

Appendix I

Glossary of Abbreviations and Conversion Factors

AURN	Automatic Urban Network
BAM	Beta Attenuation Mass Monitor
CMCU	Central Management and Co-ordination Unit
CO	Carbon Monoxide
DA's	Devolved Administrations - Scottish Executive, Welsh Assembly Government, Department of the Environment in Northern Ireland
defra	Department for Environment, Food and the Rural Affairs
EC	European Communities
ERG	Environmental Research Group (of King's College)
ESU	Equipment Support Unit
EU	European Union
IR	Infra-red
LA	Local Authority
LAQN	London Air Quality Network
LSO	Local Site Operator
mg/m ³	milligrammes per cubic metre
MU	Management Unit (CMCU)
netcen	National Environmental Technology Centre
nm	nanometres
NO	Nitric Oxide
NO ₂	Nitrogen Dioxide
NO _x	Oxides of Nitrogen (NO + NO ₂)
NPL	National Physical Laboratory
ppb	parts per billion

ppm	parts per million
PC	Personal Computer
PM ₁₀	Particulate Matter (the mass fraction of particles collected by a sampler with a 50% inlet cut-off at aerodynamic diameter 10µm)
QA/QC	Quality Assurance and Control
SO ₂	Sulphur Dioxide
SUN	Statutory Urban Network
TEOM	Tapered Element Oscillating Microbalance
UKAS	United Kingdom Accreditation Service
UV	Ultra-violet
µm	micrometres
µg/m ³	microgrammes per cubic metre

Conversion Factors – (at 293K and 101.3 kPa)*Nitric oxide*

$$1 \text{ ppb} = 1.25 \text{ } \mu\text{g}/\text{m}^3 \quad 1 \text{ } \mu\text{g}/\text{m}^3 = 0.8 \text{ ppb}$$

Nitrogen dioxide

$$1 \text{ ppb} = 1.91 \text{ } \mu\text{g}/\text{m}^3 \quad 1 \text{ } \mu\text{g}/\text{m}^3 = 0.523 \text{ ppb}$$

Total oxides of nitrogen (NO_x)

$$\text{NO}_x \text{ in } \mu\text{g}/\text{m}^3 \text{ is expressed as NO}_2 \text{ ie } (\text{NOppb} + \text{NO}_2\text{ppb}) \times 1.91 = \text{NO}_x \text{ } \mu\text{g}/\text{m}^3$$

Sulphur dioxide

$$1 \text{ ppb} = 2.66 \text{ } \mu\text{g}/\text{m}^3 \quad 1 \text{ } \mu\text{g}/\text{m}^3 = 0.38 \text{ ppb}$$

Ozone

$$1 \text{ ppb} = 2.0 \text{ } \mu\text{g}/\text{m}^3 \quad 1 \text{ } \mu\text{g}/\text{m}^3 = 0.5 \text{ ppb}$$

Carbon monoxide

$$1 \text{ ppm} = 1.16 \text{ mg}/\text{m}^3 \quad 1 \text{ mg}/\text{m}^3 = 0.86 \text{ ppm}$$