



St. Johns County Board of County Commissioners

Utility Department

RE: Inflow/Infiltration (I/I) Reduction Program – Sanitary Sewer Smoke Testing Phase One

Dear Resident or Property Owner:

This letter is to notify you that St. Johns County Utility Department (SJCUD) is in the process of implementing an Inflow/Infiltration (I/I) Reduction Program and is planning to start sanitary smoke testing in your community within the next thirty days. The program objective is to remove storm water sources from the sanitary sewer system, keep wastewater treatment costs and sanitary sewer rates low, and protect the environment.

Smoke Testing is a standard method of detecting sewer defects and storm water cross connections to the sanitary sewer system. Smoke testing consists of placing a high capacity blower on top of a sanitary sewer manhole and forcing “smoke” down into the sewer system. The smoke, under pressure from the blower, travels through the sewer system and escapes through any connection, cracks, leaks, etc., along the way. This quickly reveals sources of I/I within the study area. See attached Smoke Testing FAQ for commonly asked questions about the process.

W K Dickson, a consultant hired by the County, will be performing the smoke testing and all personnel will have proper identification and vehicles marked. The smoke used for smoke testing is non-toxic and non-hazardous and is manufactured specifically for this purpose. It leaves no residue or stains, and has no effect on plants or animals. The smoke should not enter your building, but if it does, it will have a distinct odor and should only last a few minutes with proper ventilation. Both the St. Johns County Fire and Sheriff Departments will be made aware of the smoke testing project areas and schedule. Reminder notices will be given to residents at least 24-48 hours prior to work in the specific area. Please note, all plumbing fixture drain traps must be filled with water prior to smoke testing. Please perform the following tasks to ensure smoke does not enter your home:

- Make sure all drain traps and plumbing fixtures have water in them. Fill seldom used drains (such as floor drains, garage sinks, etc.) with water by running the faucet for 30-60 seconds or filling the drain with approximately 3 cups of water.
- Prepare drains as soon as you receive this smoke testing notice, this only needs to be done once before testing begins.
- You do not need to be home during the smoke testing field work.
- Smoke should not enter your home; however, if it does this could be an indication of a defect in your plumbing system. This defect could allow sewer gases to enter inside your home, which is a potential health hazard. Corrections of such defects on private property are the responsibility of the property owner, and a licensed plumber should be consulted to ensure the proper corrections are made. If smoke does enter your home or building, please notify the field technicians who are conducting the test.



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The information gathered during the smoke testing project will be used to create a prioritized plan to reduce I/I impacts to the sanitary sewer system. Sewer defects will exist on both public and private property and will need to be corrected in a timely manner. After the smoke testing is complete, notices will be sent to those property owners that will need to make corrections. Often times, it can be as simple as removing a connected roof downspout and letting it drain above ground, or replacing a broken or missing lateral cleanout cap in your yard. SJCUD will assist homeowners in determining the best approach in disconnecting I/I sources and rerouting storm drainage. Reducing I/I will keep sanitary sewer rate charges low, while also protecting the environment.

We appreciate your patience and understanding and will make every effort to minimize the inconvenience or disruptions this project may have on you. If you have any further questions or concerns regarding smoke testing, please call 904-209-2636. SJCUD is also maintaining a website designed for the I/I Reduction Program. For project updates, project maps, important notices, and more information please visit www.sjcfl.us/SmokeTesting.

Sincerely,

Tom Tibbitts
Information Systems Coordinator



Inflow/Infiltration (I/I) Reduction Program

NOTICE

**SMOKE TESTING WILL COMMENCE IN YOUR
NEIGHBORHOOD APRIL 3rd-6th**

The St. Johns County Utility Department will be smoke testing sanitary sewers in your area between April 3rd-6th 2018, weather permitting.

Smoke testing is used to locate breaks, cracks, leaks, and cross connections with rain water sources to the sanitary sewers. Large quantities of rain or ground water in the sanitary sewers can lead to Sanitary Sewer Overflows (SSOs) or sewage backups into residential homes and businesses.

