
WELSH STATUTORY INSTRUMENTS

2007 No. 717

The Air Quality Standards (Wales) Regulations 2007

PART 2

Group A and Group B pollutants and ozone

CHAPTER 1

Air quality standards

Preliminary and application

- 4.—(1) This Part applies in respect of the following pollutants—
- (a) Group A pollutants;
 - (b) Group B pollutants; and
 - (c) ozone.
- (2) The National Assembly must ensure that all measures taken under Chapter 2 or 3 of this Part—
- (a) take into account an integrated approach to the protection of air, water and soil; and
 - (b) have no significant negative effects on—
 - (i) any other member State, or
 - (ii) any other part of the United Kingdom.

Zones and agglomerations

- 5.—(1) The National Assembly must, for the purposes of this Part, divide the territory of Wales into zones.
- (2) A zone is to be classified as an agglomeration for the purposes of this Part where—
- (a) it comprises a population in excess of 250,000 inhabitants; or
 - (b) in any other case, it has a population density per km² for which the National Assembly considers that such a classification is justified.
- (3) The National Assembly may establish different zones for different pollutants where it considers it appropriate.

Air quality standards

- 6.—(1) Subject to paragraphs (2) to (4), the following air quality standards specified in Schedule 1 are required to be attained within each zone—
- (a) for Group A pollutants, the limit values set out in Part 1 of that Schedule;
 - (b) for Group B pollutants, the target values set out in Part 3 of that Schedule; and
 - (c) for ozone, the target values and long-term objectives set out in Part 4 of that Schedule.

- (2) The attainment date for a limit or target value is—
- (a) the attainment date specified for the relevant pollutant in Schedule 1; or
 - (b) where no attainment date is specified, the date on which these Regulations come into force.
- (3) The long-term objectives are to be attained in the long term, to the extent these objectives are achievable through the measures required by regulation 7(3)(b).
- (4) In the case of benzene and nitrogen dioxide, the margins of tolerance set out in Part 2 of Schedule 1 apply within the periods specified.

CHAPTER 2

Attainment of air quality standards

General attainment measures

7.—(1) Subject to paragraphs (2) and (3), the National Assembly must take the necessary measures to ensure that, within each zone, concentrations of each pollutant attain the air quality standards required by regulation 6.

- (2) The necessary measures in relation to Group B pollutants are—
- (a) measures not entailing disproportionate costs; and
 - (b) insofar as concentrations of the relevant pollutants arise as a result of emissions from installations to which Council Directive [96/61/EC](#) concerning integrated pollution prevention and control⁽¹⁾ applies, the application of best available techniques to prevent pollution from those installations in accordance with article 3(a) of that Directive⁽²⁾.
- (3) The necessary measures in relation to ozone are measures the National Assembly considers to be—
- (a) in the case of both the target values and long-term objectives, proportionate; and
 - (b) in the case of a long-term objectives, cost-effective.

Improvement plans

- 8.—(1) This regulation applies in respect of each zone in which—
- (a) prior to the attainment date, concentrations of benzene or nitrogen dioxide exceed a limit value plus the applicable margin of tolerance; or
 - (b) concentrations of ozone exceed a target value.
- (2) Where paragraph (1)(a) applies, the National Assembly must prepare and implement an improvement plan in respect of the pollutant in question or, if the condition specified is met in relation to both pollutants, in respect of both those pollutants.
- (3) Where paragraph (1)(b) applies, the National Assembly must prepare and implement an improvement plan in respect of ozone unless it considers that the target value would not be attainable through proportionate measures.
- (4) An improvement plan must include the information specified in Schedule 2.
- (5) Where an improvement plan is required to be prepared and implemented under both paragraphs (2) and (3), the National Assembly must, where it considers it appropriate, prepare and implement an integrated improvement plan covering all of the pollutants concerned.

(1) OJ No L 257, 10.10.96, p.26.

(2) The Directive is implemented by the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I. 2000/1973 as amended by S.I. 2001/503, 2002/275, 2002/1702, 2003/1699, 2003/3296, 2004/3276, 2005/1448 and 2006/2802 (W.241)).

(6) For the purposes of this regulation, an improvement plan may comprise either a plan or a programme which, in either case, must have the objective of attaining the limit or target value within the relevant zone by the attainment date for the pollutant in question.

Other improvement measures

- 9.—(1) This regulation applies in respect of each zone in which concentrations of—
- (a) one or more Group B pollutants exceed the relevant target value; or
 - (b) ozone are equal to or below the target values, but exceed a long-term objective.
- (2) Where paragraph (1)(a) applies, the National Assembly must—
- (a) identify the cause of the pollution and the predominant sources of emissions; and
 - (b) in relation to the pollutants concerned, ensure that the measures required by regulation 7(2) are directed in particular at the sources of emissions identified.
- (3) Where paragraph (1)(b) applies, the National Assembly must prepare and implement measures which it considers to be cost-effective with the aim of attaining the long-term objective.
- (4) The National Assembly must ensure that the measures required in paragraph (3) are consistent with any improvement plan prepared for ozone under regulation 8(3).

