

Field Olfactometry

This method uses trained panelists, as in the field inspection method, but instead of measuring the frequency of odour, it gives an indication of concentration. Panelists use a breathing device which dilutes the outside odourous air with fresh air. The panelists then measure how many times the odourous air needs to be diluted before it can no longer be detected by a human nose.

What is it?

Field Olfactometers are portable devices that create a series of discrete dilutions by mixing the odorous ambient air with clean air (odour-free). In this case, panellists are moved to the problematic area and use this device to create several dilutions to know the "Dilution-to-Threshold," D/T, ratio. The "Dilution-to-Threshold," D/T, ratio is a measure of the number of dilutions needed to make the odorous ambient air "non-detectable".

What can it be used for?

It can be used to give an indication of the number of times that air needs to be diluted to make it non odorous close to an odour source.

What can it NOT be used for?

It doesn't provide odour concentration in ouE/m3. Odour concentration is only measured by the reference method (i.e. dynamic olfactometry according to EN 13725:2003) at emissions. It is not recommended to be used at the fenceline or near the population affected. Results obtained entail high variability, which is due to several factors, and that makes that results of field olfactometry are not comparable with any reference method. The calibration of the assessors is a key element, and sniffing sticks are not suitable for this calibration.

