
STATUTORY INSTRUMENTS

2007 No. 64

The Air Quality Standards 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 Secretary of State shall ensure that all measures taken under Chapters 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 effect on—
 - (i) any other member State; or
 - (ii) any other part of the United Kingdom.

Zones and agglomerations

- 5.—(1) The Secretary of State shall, for the purposes of this Part, divide the territory of England into zones.
- (2) A zone shall be classified as an agglomeration for the purposes of this Part where—
- (a) it has a population in excess of 250,000 inhabitants; or
 - (b) in any other case, the Secretary of State determines that its population density per km² is sufficiently high to justify such a classification.
- (3) The Secretary of State may establish different zones for different pollutants where he considers this appropriate.

Air quality standards

- 6.—(1) Schedule 1 prescribes the following air quality standards—
- (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) Limit values—

- (a) shall be attained by the attainment date specified for the limit value concerned; or
 - (b) apply when these Regulations come into force, if no attainment date is specified.
- (3) Target values shall be attained from the attainment date specified, in so far as this is possible.
- (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) The Secretary of State shall take the necessary measures to ensure that the air quality standards in regulation 6 are attained.

(2) In the case of Group B pollutants, the necessary measures are—

- (a) measures not entailing disproportionate costs; and
- (b) in so far as concentrations of a relevant pollutant 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 that Directive(2).

(3) In the case of ozone, the necessary measures are measures the Secretary of State considers to be proportionate and, in relation to the long-term objectives, cost effective.

Improvement plans

8.—(1) This regulation applies in respect of each zone in which prior to the attainment date—

- (a) 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 Secretary of State shall prepare and implement an improvement plan for the pollutant in question or, where concentrations of both pollutants exceed the level referred to, a single improvement plan for both pollutants.

(3) Where paragraph (1)(b) applies, the Secretary of State shall prepare and implement an improvement plan in respect of ozone unless he considers that the target value would not be attainable through proportionate measures.

(4) An improvement plan shall include the information specified in Schedule 2.

(5) Where the Secretary of State is required to prepare and implement an improvement plan under both paragraphs (2) and (3) he shall, where he considers it appropriate, prepare and implement an integrated improvement plan covering all of the pollutants concerned.

(6) An improvement plan may comprise either a plan or a programme which, in either case, shall have the objective of attaining—

- (a) the limit value, by the attainment date; or
- (b) the target value, by 2010.

(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, S.I. 2002/275, S.I. 2002/1702, S.I. 2003/1699, S.I. 2003/3296, S.I. 2004/3276, S.I. 2005/1448 and S.I. 2006/2311).

Other improvement measures

- 9.—(1) This regulation applies in respect of each zone in which—
- (a) concentrations of one or more Group B pollutants exceed the relevant target value; or
 - (b) concentrations of ozone are equal to or below the target values, but exceed a long-term objective.
- (2) Where paragraph (1)(a) applies, the Secretary of State shall—
- (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 Secretary of State shall prepare and implement measures which he considers to be cost-effective with the aim of attaining the long-term objective.
- (4) The Secretary of State shall ensure that the measures required in paragraph (3) are consistent with the improvement plans 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—
- (a) concentrations of one or more Group A pollutants are below the relevant limit values;
 - (b) concentrations of one or more Group B pollutants are below the relevant target values; or
 - (c) concentrations of ozone meet the long-term objectives.
- (2) Where sub-paragraphs (a) or (b) of paragraph (1) apply, the Secretary of State shall in respect of each pollutant meeting the conditions set out in those sub-paragraphs—
- (a) maintain compliance with the relevant limit values or target values; and
 - (b) endeavour to maintain the lowest concentration which he considers to be compatible with sustainable development.
- (3) Where paragraph (1)(c) applies, the Secretary of State shall—
- (a) in so far as the transboundary nature of ozone pollution, meteorological conditions and any other similar factors permit, ensure that concentrations are kept at or below the long-term objectives; and
 - (b) maintain through proportionate measures the lowest concentrations which he considers to be compatible with sustainable development and a high level of protection for the environment and human health.

Action plans

- 11.—(1) The Secretary of State shall—
- (a) in accordance with paragraphs (2) to (4) and (6), prepare; and
 - (b) in accordance with paragraph (5) and (6), implement,
- action plans.
- (2) The action plans shall 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 Secretary of State 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 shall be—
- (a) to reduce the risk that the relevant limit value or alert threshold will be exceeded; or
 - (b) where it is not possible to prevent the relevant limit value or alert threshold being exceeded, to limit the duration or severity of the occurrence.
- (4) In relation to ozone, the obligation imposed by paragraph (1)(a) shall only apply in so far as, taking into account geographical, meteorological and economic conditions, the Secretary of State considers there is significant potential for the objectives set out in paragraph (3) to be achieved.
- (5) When the Secretary of State considers that the risks referred to in paragraph (2) arise within a zone, he shall implement the measures indicated in the relevant action plans within that zone to the extent he considers necessary in the circumstances.
- (6) In preparing and implementing any action plans for ozone, the Secretary of State shall have regard to Annexes I and II to the Commission Decision of 19 March 2004 concerning guidance for implementation of Directive [2002/3/EC](#)(3).
- (7) 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 Secretary of State shall assess the concentration of each pollutant within each zone, in accordance with regulations 13 to 16.

