Frequently Asked Questions (FAQs) for Method 25C

10/16/2023

1. What pollutant(s) does this method seek to measure?

Method 25C measures nonmethane organic compounds.

2. Was it developed for a specific source category?

Method 25C was developed for Municipal Solid Waste Landfills under the NSPS (40 CFR Part 60, Subpart WWW).

3. Is it applicable to other sources?

Currently, Method 25C is applicable only to Subpart WWW facilities.

4. How is sampling done?

Samples are collected from beneath the landfill cover through a metal probe that is inserted at least 1 meter beneath the cover. At least 2 samples per hectare of landfill area are collected in evacuated cylinders. Single cylinder samples are collected from each probe or composite samples from multiple probes may be taken.

5. What are the general rules for composite sampling?

a.) Take equal sample volumes from each probe; this volume should be at least 1 liter. **b.)** Record the appropriate volume data (e.g. sampling flow rate, sample collection time, beginning and ending cylinder pressures and temperatures, barometric pressure, etc.) to verify sample volume was determined accurately. **c.)** Terminate compositing before the volume measurement capabilities diminish as the cylinder vacuum approaches ambient.

6. May synthetic bags be used in place of cylinders?

Synthetic bags are not allowed in place of cylinders.

7. What technique is used for sample analysis?

Analysis is by Gas Chromatography with Flame Ionization Detector (GC/FID)

8. Is the method usually completed in the field or back at the laboratory?

Samples are usually analyzed in the laboratory but, with proper equipment, this may be done in the field.

9. Is an audit sample available for this method?

No. Audit samples developed for Method 25 are sometimes used but may not be appropriate since they are designed for the Method 25 sampling system that contains a trap.

10. What other QA/QC procedures are required for this method?

The NMOC analyzer must be calibrated initially and daily. The nitrogen or oxygen concentration of each sample must be measured to determine if ambient air in-leakage has occurred.

11. What types of problems have users run into with this method?

Some testers have not fully understood the need to take initial and final tank pressure readings and barometric pressure and ambient temperature in the field. Some have evacuated the tanks in the lab and begun sampling in the field without checking the initial tank pressure in the field. This can lead to inaccurate volume measurements. The same holds true if the final tank pressure is not measured in the field and rechecked in the lab.

12. What types of variations have been allowed for this method in the past?

Prefabricated probes (e.g. Geoprobes) with detachable tips that are driven into the test site and withdrawn to leave an unsheathed void of earth a third of the distance is an acceptable variation.

13. Can Method 25C samples be collected from in-place active gas collection systems where the system is designed to allow sampling only after the condensate removal system?

Sampling after condensate removal systems is not normally allowed due to the potential for NMOC dropout through interaction with the condensate. In special cases, approval may be granted to test at this location where condensate removal designs allow only minimal contact between the collected condensate and the landfill gas being transported.

14. When Method 25C or 25 are not sensitive enough for the outlet concentration measurement and Method 25A is allowed to be used in place of Method 25 after the control device because of low concentrations, how is the methane measured so that it can be subtracted from the total organics concentration?

In these cases, methane is typically measured by Method 18.