



Ruling: Indoor Air Quality calculations

September 2018

1 Purpose & Scope

The purpose is to correct two formulas in the NABERS Indoor Environment for offices Rules for collecting and using data V1.0 (the Rules). This ruling applies to all NABERS Indoor Environment ratings.

2 Formaldehyde

Formaldehyde sources are chiefly associated with the office fit out, emitted from flooring, furnishings and adhesives for example. Measurements can be taken using either real-time hand-held equipment or from laboratory analysis.

2.1 Measurements of Formaldehyde using laboratory analytical methods

Step 4 as described in the Rules (page 59) must be calculated as follows:

4) Where values provided by the NATA-accredited laboratory are reported in mg/m^3 , the Assessor must convert values to ppm before entering results into NABERS rate by using the following equation:

$$\frac{\text{Formaldehyde value} \left(\frac{\text{mg}}{\text{m}^3} \right) \times 24.45}{30.03} = \text{Formaldehyde results (ppm)}$$

3 Total Volatile Organic Compounds

Total volatile organic compounds (TVOCs) are released in an office space as a result of tenant activities and the equipment and materials selected for fit out. Measurements can be taken using either real-time hand-held equipment or from laboratory analysis.

3.1 Measurements of TVOCs using laboratory analytical methods

Step 7 as described in the Rules (page 61) must be calculated as follows:

Where values provided by the NATA-accredited laboratory are reported in mg/m^3 , the Assessor must convert values to ppm before entering results into NABERS rate by using Isobutylene as a calibration standard using the following equation:

$$\frac{\text{TVOC Value obtained} \left(\frac{\text{mg}}{\text{m}^3} \right) \times 24.45}{56.10} = \text{TVOC results (ppm)}$$