

Community Information Open Day

Fact sheet 4

Sampling Canisters User Guide

Participants chosen to become involved in the Community Air Sampling Program will be provided with equipment to sample for key volatile organic compounds (VOCs) over short periods of time.

Selection of participants will be based on a representative spread of locations agreed upon by DEC and interested members of the community.

The sampling canisters provided are supplied with a negative air pressure of -30psi. Once the valve is opened, ambient air enters to equalise pressure. Once the gauge reaches zero, the canister is full and can be re-sealed.

Samples collected are tested for levels of common VOCs including benzene, toluene, ethylbenzene and xylene.

Participants are supplied with a sampling canister and an observation log book.

Figure 1: *Sampling canister*

- A. Intake cover
- B. Filter
- C. Valve
- D. Vacuum gauge
- E. Information tag

Before use, check that the vacuum gauge (D) reads -30 psi. This indicates that it is an unused sampling canister, ready for a fresh sample.

How to use the sampling canisters

1. Remove the intake cover (A).
2. Place the canister upwind from where you are standing.
3. Turn valve (C) **anticlockwise** to start collecting the sample.
4. Immediately move a few paces downwind from the canister.
5. When the vacuum gauge (D) reaches zero the canister is full.
6. Seal the canister by turning the valve (C) **clockwise** until it stops.
7. Replace the intake cover (A).



8. Enter the sample location, time and date, local weather details and your reason for taking the sample on the information tag on the canister (E) and in the log book.
9. Replace the canister in the packing box provided for dispatch and replacement. A DEC point of contact will be provided to successful participants to arrange the collection and replacement of the sampling canister.

How to ensure an accurate sample is taken

- Ensure your hands and clothes are clean and free of any strong solvent based products or cigarette residue.
- Ensure there are no sources of Volatile Organic Compounds (VOCs) in the immediate vicinity of the sampling area, i.e. idling cars or engines, perfumes, deodorants, hair spray, cigarette smoke (or pipe or cigar smoke), freshly painted surfaces, glues, cooking odours/vapours, etc (contact the Department of Environment and Conservation for further information).
- Avoid storing the canister near volatile organic compounds, i.e. chemicals, lawn mower, open fires etc.
- Keep the canister in a secure location during storage and use. You can safely store the canisters in your house.

Please note: If the sampling canister has lost its vacuum (i.e. the gauge reads zero or close to zero instead of -30 psi) note the gauge reading on the information card and inform the nominated DEC contact person who will arrange a replacement canister.

Please ensure that the canister is physically secure during use and storage, and that it doesn't suffer any mechanical damage.