

## SCHEDULE 5

Regulation 15(1), (4), (5) and (7)

## Minimum number of sampling points

## PART 1

## Group A pollutants: human health based limit values and alert thresholds

1. This Part sets out the minimum number of sampling points for fixed measurement of Group A pollutants to assess compliance with limit values for the protection of human health and alert thresholds in zones where fixed measurement is the sole source of information.

**Diffuse sources**

<i>Population of zone (thousands)</i>	<i>If concentrations exceed the upper assessment threshold<sup>(1)</sup></i>	<i>If maximum concentrations are between the upper and lower assessment thresholds</i>	<i>For nitrogen dioxide and sulphur dioxide in agglomerations where maximum concentrations are below the lower assessment thresholds</i>
0–249	1	1	not applicable
250–499	2	1	1
500–749	2	1	1
750–999	3	1	1
1,000–1,499	4	2	1
1,500–1,999	5	2	1
2,000–2,749	6	3	2
2,750–3,749	7	3	2
3,750–4,749	8	4	2
4,750–5,999	9	4	2
6,000 or more	10	5	3

(1) For NO<sub>2</sub> and PM<sub>10</sub> to include at least one urban-background station and one traffic-orientated station; this requirement shall also apply to benzene and carbon monoxide provided that it does not increase the number of sampling points.

**Point sources**

2. For the assessment of pollution in the vicinity of point sources, the number of sampling points for fixed measurement shall be calculated taking into account emission densities, the likely distribution patterns of ambient-air pollution and the potential exposure of the population.

*Status: This is the original version (as it was originally made).*

## PART 2

Group A pollutants: limit values for the protection of ecosystems or vegetation

3. The following table sets out the minimum number of sampling points for fixed measurements to assess compliance with limit values for the protection of ecosystems or vegetation in zones other than agglomerations.

<i>If maximum concentrations exceed the upper assessment threshold</i>	<i>If maximum concentrations are between the upper and lower assessment thresholds</i>
1 station every 20,000 km <sup>2</sup>	1 station every 40,000 km <sup>2</sup>

4. In island zones the number of sampling points for fixed measurement shall be calculated taking into account the likely distribution patterns of ambient-air pollution and the potential exposure of ecosystems or vegetation.

## PART 3

Group B pollutants

5. This Part sets out the minimum number of sampling points for fixed measurement of Group B pollutants to assess compliance with target values for the protection of human health in zones where fixed measurement is the sole source of information.

### Diffuse sources

<i>Population of zone (thousands)</i>	<i>If maximum concentrations exceed the upper assessment threshold<sup>(1)</sup></i>		<i>If maximum concentrations are between the upper and lower assessment thresholds</i>	
	<i>Arsenic, Cadmium, Nickel</i>	<i>Benzo(a)pyrene</i>	<i>Arsenic, Cadmium, Nickel</i>	<i>Benzo(a)pyrene</i>
0–749	1	1	1	1
750–1999	2	2	1	1
2000–3749	2	3	1	1
3750–4749	3	4	2	2
4750–5999	4	5	2	2
≥6000	5	5	2	2

(1) To include at least one urban-background station and for benzo(a)pyrene also one traffic-oriented station provided this does not increase the number of sampling points.

### Point sources

6. For the assessment of pollution in the vicinity of point sources, the number of sampling points for fixed measurement shall be determined taking into account emission densities, the likely distribution patterns of ambient air pollution and potential exposure of the population. The sampling points should shall be sited such that the application of the measures referred to at regulation 7(2) (b) can be monitored.

## PART 4

### Ozone

7. Except in so far as otherwise provided by regulation 15(5) or (6), the minimum number of sampling points for fixed continuous measurement to assess air quality in view of compliance with the target values, long-term objectives and information and alert thresholds where continuous measurement is the sole source of information is set out in the following table below.

<i>Population of zone (thousands)</i>	<i>Agglomerations (urban and suburban)<sup>(1)</sup></i>	<i>Other zones (suburban and rural)<sup>(1)</sup></i>	<i>Rural background</i>
0–249	1	1	1 station/50,000 km <sup>2</sup> as an average density over all zones in Scotland <sup>(2)</sup>
250–499	1	2	
500–999	2	2	
1,000–1,499	3	3	
1,500–1,999	3	4	
2,000–2,749	4	5	
2,750–3,749	5	6	
3,750 or more	1 additional station per 2 million inhabitants	1 additional station per 2 million inhabitants	

(1) At least 1 station in suburban areas, where the highest exposure of the population is likely to occur. In agglomerations at least 50% of the stations should be located in suburban areas.

(2) 1 station per 25,000 km<sup>2</sup> for complex terrain is recommended.

## PART 5

### Ozone: minimum number of sampling points for fixed measurements for zones attaining the long-term objectives

8. In cases where zones attain the long-term objectives, the number of sampling points for ozone shall, in combination with other means of supplementary assessment such as air quality modelling and co-located nitrogen dioxide measurements, be sufficient to examine the trend of ozone pollution and check compliance with the long-term objectives.

9. The number of stations located in agglomerations and other zones may be reduced to one third of the number specified in the Table in Part 4 of this schedule. Where information from fixed measurement stations is the sole source of information, at least one monitoring station shall be kept. If, in zones where there is supplementary assessment, the result of this is that a zone has no remaining station, co-ordination with the number of stations in neighbouring zones must ensure adequate assessment of ozone concentrations against long-term objectives.

10. The number of rural background stations should be 1 per 100,000 km<sup>2</sup>.