Sewer Smoke Testing

Elk Valley Road and Bertsch-Oceanview area.

Sewer Smoke Testing

Kicking off 15 September, 2025. The County of Del Norte (CODN) will conduct specialized testing of its sewer system through non-toxic smoke testing.

Expect to see non-toxic smoke in the air and coming from the ground and sewer systems.

Please make sure that you put at least 3 cups of water down each drain, toilet, sink, or any feature that drains to the sewer system. This will ensure that you p-traps are full which will prevent smoke from entering your residence or structures.

What is a Sewer Smoke Test?

A sewer smoke test consists of a non-toxic, odorless, and harmless smoke (similar to the smoke seen at various concert events) to locate any leaks or defects in a sanitary sewer system; smoke is pumped into the pipelines and helps identify any improper private connections into the County's sewer system. County Code section 15.28.10, Discharge of Rainwater or Uncontaminated Water Prohibited, states "No person shall discharge or cause to be discharged any rainwater, storm water, groundwater, street drainage, subsurface drainage, yard drainage, water from yard fountains, ponds or lawn sprays, cooling water, or any other uncontaminated water into any sewerage facility which directly or indirectly discharges to facilities owned by the district."

This smoke testing is designed to help prevent overflows, protect the structural integrity, and maintain the County's sewer system by pinpointing various possible issues or defects that could be within a sewer system. Depending on where the smoke might be seen during the course of the test, it can help to identify these possible defects in the system's infrastructure:

- Cracked or broken pipes Smoke escaping from the ground or pavement may indicate structural damage underground.
- **Missing or broken cleanout caps** Smoke emerging from cleanouts suggests they may be uncapped or damaged.
- **Cross-connections** Smoke coming from downspouts, roof drains, or other non-sanitary sources may indicate improper connections.
- **Illegal connections** Such as sump pumps or yard drains connected to the sanitary sewer.
- **Defective manhole covers or frames** Smoke escaping from manhole seams can point to possible infiltration or exfiltration points.
- **Dry or faulty traps** If smoke enters a building, it could be due to dry or missing traps, allowing gases (or smoke) to enter.
- Open joints or gaps in the system Particularly in older systems or systems affected by ground movement or root intrusion.

How to Best Prepare

If you receive a notification or door hanger for an upcoming sewer smoke test, CODN request the following assistance from customers to best prepare for a sewer smoke test in your neighborhood:

- Pour approximately 3 cups (24 ounces) of water per drain on the day of the test including sinks, showers, and floor drains.
- The Fire and Sheriff Departments are informed about the sewer smoke testing in your area. If you have any questions, please contact us at (707) 464-7229.
- We anticipate the entire project to be completed within a two-week period. Once each area or block is isolated, the sewer smoke testing process should take approximately one hour for that specific area.

• If you detect smoke in your residence/business, please notify the field technicians conducting the smoke testing.

Thank you for your cooperation as we work to successfully complete this important maintenance project. If there are any further questions or concerns, please reach out to the County of Del Norte Engineering and Surveying at 707 464-7229

FAQ: Before the Sewer Smoke Test

Before the Sewer Smoke Test

What is the reason for smoke testing?

Smoke testing is used to find potential leaks or cracks in the sewer system to help us ensure the proper maintenance of our infrastructure.

Is the smoke harmful?

No, the smoke used in sewer testing is considered non-toxic and safe to breathe. The smoke used for this test is similar to the smoke used at events or concerts.

What is the smoke made from?

The smoke is similar to the smoke that is often seen and used in various concerts or theme park attractions, but to learn in more detail please see the two PDFs below:

<u>LiquiSmoke-SDS-and-Test-Results-Explaination-2023.pdf(PDF, 491KB)</u>

 $\frac{https://www.lbutilities.org/files/sharedassets/utilities/v/1/sewer/documents/liquismoke-sds-and-test-results-explaination-2023.pdf}{Hurco-LiquiSmoke-SDS-2019.pdf}_{(PDF,\,444KB)}$

https://www.lbutilities.org/files/sharedassets/utilities/v/1/sewer/documents/hurco-liquismoke-sds-2019.pdf

FAQ: During the Sewer Smoke Test

During the Sewer Smoke Test

How long will the smoke test take?

