

What is Smoke Testing?

As sanitary sewer infrastructures age, routine investigations are needed to find potential problems within the system. One common concern is the potential for infiltration and inflow (I&I) of rainwater and stormwater into pipes and manholes. This I&I can surcharge a pipe network and pump station, threatening the integrity of the system, while costing taxpayers money due to the added volume of sewer treatment.

To assist in finding areas of infiltration and inflow, a non-toxic, low-odor, water-based vapor is blown into the sewer pipes through a sanitary sewer manhole. By doing this, personnel can identify areas of concern when white smoke appears at trouble locations. Smoke presents itself by rising out of the sewer system through breaks, cracks, holes, and other flaws in the structures.

Visible Smoke

During smoke testing it is normal for the smoke to travel up and out of roof vents, typically an indication of efficient plumbing and no major I&I concern in the immediate area. Although unexpected, if smoke becomes visible inside a home or business, there is likely a defect in the private system and a plumbing professional may be needed.



Smoke from roof vent OK

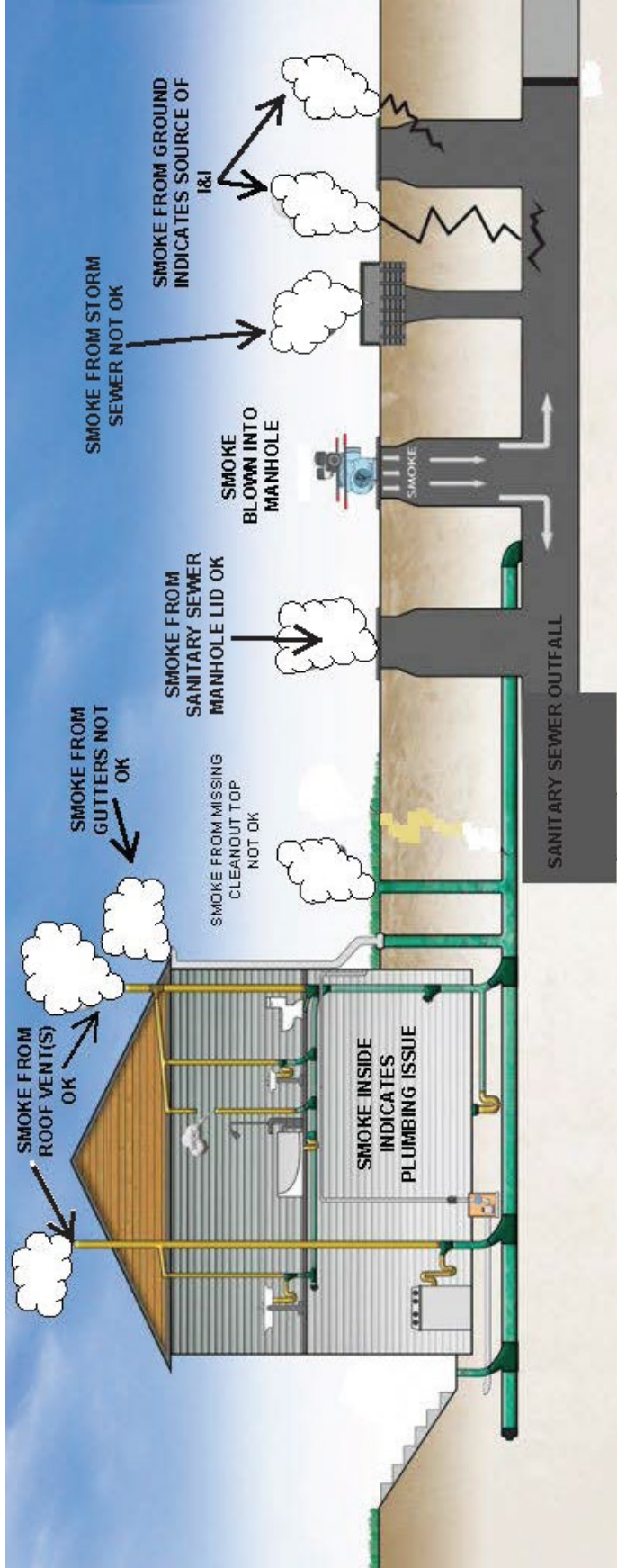


Smoke from ground potential I&I

What Next?

The Town of Elon will take steps to resolve issues found within the public sewer lines, while residents will be notified if any private connection issues arise during the study. Instances that cause notification and would require action by a homeowner include: roof drains, foundation drains, sump pumps, yard drains, or any stormwater drains connecting to the sanitary sewer system.

A diagram of the smoke testing process is provided on the backside of this brochure. For more information go to townofelon.com or contact Assistant Public Works Director David Murphy at 919-584-9600.





Areas to be smoke tested
are shown by colored area

