

Cleanaway New Chum odour issues

Understanding air quality monitoring results

May 2022

The Department of Environment and Science is working with community members within the vicinity of Collingwood Park to undertake air monitoring at local residential premises.

Thank you for taking the time and effort to assist us with community air monitoring.

What is this report?

The Summa Canister air sample report provides you with an overview of the instantaneous air measurements that have been taken via the Summa canister that was provided to you by the department.

Before you receive your report, the department liaises with Queensland Health to review the results and assess potential risks to human health.

What is tested for with Summa Canisters?

This measurement method is capable of identifying the presence of individual volatile organic compounds (VOCs).

VOCs are a group of carbon-based chemicals that easily evaporate at room temperature. Many common household materials and products, such as paints and cleaning products, give off VOCs. Common VOCs include acetone, benzene, ethylene glycol, formaldehyde, methylene chloride, perchloroethylene, toluene and xylene. Different VOCs have different health effects, and range from those that are highly toxic to those with no known health effect.

How many different compounds are tested?

This type of air monitoring tests for 74 different VOCs. The laboratory analyses for each of these compounds when they receive the canister. While all 74 compounds are tested for, they may not all be detected or may be below the limit of reporting (LOR) on the lab report.

What are the results assessed against?

Assessment of possible health impacts by any of the 74 compounds that are tested for is done by comparing the measured compound concentrations in the laboratory report against the relevant short-term (1-hour or 24-hour) objective for protection of human health listed in the Queensland *Environmental Protection (Air) Policy 2008* (EPP Air), where available.

Where the criteria for air pollutants are not prescribed within the *Environmental Protection (Air) Policy 2019*, other reputable international standards such as the Texas Commission on Environmental Quality (TCEQ) or Ontario – Ambient air quality criteria, are used to assess risks to human health.

The sampling method used (air sample collected over 30 seconds or less) means that it is not appropriate to compare the Summa canister results against longer-term (weekly or yearly) air quality objectives. Longer-term exposure will be influenced by factors such as changing source emissions and weather conditions over time, so an instantaneous VOC measurement may not reflect the weekly or annual VOC concentration.

How do I interpret my results?

The report provided for each individual air canister by the laboratory can be complicated to read and understand – it is essentially the raw data.

To help interpret the data, the department has established a “traffic light” system at its website to see if the results



for any VOCs detected at individual residences are below the relevant health guideline. Results are published to the website as soon as possible. If your results are not on the website when you first check, please revisit the page in a few hours.

To interpret your results please:

- 1) Go to the department's website [Cleanaway New Chum odour issues – air quality monitoring results | Environment, land and water | Queensland Government \(www.qld.gov.au\)](#)
- 2) Scroll down the page to the section titled 'Air monitoring by community members'
- 3) You will see a list of results for various streets and suburbs.
- 4) Refer to your laboratory report for your unique sample number (e.g "22KS1234").
- 5) Using your unique sample number, find your results on the web page. Concentrations are reported in units of parts per billion. It is not unusual for the laboratory to be unable to detect some of the 74 compounds if the compound is not present or its concentration is too low to be detected. The department is publishing results for detected compounds only.
- 6) There is a legend on the website (graphic below) detailing health protection guideline values.

Legend

Measurements are in parts per billion (volume basis).

not detected	Below the limit of reporting and not detected
	Below the short-term health-based guidelines published by the Texas Commission on Environmental Quality (TCEQ) *Ontario Ministry for Environment – Ambient air quality criteria (Propene)
	Above the short-term health-based guidelines published by TCEQ.

More information

For more information about the Cleanaway New Chum odour issues visit the Queensland Government [website](#).

If you have questions about the air quality monitoring results, contact the Pollution Hotline on 1300 130 372 or PollutionHotline@des.qld.gov.au