

SMOKE TESTING SERVICES

SPECIALIZED TOOLS AND TECHNIQUES

- Dual Blower Technique
- Digital Mobile Data Collectors
- Pro-active Public Notifications/ Outreach
- Stringent Health & Safety Policies
- RJN Clarity
- GIS/CMMS Compatible Deliverables



SMOKE TESTING INSPECTIONS locate structural defects in pipe segments and connections that allow clean water to inflow or infiltrate a wastewater collection system.

RJN standard practice is the **dual blower technique**. High capacity blowers placed at each end of a pipeline segment force the odorless, non-toxic smoke through the pipe segment. The smoke escapes through cracks, deteriorations, and failing and illicit connections simulating how rainfall/high groundwater can enter the collection system.

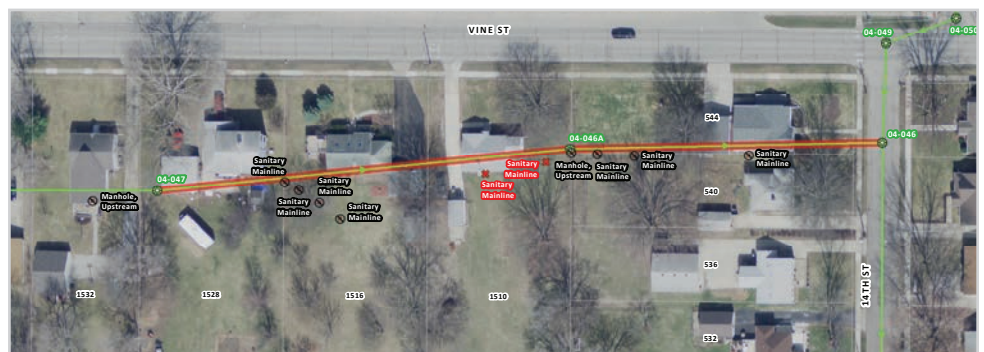
Smoke testing produces results critical to understanding “defects” that impact the design capacity of a collection system. Findings not only isolate public source defects (manholes and sewer pipes), but also private source defects (lateral connections, downspouts, and yard/foundation drains).

WHY DUAL BLOWERS?

RJN engineers and field inspectors have proven time and time again that four to six times as many defects are identified using dual blowers.

TECHNIQUE PROOF

During a recent project, RJN validated the dual vs. single blower technique. The GIS image to the right illustrates the findings. The defects located with the single blower are marked in RED. The defects located with dual blowers are marked in RED and BLACK.



Accurate condition data ultimately forms the foundation for capital planning, regulatory compliance, and cost-effective routine operations and maintenance.

RJN-developed mobile data collectors and data management tools drive our sophisticated field data collection and data management processes for Condition Assessment Programs, Flow Monitoring Programs, and GIS Development.

RJN GATAR

RJN GATAR data collectors operate on widely-used IOS/Android platforms transmitting data as it is captured to RPM. The GATAR units record and document GPS coordinates, structural attributes, and conditions supported with digital photos/video. Inspections are conducted using customized views constructed with inherent Quality Control (QC) by trained and experienced RJN field inspectors.



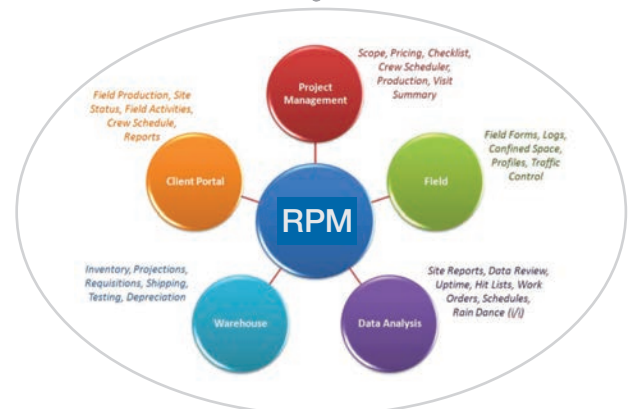
RJN Project Manager (RPM)

RJN RPM manages the data. This SQL-based platform organizes and stores data, interfaces with GIS tools, and offers client access to results, logs, and reports.

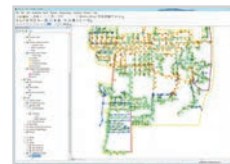
RJN Clarity

RJN Clarity is a secure online data viewer offering transparent access to field data as it is collected.

GATAR Condition Data Collection



GIS



Engineering Analysis



CMMS/Asset Management Tools



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