Odour Sampling from Area Sources

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Area sources at wastewater treatment plants, landfills and agricultural operations present particular difficulties for the measurement of emission rates.

Enclosure methods, whereby a portion of the emission surface is enclosed and a controlled airflow imposed on the surface, are a useful method for emission rate measurement, but require great care in their application if meaningful measurements are to be obtained.

This presentation provides a review of enclosure methods for emission rate measurement. It aims to illustrate the various enclosure parameters that can influence emission rates, and aims to highlight current uncertainties in enclosure design and their potential for affecting the accuracy of measurements.

Although the emphasis is on odour emission rate measurements, the techniques discussed have relevance for other applications such as volatile organic compound emissions.