CHAPTER 3

Maintenance of air quality standards and action plans

Maintenance of air quality standards

- 10.—(1) This regulation applies in respect of each zone in which concentrations of—
- (a) one or more Group A pollutants are below the relevant limit values;
 - (b) one or more Group B pollutants are below the relevant target values; or
 - (c) ozone meet the long-term objectives.
- (2) Where sub-paragraph (a) or (b) of paragraph (1) applies, the National Assembly must, in respect of each pollutant meeting the conditions set out in those sub-paragraphs, maintain compliance with the relevant limit or target values and endeavour to preserve the lowest concentration which it considers to be compatible with sustainable development.
- (3) Where paragraph (1)(c) applies, the National Assembly must—
- (a) ensure that concentrations are kept at or below the long-term objectives, insofar as the transboundary nature of ozone pollution, meteorological conditions and any other similar factors permit; and
 - (b) preserve through proportionate measures the lowest concentrations of ozone which it considers to be compatible with sustainable development and a high level of protection for the environment and human health.

Action plans

- 11.—(1) The National Assembly must, in accordance with,—
- (a) paragraphs (2) to (4), prepare action plans; and
 - (b) paragraph (5), implement action plans.
- (2) The action plans must indicate the measures to be taken within any zone in the short term in order to achieve the objectives set out in paragraph (3) in the event of circumstances in which the National Assembly considers there is a risk that any one of the following will be exceeded—

- (a) a limit value;
 - (b) the alert threshold for nitrogen dioxide or sulphur dioxide; or
 - (c) subject to paragraph (4), the alert threshold for ozone.
- (3) The objectives of each action plan are to—
- (a) reduce the risk that the relevant limit value or alert threshold will be exceeded; or
 - (b) where it is not possible to prevent the occurrence, limit its duration or severity.
- (4) In relation to ozone, the obligation imposed by paragraph (1)(a) only applies insofar as, taking into account geographical, meteorological and economic conditions, the National Assembly considers there is significant potential for the objectives set out in paragraph (3) to be achieved.
- (5) The National Assembly must, when it considers that the risks referred to in paragraph (2) arise within any zone, implement the measures indicated in the relevant action plans within the zone concerned to the extent it considers necessary in the circumstances of the particular case.
- (6) Schedule 3 has effect in prescribing—
- (a) alert thresholds for nitrogen dioxide and sulphur dioxide, in Part 1 of that Schedule; and
 - (b) the alert threshold and information threshold for ozone, in Part 2 of that Schedule.

CHAPTER 4

Assessment

Duty to assess air quality

12. The National Assembly must assess the concentration of each pollutant within each zone in accordance with regulations 13 to 16.

Assessment methods

13.—(1) The National Assembly must assess concentrations of pollutants in accordance with the methods required or, in the case of Group A pollutants and Group B pollutants, permitted by this regulation.

- (2) In relation to Group A pollutants and Group B pollutants in cases where—
- (a) the assessment concerns a Group A pollutant within an agglomeration; or
 - (b) concentrations of a pollutant have exceeded the upper assessment threshold,
- assessment is required to be by means of fixed measurement.
- (3) In cases where paragraph (2) does not apply and, in the case of nitrogen dioxide, subject to regulation 15(7), the National Assembly may use the following assessment methods in relation to Group A pollutants and Group B pollutants—
- (a) a combination of—
 - (i) fixed measurement, and
 - (ii) modelling techniques,
 provided that concentrations of the relevant pollutant have, over a representative period, been below the upper assessment threshold; or
 - (b) the sole use of either modelling or objective estimation techniques, provided that—
 - (i) paragraph (4) does not apply, and
 - (ii) concentrations of the relevant pollutant have, over a representative period, been below the lower assessment threshold.

(4) The National Assembly must not use the methods referred to at paragraph (3)(b) to assess nitrogen dioxide or sulphur dioxide within an agglomeration.

(5) For the purposes of paragraphs (2) and (3)—

(a) the upper and lower assessment thresholds are specified for Group A pollutants in Part 1 of Schedule 4 and for Group B pollutants in Part 2 of that Schedule; and

(b) the representative period is to be interpreted in accordance with Part 3 of that Schedule.

(6) The National Assembly must review the method by which Group A pollutants and Group B pollutants are assessed within each zone—

(a) in the event of significant changes in activities affecting concentrations of a pollutant within that zone; and

(b) in any event, at least once in every five years.

(7) The National Assembly must assess concentrations of ozone by fixed continuous measurement if, within the zone concerned, concentrations have exceeded a long-term objective during any of the previous five years of measurement.

(8) In cases where fewer than five years' data is available, the National Assembly may assess concentrations of ozone by combining the following—

(a) measurement campaigns of short duration at times and locations which it considers are likely to be typical of the highest pollution levels; and

(b) results from emission inventories and modelling.

