

Sanitary Sewer Rainfall Simulation (Smoke Testing)

CWB Engineers, Inc. will have crews working for Paragould Light, Water and Cable in your area soon.

Should you have any questions or concerns regarding the information below, please contact:
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Frequently Asked Questions

What is the purpose of smoke testing sanitary sewer lines? Smoke testing is used to find potential leaks in or illegal connection to the sanitary sewer system. Leaks and illegal connections let extra water enter the sewer that could lead to overflows, water backing up in homes and extra costs in water treatment. All problems that result in extra costs for the sewer system's customers. Smoke testing can locate the following problems:

- Structures having downspout, cellar, yard or basement drains, and sump pumps connected to the sewer
- Points where groundwater or surface water can enter the sewer
- Any connections between sanitary sewers and storm drains
- Defective or broken sewer service lines that could allow sewer gases to enter back into a home or building

How does smoke testing work?

During smoke testing, field crews blow air and smoke into the sanitary sewer system at a manhole and monitor where smoke escapes the sewer lines. The smoke will fill the main line as well as any connections and come out at the ground surface. If the smoke comes up in a yard, it indicates breaks in the sewer line and/or service. If smoke enters your home or building during the test, you have a plumbing issue. The smoke is harmless and will disappear after only a few minutes. **If you have any doubt as to the source of the smoke in your home or yard, phone 911 immediately.**

What are the benefits of smoke testing?

Smoke testing is the most efficient and cost-effective way to locate and identify where excess water is entering the public sewer system. Smoke testing will also help identify private plumbing leaks in homes and buildings that could allow sewer gases to enter.

Smoke testing is a tool that helps the utility reduce excess water from entering the sewer system. The expense for treating the excess water is passed on the sewer customer.

Is the smoke harmful? NO. The "smoke" is not true smoke, but a mist containing a large percentage of water vapor that is highly visible. It will not harm your health or leave a stain and will disappear rapidly without leaving any 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 and harmless to humans, pets and plants
- Non-staining and odorless
- Creates no fire hazard

How may the smoke enter my house?

Since plumbing fixtures in your home or business are connected to the sanitary sewer system, there is the potential for the smoke to enter if the drains are not connected properly. This happens under the following circumstances:

- The vents connected to your building's sewer pipes are 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 piping system in and/or under your building are damaged, defective, have plugs missing or are improperly installed.

IF SMOKE FROM THE TEST ENTERS YOUR HOME, YOU HAVE A PLUMBING ISSUE AND NEED TO CONTACT A CERTIFIED PLUMBER.

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 building and notify the smoke testing personnel in the area.

If the smoke is not harmful, why do you recommend evacuating the structure? We recommend evacuating as a precautionary measure in case the smoke is due to a real fire rather than the test, **and since smoke in your house from this test indicates other sewer gases may also be entering the building.**

How long will the testing take?

While crews might be in your area for a few hours, each actual 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 to prepare for smoke testing?

When you receive notice that smoke testing will take place, you should:

- Make sure that all drain traps under sinks, bathtubs, showers and floor drains contain water; simply flush toilets and run or 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 unless smoke is present, and you want them 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?

The purpose of the smoke test is to identify sources of unauthorized water entering the public portion of the sewer system. 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. The schedule may also shift if more or fewer defects than expected are located and need to be documented.

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, please call 911.**

Can smoke plug the sewer? The smoke cannot plug your sewer lines.

Where does the smoke appear? Smoke may be seen coming from roof vents, building foundations, manhole covers or yard cleanouts. Smoke coming from roof vents on the roof of homes is a normal occurrence and indicates to the crews that smoke has filled all sewers.