
WELSH STATUTORY INSTRUMENTS

2010 No. 1433

The Air Quality Standards (Wales) Regulations 2010

PART 2

Assessment of ambient air quality

CHAPTER 3

Arsenic, cadmium, mercury, nickel, benzo(a)pyrene and other polycyclic aromatic hydrocarbons

Assessment thresholds

10.—(1) The Welsh Ministers must classify each zone according to whether or not the upper or lower assessment thresholds specified in Section I of Annex II to Directive [2004/107/EC](#) are exceeded in relation to arsenic, cadmium, nickel and benzo(a)pyrene.

(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 II of Annex II to Directive [2004/107/EC](#).

Assessment requirements

11.—(1) The Welsh Ministers must assess the level of arsenic, cadmium, nickel and benzo(a)pyrene in ambient air in each zone in accordance with paragraphs (2) to (4).

(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 10, fixed measurements must be used in relation to that pollutant, but may be supplemented by modelling in order to provide an adequate level of information on ambient air quality.

(3) In zones where the level of any pollutant mentioned in paragraph (1) is between the upper and lower assessment thresholds for that pollutant referred to in regulation 10 over a representative period, fixed measurements must be used in relation to that pollutant but may be combined with indicative measurements as referred to in Section I of Annex IV to Directive [2004/107/EC](#) 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 10, modelling or objective estimation techniques or both may be used instead of measurement in relation to that pollutant.

(5) In addition to the assessment referred to in paragraphs (1) to (4), the Welsh Ministers must monitor concentrations of other relevant polycyclic aromatic hydrocarbons in addition to benzo(a)pyrene as the Welsh Ministers think fit, including at least the following—

- (a) benzo(a)anthracene,
- (b) benzo(b)fluoranthene,

- (c) benzo(j)fluoranthene,
- (d) benzo(k)fluoranthene,
- (e) indeno(1,2,3-cd)pyrene,
- (f) dibenz(a,h)anthracene.

(6) The Welsh Ministers must, in addition, operate background sampling points to provide indicative measurements of—

- (a) the concentrations of arsenic, cadmium, nickel, total gaseous mercury, benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in paragraph (5) in ambient air, and
- (b) the total deposition rates of arsenic, cadmium, mercury, nickel, benzo(a)pyrene and the other polycyclic aromatic hydrocarbons referred to in paragraph (5).

(7) Measurements for the purposes of paragraph (6) 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 Annex IV to Directive 2004/107/EC must be applied in carrying out the assessments referred to in paragraphs (1), (5) and (6).

(9) Measurements in this regulation must be taken in accordance with the reference measurement methods specified in Annex V to Directive 2004/107/EC.

(10) In this regulation, “total gaseous mercury” (“*mercwri nwyol llwyr*”) means elemental mercury vapour (Hg₀) and reactive gaseous mercury, being water-soluble mercury species with sufficiently high vapour pressure to exist in the gas phase.

Location and number of sampling points and monitoring sites

12.—(1) The Welsh Ministers must install sampling points in accordance with the criteria set out in Sections I, II and IV of Annex III to Directive 2004/107/EC for the assessment of arsenic, cadmium, nickel and benzo(a)pyrene.

(2) The Welsh Ministers must ensure that monitoring sites for polycyclic aromatic hydrocarbons other than benzo(a)pyrene—

- (a) are located together with sampling points for benzo(a)pyrene,
- (b) are located in accordance with the criteria set out in Sections I to III of Annex III to Directive 2004/107/EC, and
- (c) are selected so that geographical variations and long-term trends in the concentrations of polycyclic aromatic hydrocarbons can be identified.

(3) The Welsh Ministers must ensure that—

- (a) at least one background sampling point is installed to provide indicative measurements for the purposes of paragraph (6) of regulation 11,
- (b) such background sampling points are located in accordance with the criteria set out in Sections I to III of Annex III to Directive 2004/107/EC, and
- (c) such background sampling points are selected so that geographical variations and long-term trends in the concentrations and total deposition rates of the relevant pollutants can be identified.