



## SMOKE TESTING

### How Is Smoke Testing Done?

Smoke is blown into sewer systems and creates visual indicators where leaks or breaks exist.

### What is it?

The City of Santa Rosa conducts Smoke Testing of the sanitary sewer system. It involves opening of manholes in the streets and public utility easements. The test takes 5 minutes. A special non-toxic smoke is used in these tests. The smoke is manufactured for this purpose, leaves no residuals or stains, and has no effect on plant or animal life. **Very rarely does smoke enter a home** but, if you suffer from respiratory problems, do not stay in your house or place of business during the smoke test. If you have an animal, please keep it outside until the smoke test is complete. The smoke has a distinctive, but not unpleasant, odor. Visibility and odor last only a few minutes, where there is adequate ventilation.

### What is the purpose of testing?

- To find the source of an inflow or infiltration problem.
- To find leaks and illegal connections to sewer lines.
- To find abandoned sewer lines not previously surveyed.

Because the plumbing appliances in your house or building are connected to the sanitary sewer system, some smoke may enter your home or place of business if the:

- Vents connected to your building's sewer pipes are inadequate, defective, or improperly installed.
- Traps under sinks, tubs, basins, showers and other drains are dry (not used often), defective, improperly installed, or missing.
- Pipes, connections and seals of the wastewater drain system in and under your buildings are damaged, defective, have plugs missing, or are improperly installed.

### What do I do if smoke enters my house?

If traces of this smoke or its odor enter your house or building, it is an indication that gases and odors from the sewer also may enter. These can be both unpleasant and dangerous, as well as a health risk to the occupants. If smoke does enter your home, that means there is a defect in your plumbing and you should contact a plumber to resolve the problem. You may also contact a member of the smoke testing crew working in your area. The crew member may be able to help and check with you as to where the smoke has entered your building. Location, identification and correction of the source of smoke that enters your building is urgently advised.

The information gained from this testing will be used to improve your sewer services and may reduce the eventual cost to utility customers. Should you have any questions, please contact the City of Santa Rosa Utilities Department at (707) 543-4200.

### **Frequently Asked Questions about Smoke Testing?**

#### **1. Why does the City perform smoke tests?**

A. The City performs smoke tests to determine if there are any illegal connections to, or defects in, the sanitary sewer system. A defect could allow storm water into the sanitary sewer system, raising the cost of wastewater treatment.

#### **2. How often does the City perform smoke tests in my neighborhood?**

A. The City plans on smoke testing every neighborhood every 5 to 10 years.

#### **3. I or a family member has a respiratory problem. What should I do during a smoke test?**

A. Very rarely does smoke enter a home, but it would be best if you could sit outside for the duration of the smoke test which is approximately 5 minutes. If you cannot sit outside, open the windows of your home and shut your bathroom doors. Also, let the City smoke test crew member who knocks on your door know you have a respiratory condition.

#### **4. I work during the day and have inside animals. What do I do during a smoke test?**

A. Very rarely does smoke enter a home, but if you do have to leave your animals inside make sure you leave windows open. On the rare occasion when smoke does enter the home, it is usually a defect in the bathroom, so do not lock animals in the bathroom. Shut bathroom doors and leave the bathroom window open.

**5. Is smoke harmful to my animals?**

A. In most cases, no. But, if your animal has a respiratory condition, the smoke could irritate it.

**6. Is smoke harmful to my plants?**

A. No, the smoke is not harmful to indoor or outdoor plants.

**7. Why would smoke enter my resident or business?**

A. A plumbing defect or unused sinks, showers or drains is how smoke would enter a home or business. The most frequent cause of smoke in a residence or business is a bad wax ring on the toilet. Unused sinks, showers or drains should have water placed in them to fill up the p-traps. A p-trap is a standard plumbing fitting used on all sinks, showers or drains so sewer gases and sewer odor won't enter your home.

**8. Should I be concerned if smoke enters my home or business?**

A. Yes, this means that sewer gases or odors can also enter your home or business.

**9. What should I do if smoke enters my home or business?**

A. Open your windows and call a professional plumber.

**10. How long does the smoke test last?**

A. Approximately 5 minutes.

**11. When and how will I be notified of the time of the smoke test for my home or business?**

A. A City smoke test crew member will knock on your door just prior to the smoke test. The crew has to notify a large area so “just prior” could be 20 minutes or 5 minutes.

**12. I have a sump pump connected to my sewer lateral under the house. Will that be affected during the smoke test?**

A. Yes, sump pumps are illegal connections to the sanitary sewer system. If you have a sump pump connected to the sanitary sewer system, you should disconnect it. If your sewer lateral becomes fully or partially plugged and your sump pump turns on, the water could be pumped into your home through a shower or tub causing tremendous damage.