

Find out more

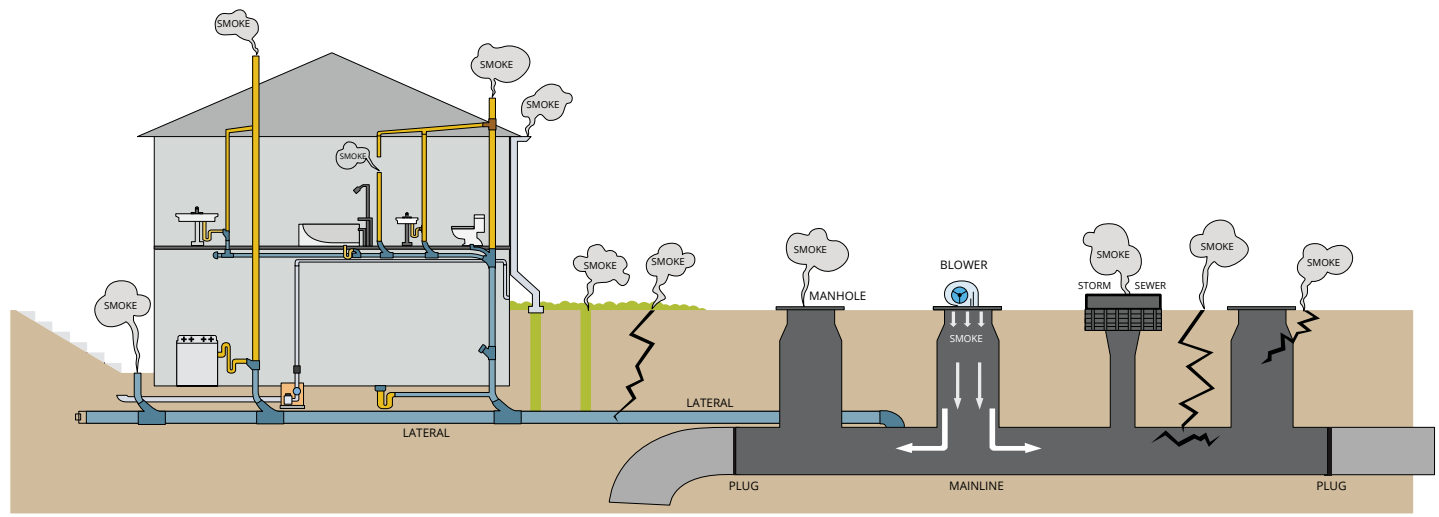
# A guide to Smoke Testing and what it means for you

## Fact Sheet

**Council is carrying out a smoke testing programme on the wastewater network in Ōamaru. This work will be undertaken by PipeWorks staff at various locations during July and August 2023. Below are some FAQs (Frequently Asked Questions) that we've put together to help provide more information on this project.**

### What is smoke testing?

Smoke testing involves forcing a dense, non-toxic and odourless smoke into the wastewater (sewer) network at a manhole. The smoke fills the wastewater main and any connected pipes (i.e. plumbing within private property) and follows the path of any breaks in pipes to the ground surface. Smoke testing staff monitor the locations where smoke escapes the system and is visible above ground and will take pictures and collect data on these locations.



## Why does Council smoke test?

---

The purpose of smoke testing is to identify areas within the wastewater network that need attention.

Our wastewater network is designed to collect wastewater (sewage) from homes and businesses, not rainwater and other surface water. When other water enters the wastewater network (through direct cross-connections or faults/breaks), it can overwhelm the capacity of the network (especially in heavy rain events). This can result in overflows of diluted untreated wastewater into streets, private property and waterways and can have a harmful effect on our environment. Excessive stormwater that arrives at wastewater treatment facilities can also wash away the special bugs that treat our wastewater. This affects our treatment processes.

Smoke testing identifies faults/breaks in pipes (public and private) and manholes as well as locations where stormwater and other surface water can get directly into the wastewater network (also known as a cross-connection). This helps us to keep faults to a minimum and unnecessary water out of the wastewater network, which in turn helps keep wastewater operational costs down.

Smoke testing is common practice around New Zealand.

## Where does the smoke appear?

---

Smoke will be seen coming from sewer vents (also known as terminal vents) on roofs of homes/buildings. This is normal and indicates that smoke has filled the sewers.

Smoke may also be seen coming from building foundations, manhole covers, or cleared sections with existing sewer connections. This is normal and indicates that smoke has filled the sewers.

Smoke may enter your home/building. Read on for further information on this.

## Will the smoke testing staff enter my home?

---

**No, the staff performing the smoke testing will not enter your home/building during the testing process** (and you do not need to be present during the smoke testing). However, if smoke is found in your home/building, you can request they enter to assist in determining where the smoke is entering from.

As there may be Council-owned pipes and manholes located in your property, Council or PipeWorks staff may require access to your property (backyard) to check that smoke is exiting from the expected locations.

## Is the smoke harmful to me or my pets? Can it damage my plumbing?

---

**No. The “smoke” is not true smoke. It is a harmless white vapour** – the same non-toxic substance used in smoke machines at concerts. It is considered safe for humans, animals and plants, leaves no residue or stains, is not a fire hazard and will disappear rapidly without leaving an odour.

