

## SCHEDULE 1

Sampling points for measurement of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide in ambient air

### PART 2

#### Macroscale siting of sampling points

##### **Sampling points for the protection of human health**

1. Sampling points directed at the protection of human health must be sited to provide data on—
  - (a) the areas within zones where the highest concentrations occur to which the population is likely to be directly or indirectly exposed for a period which is significant in relation to the averaging period of the limit values; and
  - (b) levels in other areas within the zones which are representative of the exposure of the general population.
2. Sampling points shall in general be sited to avoid measuring very small micro-environments in their immediate vicinity. Where feasible, the Department shall locate sampling points so as to be representative of air quality in a street segment of no less than 100 m in length at traffic-orientated sites or an area of at least 250 m x 250 m at industrial sites.
3. Sampling points in urban background locations shall be located so that their pollution level is influenced by the combined contribution from all sources upwind of the station. The pollution level should not be dominated by a single source unless such a situation is typical for a larger urban area. Those sampling points shall, as a general rule, be representative for several square kilometres.
4. Where the objective is to assess rural background levels, the sampling point shall not be influenced by agglomerations or industrial sites in its vicinity, i.e. closer than five kilometres.
5. Where contributions from industrial sources are to be assessed, at least one sampling point shall be installed downwind of the source in the nearest residential area. Where the background concentration is not known, an additional sampling point shall be situated within the main wind direction.
6. Sampling points shall also, where possible, be representative of similar locations not in their immediate vicinity.
7. Account shall be taken of the need to locate sampling points on islands, where it is necessary for the protection of human health.

##### **Protection of ecosystems and vegetation**

8. Sampling points targeted at the protection of ecosystems or vegetation shall be sited more than 20 km from agglomerations or more than 5 km from other built-up areas, industrial installations or motorways or major roads with traffic counts of more than 50,000 vehicles per day. The Department shall locate sampling points so as to be representative of air quality in a surrounding area of at least 1000 km<sup>2</sup>. A sampling point may be sited at a lesser distance or to be representative of air quality in a less extended area, taking account of geographical conditions or opportunities to protect particularly vulnerable areas. Account shall be taken of the need to assess air quality on islands.