The smoke used is non-toxic and non-hazardous and is manufactured specifically for this purpose. It leaves no residue or stains, and has no effects on plants or animals.

Important Instructions for Residents Prior to Smoke Testing:

- Make sure all drain traps and plumbing fixtures have water in them. Fill seldom used drains (such as floor drains, garage sinks, etc.) with water by running the faucet for 30-60 seconds or filling the drain with approximately 3 cups of water.
- Prepare drains as soon as you receive this smoke testing notice, this only needs to be done once before testing begins.
- You do not need to be home during the smoke testing field work.
- Smoke should not enter your home; however, if it does this could be an indication of a defect in your plumbing system. This defect could allow sewer gases to enter inside your home, which is a potential health hazard. Corrections of such defects on private property are the responsibility of the property owner, and a licensed plumber should be consulted to ensure the proper corrections are made. If smoke does enter your home or building, please notify the field technicians who are conducting the test.

The St. Johns County Fire/Rescue Department and Sheriff's Office are aware of the smoke testing project areas and schedule.

We appreciate your patience and understanding and will make every effort to minimize the inconvenience this project may have on you. If you have any further questions or concerns regarding smoke testing, please call (904) 209-2636.

The St. Johns County Utility Department maintains a website for the I/I Reduction Program. For project updates, maps, important notices and further information please visit www.sjcfl.us/SmokeTesting.



Inflow/Infiltration (I/I) Reduction Program Smoke Testing FAQ

What exactly is a Smoke Test? A three-man crew from St. Johns County Utility Department (SJCUD) will use a high capacity blower technique to test each sewer line with smoke. Smoke blowers are placed on manholes and smoke is blown through the sewer system. Any location where smoke is identified during the test, except plumbing vent stacks, is a potential I/I source for storm water to enter the sewer system. These locations will be documented via pictures and sketches.

What is the benefit to the County for performing a Smoke Test? Smoke testing is one technique utilized to identify sections of sewers that may exhibit inflow during heavy rainfall. Smoke testing is best used to detect inflow sources such as roof downspouts, driveway, yard and area drains, foundation drains, faulty connections, and storm water drainage system cross connections. It can also detect structural damages and leaking joints in sewer pipes.

How will residents know when Smoke Testing will be performed in their neighborhoods? Prior to beginning the smoke testing, SJCUD will give notices to all homes/buildings on the streets to be smoke tested at least 24 to 48 hours in advance. A smoke testing schedule will also be posted on the County's I/I Reduction Program website, located at www.sjcfl.us/SmokeTesting.

How are County crews recognizable in the field? SJCUD personnel are uniformed and carry identification badges. Crewmembers operate from vehicles with proper signage for ease of recognition.

Is the smoke that is used hazardous? The smoke that comes out of the vent stacks on houses or holes in the ground is non-toxic, harmless. It does not create a fire hazard. St. Johns County Sheriff and Fire Departments will be made aware of the test areas and schedule.

Do residents have to do anything to prepare their homes for Smoke Testing? Plumbing drain traps need to be filled with water to prevent the smoke from entering the building. Run the faucet for 30-60 seconds or pour about 3 cups of water in floor and sink drains, filling the traps. Make sure to check seldom used floor drains and plumbing fixtures in your home. If smoke does enter, the resident should consult a licensed plumber. If smoke from the testing can enter through faulty plumbing, the potential exists for dangerous sewer gases to also enter the home.

Does the resident need to be home when the Smoke Testing is performed? Homeowners do not need to be home and at no time will field crews need to enter the residence. Field inspectors will be documenting the testing, taking photos and measuring distances so that the defects may be found at a later date and repaired.

What happens after the smoke testing has been completed?

SJCUD will notify residents who need to make corrections with a letter explaining the nature of defect found, ways to correct it, and a list of licensed sewer contractors who can make corrections, if need be. Again, most corrections can be easy fixes, such as disconnecting a downspout from the ground and letting the water flow above ground away from the home.