The smoke cannot block pipes and does not damage plumbing.

Since any vapour can be an irritant, direct contact with the smoke may cause minor respiratory irritation in some people. People with respiratory problems such as chronic asthma or emphysema should avoid direct exposure to the smoke.

**Please contact Council by phone 03 433 0300 or PipeWorks on 027 277 2177, to discuss your situation further if you have concerns about upcoming smoke testing.**

## Will the smoke get into my home/building and what should I do?

Smoke may appear in your home/building. **Do not be alarmed.**

Open windows to allow ventilation and note where the smoke is coming from; it will clear in a few minutes. Smoke alarms may be activated.

Leave your home/building and notify smoke testing personnel in the area. This is precautionary until we confirm that the smoke is from our testing and is not indicative of fire.

**If the smoke is from our testing, this may indicate that there is a problem with your plumbing.**

We suggest you contact your plumber as soon as possible to inspect and make any necessary repairs. If the smoke has entered your home/building, then there is the possibility that gases from the wastewater network are also entering your home/building. This is potentially dangerous and should be rectified immediately.

## How may smoke enter my house/building?

Because your plumbing is connected to the wastewater network, smoke may enter your home/building if:

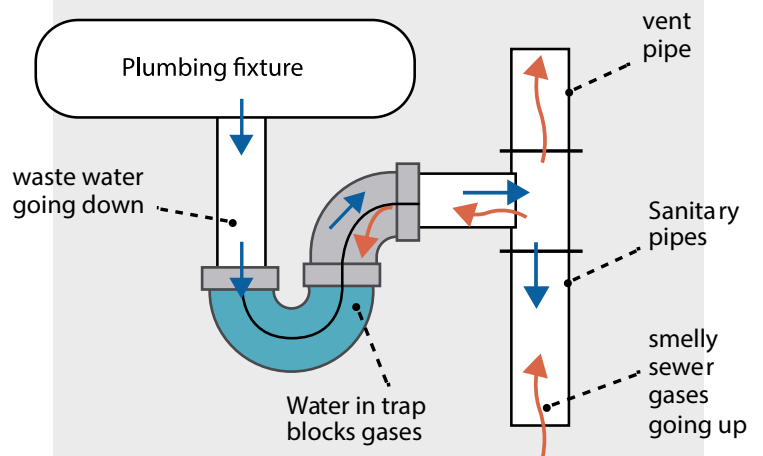
- Vents connected to your home/building's wastewater plumbing are inadequate, defective, or improperly installed.
- Pipes, connections and seals of the wastewater plumbing, in and under your buildings are damaged, defective, have plugs missing, or are improperly installed.
- U-traps under sinks, tubs, basins, showers and other drains are dry, defective, improperly installed, or missing.

**If you have any doubt as to the source of the smoke in your home or property and suspect a fire, please call 111**

**If your plumbing is installed and working properly, your U-traps will prevent smoke entering your home.**

A U-trap is a U-shaped section of your drain pipe that is always full of water. The water acts as a barrier, preventing sewer gases from getting into your home through sinks and drains. If there is no water in the trap, it will not work properly.

Dry traps are most often found in floor drains and bathroom drains that aren't used often. Please thoroughly check your home. We recommend running some water into building drains and fixtures before smoke testing to replenish any water that may have been lost over time.



## What should I do to prepare for smoke testing?

---

- Ensure all U-traps contain water by running some water into all drains and fixtures before smoke testing. This is particularly important for floor drains and bathroom drains that aren't often used.
- Flush all toilets.
- If there is an individual in your home or business with respiratory problems and/or mobility limitations, or if you have any additional questions, please contact PipeWorks on: 027 281 4507, or the smoke testing staff in the street or Waitaki District Council, phone 433 0300.

## How will I know if smoke enters my house/building if I am not home during the testing?

---

### **Smoke testing focuses on the Council-owned portion of the wastewater network.**

While the testing can also identify plumbing problems on private property, this is not the main intent of the smoke test. If your private plumbing has been correctly installed and is in good condition, there is no reason smoke should enter your home/building.

It is the property owners responsibility to maintain plumbing on your property so please contact your plumber if you have any concerns about plumbing on your property.

If smoke is found on your property during testing and you are not home, PipeWorks staff will leave a note explaining what has happened and you can contact them if you have any questions.

Once all of the smoke testing has been completed, Council will contact the owners of any properties that had smoke appear during testing to explain the issues.

## Why can't you tell me in advance exactly what date my home will be tested?

---

We can't do smoke testing when it's rainy or very windy, so the weather can sometimes cause delays. Also, other activities in the project may take less time than anticipated, so testing can sometimes be sooner than expected.

## What happens after the smoke testing is completed?

---

Council will use the findings to prepare a wastewater main renewal programme and plan changes required to stop stormwater and other surface water from getting into the wastewater network. Depending on the findings, we may also undertake immediate repairs to the wastewater network.

**If issues are found on private plumbing (gully traps, drainpipes and the like), each property owner will be contacted by Council directly to explain the issues.**

*For any queries or further information regarding smoke testing, contact:  
Waitaki District Council on 03 433 0300,  
email [jkasi@waitaki.govt.nz](mailto:jkasi@waitaki.govt.nz)  
or phone PipeWorks on 027 277 2177*