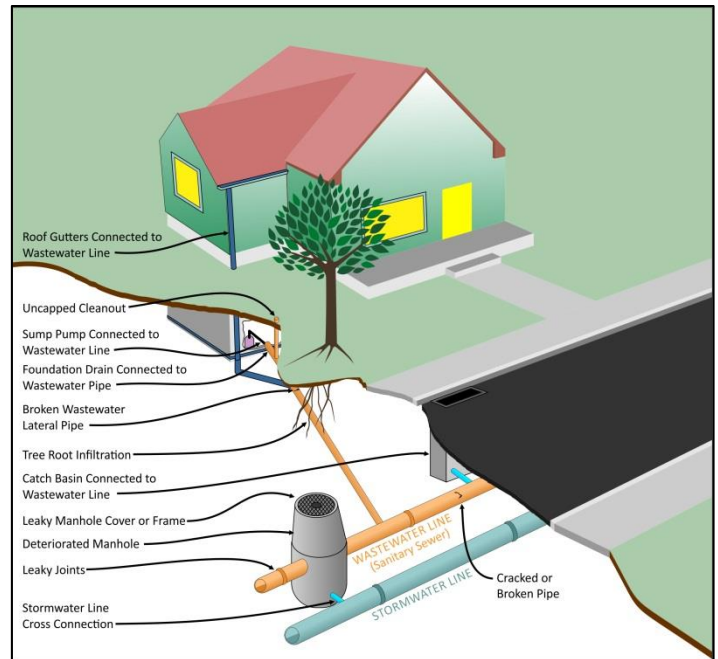


Figure 4. Typical Residential Inflow and Infiltration