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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 3

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

**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 (Hg<sup>0</sup>) and reactive gaseous mercury, being water-soluble mercury species with sufficiently high vapour pressure to exist in the gas phase.