A typical smoke test for a single property can take anywhere from 30 minutes to an hour, depending on the complexity of the plumbing system.

Does the customer need to be home for the test?

No, but we do recommend the customer be there if possible. However, if it is not possible for the customer to be present, please make sure to pour at least three cups of water into all drains any time before the day of the test.

Why might smoke come into my house?

If you see smoke in or on your property, this may indicate a broken sewer pipe or improper connection.

What should I do if smoke enters my home?

If you notice smoke entering your home during the smoke test, ventilate the area by opening doors and windows. Next, please contact the on-site field technician or call the County of Del Norte (CODN) at (707) 464-7229.

If smoke appears on my property, who is the field technician I should speak to?

The field technician is from the County of Del Norte. You can also request to speak with an CODN representative if you have any additional questions.

Will a field tech always be on site for customers to connect with, or will a phone number be provided? If on site, how long will they be present?

The technician will be present in the testing area for approximately one hour before moving onto the next scheduled smoke test, but they will still be in the vicinity. They will be wearing safety vests.

How long before the smoke dissipates? What if it doesn't dissipate?

Under normal conditions, the smoke used in testing typically dissipates within a few minutes after the test is complete. It's non-toxic, non-staining, and designed to disperse quickly once ventilation begins or the blower is turned off.

FAQ: After the Sewer Smoke Test

After the Sewer Smoke Test

What does it mean if smoke is seen coming from a specific outdoor location?

If smoke is visible coming from a specific area outside, it likely indicates a potential leak in the sewer line at that spot.

How accurate is the smoke test at pinpointing the actual leak location?

While smoke testing is a diagnostic tool and doesn't always pinpoint the exact leak location, it's generally very accurate in identifying the general problem area.

For properties where smoke was seen, will this be tracked? If so, by who? And how?

Yes, properties where smoke is observed during the test will be tracked. Field technicians are responsible for recording their findings. They will collect detailed information, including the location of the smoke, the severity of the smoke release, and take photographs to document the findings.

Will the County contact residents if smoke is discovered on their property?

County technicians will attempt to make contact with the resident if they observe smoke coming from a property owner's residence that they cannot directly access (i.e. if smoke is seen potentially coming from a backyard or side yard). If smoke is seen from an inaccessible location, the County will knock on the door to request the owner's permission to investigate further for documentation of the findings.

How will I be contacted if I'm not home and smoke is found on my property?

Technicians will observe the smoke coming from the residence or business and will document their findings to the best of their ability to then have those findings be passed to CODN to follow up with you to discuss the observations.

How is responsibility for the reparation determined?

Responsibility is determined by the location where the smoke is observed. If smoke is visible on the private property or from a private lateral, it indicates a customer responsibility. If the smoke is observed on the County property (or within the public right-of-way) and it is not from a private lateral, it is considered an CODN responsibility. Private laterals in the right-of-way are the property owner's responsibility. For more information regarding Sanitary Sewer System responsibility, please visit our website FAQs.

How will customers be held accountable for the needed repairs if it is determined to be their responsibility?

Currently, the County of Del Norte is not planning to issue fines or penalties. Instead, we are focused on working collaboratively with residents to encourage the correcting of any of the identified issues in order to help the overall integrity of the sewer system.

If an improper connection is found as a result of the smoke test, how can I fix it?

The County of Del Norte encourages customers to contact a licensed plumber to correct any non-compliant connections to ensure the necessary repairs are proper and compliant connections.

Is there a deadline for customers to make repairs?

Currently, the County expects repairs to be made within three months. Please contact us if you have a specific issue that you are unable to address within the expected repair timeframe.