



# Smoke Testing

The main phase of field investigation activities is to smoke test all pipe within the identified high priority areas. Smoke testing enables field inspection staff to quickly identify direct sources of inflow (stormwater) entering the sanitary sewer system.

## Our Process

- Using a mechanical blower, smoke is forced into the sewer collection system through a manhole. The smoke exits the system through the same points where Inflow & Infiltration (I&I) enters the system.
- Location, source description, smoke intensity and I&I severity rating of the problem are logged for future investigation and/or rehabilitation/repair. Each defect is photographed.
- Defects are located using hand-held GPS. PDF inspection reports are generated to provide a summary of all defects identified, maps showing their location, and a GIS geodatabase format including all photographs.



## Customer Communication

Public notification is a very important part of the smoke testing process, so Duke's can minimize disruptions to the residents and businesses within the study area. Door hangers are distributed at least 48 hours in advance of any smoke testing activities to notify the public of the upcoming work. Duke's contacts the local authorities to notify them of the upcoming days' work, and any high priority locations such as hospitals, schools, etc. are also notified in person prior to smoke testing work being performed.

## Technology and Deliverables



Field Operations

Defect Sample



Scan the QR code to view a sample Smoke Testing video as executed by our Duke's Field Crews.