Fixed measurement

14.—(1) This regulation applies in cases where, in relation to one or more pollutants, a zone is assessed in accordance with the methods referred to in regulation 13(2), (3)(a) or (7).

(2) Where a zone is assessed in accordance with regulation 13(2) or (3)(a), measurements of the relevant pollutant must, subject in the case of nitrogen dioxide to the requirements imposed by regulation 15(7) in respect of the assessments required by that regulation, be taken at fixed sites either continuously or by random sampling and the number of measurements must be sufficiently large to enable concentrations of the pollutant to be properly determined.

(3) Where a zone is assessed in accordance with regulation 13(2), the National Assembly may supplement information from sampling points for fixed measurement with information from modelling techniques where it considers this will provide an adequate level of information on ambient air quality.

(4) Where a zone is assessed in accordance with regulation 13(7), the National Assembly may supplement information from sampling points with information from modelling or indicative measurements provided that the conditions set out in regulation 15(6) are complied with.

Sampling points

15.—(1) Where the National Assembly assesses concentrations of a pollutant within a zone in accordance with the methods referred to at regulation 13(2), (3)(a) or (7) it must, in respect of each pollutant, ensure that—

(a) a minimum number of sampling points are established within each zone, in accordance with paragraphs (2) to (6); and

(b) each sampling point is located in accordance with the relevant Parts of Schedule 5.

(2) In cases where a zone is assessed in accordance with—

(a) regulation 13(2), and paragraph (3)(a) of this regulation does not apply; or

(b) regulation 13(7), and paragraph (4) of this regulation does not apply, the minimum number of sampling points is specified in the relevant Parts of Schedule 6.

(3) Where a zone is assessed in accordance with—

- (a) regulation 13(2) and, within that zone, the National Assembly supplements fixed measurements with modelling techniques in accordance with regulation 14(3); or
- (b) regulation 13(3)(a),

the minimum number of sampling points required for each pollutant must be a number that the National Assembly determines is sufficient, taken together with the spatial resolution of the other techniques employed, for concentrations of the relevant pollutant to be established.

(4) Where a zone is assessed in accordance with regulation 13(7), the National Assembly may reduce the number of sampling points required under paragraph (2)(b) provided that the conditions set out in paragraphs (5) or (6) are met.

(5) In the case of zones where—

- (a) five years of measurement have been carried out; and
- (b) during each of those years, concentrations of ozone have been below the long-term objectives,

the National Assembly may determine the number of sampling points in accordance with Part 5 of Schedule 6.

(6) In the case of zones in which the National Assembly supplements the information obtained from sampling points for fixed measurement with information from modelling or indicative measurement in accordance with regulation 14(4), it may reduce the number of sampling points provided that—

- (a) the modelling techniques adopted provide an adequate level of information for the assessment of air quality with regard to the—
 - (i) target values,
 - (ii) information threshold, and
 - (iii) alert threshold;
- (b) the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of ozone to be established and to enable the compilation of assessment results as specified in Part 3 of Schedule 7;
- (c) the number of sampling points in each zone amounts to—
 - (i) at least one sampling point per two million inhabitants, or
 - (ii) one sampling point per 50,000 km²,
 whichever produces the greater number of sampling points;
- (d) each zone contains at least one sampling point; and
- (e) concentrations of nitrogen dioxide are assessed at all remaining sampling points except rural background stations, in accordance with paragraph (7).

(7) The National Assembly must ensure that—

- (a) concentrations of nitrogen dioxide are assessed—
 - (i) at least at 50 per cent of the sampling points established for ozone in accordance with Part 4 of Schedule 6, or
 - (ii) where paragraph (6) applies, in accordance with sub-paragraph (e) of that paragraph;
 and

- (b) the measurement of nitrogen dioxide taken at these sampling points is continuous, except at rural background stations where other measurement methods may be used.

Other assessment requirements

16.—(1) When the National Assembly undertakes assessments as respects—

- (a) Group A pollutants or Group B pollutants, by the methods other than fixed measurement which are permitted by regulation 13(3) or 14(3); or
- (b) ozone, by methods other than fixed continuous measurement which are permitted by regulations 13(7) and 14(4),

it must comply with the requirements of the relevant Part of Schedule 7 when using those other methods.

(2) When conducting any assessment under this Chapter, the National Assembly must have regard to the relevant data quality objectives set out in Schedule 8.

(3) The National Assembly must undertake assessments in accordance with—

- (a) the relevant reference methods required by Schedule 9; or
- (b) any alternative reference methods, where it considers that the method in question gives equivalent results to the relevant method required by Schedule 9.

(4) Measurements of volume of benzene, carbon monoxide, nitrogen dioxide, oxides of nitrogen, ozone and sulphur dioxide are to be standardised at a temperature of 293K and a pressure of 101.3 kPa.