#### SCHEDULE 9

Regulation 16(3)(a) Regulation 19(6)
Regulation 20(4)

#### Reference methods

#### PART 1

## Group A pollutants

	Reference method
Sampling and analysis of benzene	A pumped sampling method on a sorbent cartridge followed by gas chromatographic determination
Analysis of carbon monoxide	A non-dispersive infra-red spectrometric (NDIR) method
Sampling of lead	The same reference method as for $PM_{10}$
Analysis of lead	ISO 9855: 1993 Ambient air — Determination of the particulate lead content of aerosols collected in filters. Atomic absorption spectroscopy method
Analysis of nitrogen dioxide and oxides of nitrogen	ISO 7996: 1985 Ambient air — determination of the mass concentrations of nitrogen oxides — chemiluminescence method
Sampling and measurement of PM <sub>10</sub>	The reference method for the sampling and measurement of $PM_{10}$ is that described in EN 12341 "Air Quality — Field Test Procedure to Demonstrate Reference Equivalence of Sampling Methods for the $PM_{10}$ fraction of particulate matter". The measurement principle is based on the collection on a filter of the $PM_{10}$ fraction of ambient particulate matter and the gravimetric mass determination
Analysis of sulphur dioxide	ISO/FDIS 10498 (Standard in draft) Ambient air — determination of sulphur dioxide — ultraviolet fluorescence method

## PART 2

## Group B pollutants in ambient air

	Reference method
Sampling and analysis of Group B pollutants other than benzo(a)pyrene in ambient air	A method based on manual PM <sub>10</sub> sampling equivalent to EN 12341, followed by digestion of the samples and analysis by Atomic Absorption Spectrometry or ICP Mass Spectrometry
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	Reference method
Benzo(a)pyrene concentrations in ambient air	A method based on manual PM <sub>10</sub> sampling equivalent to EN 12341

# PART 3

#### Ozone

	Reference method
Analysis of ozone	UV photometric method (ISO FDIS 13964 or equivalent)
Calibration of ozone instruments	The Reference UV photometer method (ISO FDIS 13964, VDI 2468, B1.6 or equivalent)

# PART 4

#### Other reference methods

	Reference method
Sampling and analysis of polycyclic aromatic hydrocarbons in ambient air	A method based on manual PM <sub>10</sub> sampling equivalent to EN 12341
Sampling and analysis of mercury in ambient air	An automated method based on Atomic Absorption Spectrometry or Atomic Fluorescence Spectrometry
Sampling and analysis of the deposition of Group B pollutants, mercury, and polycyclic aromatic hydrocarbons	A method based on the exposition of cylindrical deposit gauges with standardised dimensions