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WELSH STATUTORY INSTRUMENTS

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**2010 No. 1433**

**The Air Quality Standards (Wales) Regulations 2010**

**PART 2**

Assessment of ambient air quality

CHAPTER 1

Sulphur dioxide, nitrogen dioxide and oxides of nitrogen,  
PM<sub>10</sub>, PM<sub>2.5</sub>, lead, benzene and carbon monoxide

**Assessment thresholds**

5.—(1) The Welsh Ministers must classify each zone according to whether or not the upper or lower assessment thresholds specified in Section A of Annex II to Directive [2008/50/EC](#) are exceeded in relation to sulphur dioxide, nitrogen dioxide and oxides of nitrogen, PM<sub>10</sub>, PM<sub>2.5</sub>, lead, benzene and carbon monoxide.

(2) The Welsh Ministers must review the classification of zones in paragraph (1) at least every five years, and must do so more frequently than every five years if there are significant changes in the activities which may affect levels of the pollutants referred to in paragraph (1) in ambient air.

(3) When reviewing the classification of zones in accordance with assessment thresholds, the Welsh Ministers must comply with Section B of Annex II to Directive [2008/50/EC](#).

**Assessment requirements**

6.—(1) The Welsh Ministers must assess the level of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, PM<sub>10</sub>, PM<sub>2.5</sub>, lead, benzene and carbon monoxide in ambient air in each zone in accordance with paragraphs (2) to (4) and the criteria set out in Annex III to Directive [2008/50/EC](#).

(2) In zones where the level of any pollutant mentioned in paragraph (1) exceeds the upper assessment threshold for that pollutant referred to in regulation 5, fixed measurements must be used in relation to that pollutant, but may be supplemented by indicative measurements or modelling or both in order to provide adequate information on the spatial distribution of the ambient air quality.

(3) In zones where the level of any pollutant mentioned in paragraph (1) is at or between the upper and lower assessment thresholds for that pollutant referred to in regulation 5, fixed measurements must be used in relation to that pollutant but may be combined with indicative measurements or modelling or both.

(4) In zones where the level of any pollutant mentioned in paragraph (1) is below the lower assessment threshold for that pollutant referred to in regulation 5, modelling or objective estimation techniques or both may be used instead of measurement in relation to that pollutant.

(5) Where fixed measurements are supplemented by modelling or indicative measurements then the Welsh Ministers must take account of the results of those supplementary methods in carrying out the assessment referred to in paragraph (1).

(6) In addition to the assessment referred to in paragraph (1), the Welsh Ministers must measure PM<sub>2.5</sub> at rural background locations away from significant sources of air pollution, in order to provide information on an annual average basis on the total mass concentration and chemical speciation concentrations of that pollutant.

(7) For the purposes of paragraph (6), measurement must be carried out in accordance with the criteria set out in Annex IV to Directive 2008/50/EC and must be coordinated with the monitoring strategy and measurement programme of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP), where appropriate.

(8) The data quality objectives and requirements set out in Sections A and C of Annex I to Directive 2008/50/EC must be applied in carrying out the assessment and measurement referred to in paragraphs (1) and (6).

(9) Save as provided for in paragraph (10), measurements under this regulation must be taken in accordance with the reference measurement methods specified in Section A and Section C of Annex VI to Directive 2008/50/EC.

(10) Alternative methods to those referred to in paragraph (9) may be used provided the conditions set out in Section B of Annex VI to Directive 2008/50/EC are complied with.

(11) In this regulation, “chemical speciation concentrations” (“*crynodiadau ffurfiant rhywogaethau cemegol*”) means the concentrations of different chemical components or species of PM<sub>2.5</sub>.

### **Location and number of sampling points**

7.—(1) The Welsh Ministers must install sampling points in accordance with the criteria set out in Annex III to Directive 2008/50/EC for the assessment of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, PM<sub>10</sub>, PM<sub>2.5</sub>, lead, benzene and carbon monoxide.

(2) In zones where fixed measurements are the sole source of information for the assessment of air quality in relation to any pollutant mentioned in paragraph (1), the number of sampling points for that pollutant must be greater than or equal to the minimum number specified in Section A of Annex V to Directive 2008/50/EC for the purpose of assessing compliance with alert thresholds and limit values for the protection of human health.

(3) In zones other than agglomerations where fixed measurements are the sole source of information for the assessment of air quality in relation to sulphur dioxide or oxides of nitrogen, the number of sampling points for that pollutant must be greater than or equal to the minimum number specified in Section C of Annex V to Directive 2008/50/EC for the purpose of assessing compliance with critical levels for the protection of vegetation.

(4) In zones where the information from fixed measurements is supplemented by information from modelling or indicative measurements or both—

- (a) the number of sampling points specified in Section A of Annex V to Directive 2008/50/EC may be reduced by up to 50% provided that the following conditions are met—
  - (i) the supplementary methods provide sufficient information for the assessment of air quality in relation to limit values and alert thresholds,
  - (ii) the supplementary methods provide sufficient information to inform the public as to the state of ambient air quality, and
  - (iii) the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of the relevant pollutant to be established in accordance with the data quality objectives specified in Section A of Annex I to Directive 2008/50/EC and enable assessment results to meet the criteria in Section B of the same Annex; and

- (b) the number of sampling points specified in Section C of Annex V to Directive [2008/50/EC](#) may be reduced by up to 50% provided that the assessed concentrations of the relevant pollutant can be established in accordance with the data quality objectives specified in Section A of Annex I to Directive [2008/50/EC](#).
- (5) The Welsh Ministers must install at least one sampling point for the measurement of PM<sub>2.5</sub> in rural background locations.