

SCHEDULE 4

LOCATION OF SAMPLING POINTS FOR THE MEASUREMENT OF RELEVANT POLLUTANTS AND OZONE IN AMBIENT AIR

PART III

MICROSCALE SITING

3.1 The following guidelines should be met as far as practicable:–

- (a) the flow around the inlet sampling probe should be unrestricted (and, for ozone sampling, free in an arc of at least 270°) without any obstructions affecting the airflow in the vicinity of the sampler (normally some metres away from buildings, balconies, trees and other obstacles by more than twice the height the obstacle protrudes above the sampler and at least 0.5 m from the nearest building in the case of sampling points representing air quality at the building line);
- (b) in general, the inlet sampling point should be between 1.5 m (the breathing zone) and 4 m above the ground. Higher positions (up to 8 m) may be necessary in some circumstances and in wooded areas. Higher siting may also be appropriate if the station is representative of a large area;
- (c) the inlet probe should not be positioned in the immediate vicinity of sources in order to avoid the direct intake of emissions unmixed with ambient air;
- (d) the sampler's exhaust outlet should be positioned so that recirculation of exhaust air to the sampler inlet is avoided;
- (e) in relation to the location of traffic-orientated samplers–
 - (i) for all pollutants, such sampling points should be at least 25 m from the edge of major junctions and at least 4 m from the centre of the nearest traffic lane;
 - (ii) for nitrogen dioxide and carbon MONOXIDE, inlets should be no more than 5 m from the kerbside;
 - (iii) for particulate matter, lead and benzene, inlets should be sited so as to be representative of air quality near to the building line;
 - (iv) for ozone, the inlet probe should be positioned well away from such sources as furnaces and incineration flues and more than 10m from the nearest road, with distance increasing as a function of traffic intensity.

3.2 The following factors may also be taken into account:–

- (a) interfering sources;
- (b) security;
- (c) access;
- (d) availability of electrical power and telephone communications;
- (e) visibility of the site in relation to its surroundings;
- (f) safety of public and operators;
- (g) the desirability of co-locating sampling points for different pollutants;
- (h) planning requirements.