



Florida Keys Aqueduct Authority

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March 10, 2020

Conch & Coral Key Wastewater Improvement Program Smoke Testing Project

Dear Customer,

Providing the most advanced wastewater treatment services to our customers requires continual operational assessments and improvements. To further this effort the Florida Keys Aqueduct Authority (Authority) is embarking on a new phase of our wastewater improvement program.

The objective is to prevent rainwater, tidal or other non-wastewater sources from entering the wastewater system, which helps to meet regulatory standards, minimize treatment costs and protect the environment. The initial task will be the implementation of a smoke test to identify locations of inflow and infiltration (I/I) to the wastewater collection system. Smoke testing is one of the most efficient and cost-effective methods of locating I/I in wastewater systems.

Smoke testing consists of introducing a non-toxic and non-hazardous smoke into the wastewater collection system. The smoke is manufactured specifically for this purpose. It leaves no residuals or stains and has no effects on people, animals or plants.

The smoke travels through the collection system and escapes through any leaks, breaks, cracks, etc., identifying the sources of I/I in the system.

Smoke testing will be conducted in Conch Key and Coral Key on March 20, 2020.

The testing will be conducted methodically on a street-by-street basis and only impact each residence for a short period of time, approximately 15 minutes. During this time Authority personnel will be on your street surveying the system for plumbing deficiencies. Additional notification will be provided via a tag at the property 24-48 hours prior to testing.



Smoke indicating a leaking wastewater lateral

Smoke that you may see coming from plumbing vent stacks on houses is normal. However, smoke coming from holes in the ground is not normal and considered a defect. All such defects will be photographed and logged. **The Authority will contact customers if a defect is found on private property.**

Important Instructions for Residents Prior to Smoke Testing

- Should you have infrequently used drains in your home you will want to ensure the drain trap has not dried up. To accomplish this place 2 gallons of water in infrequently used drains. This will ensure that your trap is filled. This only needs to be completed once. If the home is not occupied it is not necessary to complete this step.
- You do not need to be home during the smoke-testing project.
- Smoke should not enter your home. However, if it does, this could be an indication of a defect in your plumbing system. Although the smoke may be safe, it exposes the possibility that sewer gasses may enter your home. Corrections of such defects on private property are the responsibility of the property owner and a licensed plumber should be consulted immediately 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.



Smoke exiting through a plumbing roof vent is normal and expected

Please see Attachment A - Frequently Asked Questions, for more information. Updated information will also be available on www.FKAA.com under the Projects in Progress section at <http://www.fkaa.com/ConchWWSmokeTesting.htm>. For additional questions you may contact Mabel Companioni at (305) 809-2622 or via email at mcompanioni@fkaa.com.

Attachment A

Smoke Testing FAQs

What exactly is a Smoke Test and why is it conducted? Smoke blowers are placed on manholes and smoke is blown through the sewer system. Any location where smoke is observed during the test, except plumbing vent stacks, indicates a plumbing deficiency and is a potential location for inflow and infiltration. These locations are identified so appropriate repairs can be made.

Is the smoke that is used hazardous? The smoke used for testing is specially formulated and is non-toxic and harmless. It does not create a fire hazard.

What is the benefit to residents? Identifying areas of inflow and infiltration in this cost effective and efficient manner allows the Authority to identify deficiencies and make repairs that will minimize treatment costs, meet regulatory standards and protect the environment.

How will residents know when Smoke Testing will be performed in their neighborhoods? Prior to beginning the smoke testing, the Authority will mail notices and tag all homes/buildings to be smoke tested at least 24 to 48 hours in advance.

How will smoke testing crews be recognizable in the field? All smoke testing will be conducted by uniformed Authority personnel in marked vehicles.

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. Most drain traps remain filled with water, but traps in seldom used drains and plumbing fixtures may dry out. Please pour 2 gallons of water in seldom used floor drains and plumbing fixtures in your home so that the traps are filled to prevent smoke or odors from entering the building. This step may be omitted if the home is unoccupied. 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?

The Authority will utilize this information to prioritize infrastructure improvements and address deficiencies in the collection system. Residents will be notified of defects located on private property.