Assessment methods

13.—(1) Subject to paragraph (2), the Secretary of State shall assess concentrations of a Group A pollutant by fixed measurement where—

- (a) the assessment takes place within an agglomeration; or
- (b) in any other zone, representative concentrations of that pollutant exceed the relevant upper assessment threshold.

(2) Where the zone concerned is the same as that established under the Air Quality Limit Values Regulations 2003(4) (“the 2003 Regulations”), the Secretary of State may continue to use the method by which concentrations of a Group A pollutant were assessed within that zone under the 2003 Regulations (“the 2003 method”).

(3) Except where fixed measurement is required by paragraph (1) or he continues to use the 2003 method in accordance with paragraph (2), and, in the case of nitrogen dioxide, subject to the requirements imposed by regulation 15(7), the Secretary of State may assess concentrations of a Group A pollutant by any one of the following methods—

- (a) fixed measurement;
- (b) combined measurement; or

(3) OJ No L 87, 25.03.04, p.50.

(4) [S.I. 2003/2121](#) amended by [S.I. 2004/2888](#).

- (c) the sole use of modelling or objective estimation techniques, provided that representative concentrations of the pollutant in the zone concerned are below the relevant lower assessment threshold.
- (4) The Secretary of State shall assess concentrations of a Group B pollutant by fixed measurement in any zone in which representative concentrations of that pollutant exceed the relevant upper assessment threshold.
- (5) Except where fixed measurement is required by paragraph (4), the Secretary of State may assess concentrations of a Group B pollutant by one of the following methods—
 - (a) fixed measurement;
 - (b) combined measurement; or
 - (c) the sole use of modelling or objective estimation techniques, provided that representative concentrations of the pollutant in the zone concerned are below the relevant lower assessment threshold.
- (6) For the purposes of paragraphs (1) and (3) to (5), the Secretary of State shall determine the representative concentrations in accordance with Part 3 of Schedule 4.
- (7) The Secretary of State shall review the method by which concentrations of a Group A or Group B pollutant are assessed at least once every five years or earlier if there are significant changes in activities affecting concentrations of the relevant pollutant within the zone concerned.
- (8) Where the Secretary of State continues to use the 2003 method, the date from which the period of review commences is the later of—
 - (a) the date the zone was classified under regulation 7(1) of the 2003 Regulations; or
 - (b) the date on which that classification was last reviewed under regulation 8 of those Regulations.
- (9) The Secretary of State shall assess concentrations of ozone by fixed measurement if, within the zone concerned, concentrations have exceeded a long-term objective during any of the previous five years of measurement.
- (10) Where fewer than five years' information on concentrations is available, the Secretary of State may assess concentrations of ozone by—
 - (a) measurement campaigns of short duration at times and locations which he considers are likely to be typical of the highest pollution levels; and
 - (b) results from emission inventories and modelling.

Fixed and combined measurement

- 14.**—(1) Where the Secretary of State assesses concentrations of a Group A or Group B pollutant by fixed measurement or by combined measurement he shall ensure that—
- (a) measurements of the relevant pollutant are taken at sampling points either continuously or by random sampling, subject, in the case of nitrogen dioxide, to the requirements imposed by regulation 15(7); and
 - (b) the number of measurements is sufficiently large to enable concentrations of that pollutant to be properly determined.
- (2) Where the Secretary of State assesses concentrations of a Group A or Group B pollutant by fixed measurement, he may supplement information from sampling points for fixed measurement with information from modelling techniques in so far as he considers this will provide an adequate level of information on ambient air quality.
- (3) Where the Secretary of State assesses concentrations of ozone by fixed measurement—
- (a) he shall ensure that—

- (i) the measurements are taken at fixed sites continuously; and
 - (ii) the number of measurements is sufficiently large to enable concentrations to be properly determined;
- and
- (b) he may supplement information from sampling points with information from modelling techniques or indicative measurements.

Sampling points

15.—(1) Where the Secretary of State assesses concentrations of a Group A or Group B pollutant by fixed measurement he shall, except in cases falling within paragraph (2)(a), install the number of sampling points required for the zone in accordance with the relevant Part of Schedule 5.

- (2) Where the Secretary of State assesses concentrations of a Group A or Group B pollutant by—
 - (a) fixed measurement, in cases where he obtains information from modelling techniques under regulation 14(2); or
 - (b) combined measurement,

he shall install the number of sampling points he determines is sufficient, taken together with the spatial resolution of the other techniques employed, for concentrations of the relevant pollutant to be established within the zone concerned.

(3) The Secretary of State shall locate all sampling points for Group A and Group B pollutants in accordance with the requirements set out in the relevant Parts of Schedule 6.

(4) Where the Secretary of State assesses concentrations of ozone by fixed measurement he shall, except where paragraphs (5) or (6) apply, install the number of sampling points required for the zone in accordance with Part 4 of Schedule 5.

- (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 Secretary of State may determine the number of sampling points in accordance with Part 5 of Schedule 5.

(6) In the case of zones in which the Secretary of State supplements the information obtained from sampling points for fixed measurement with information from modelling techniques or indicative measurement in accordance with regulation 14(3)(b), he may reduce the number of sampling points for ozone provided that—

- (a) he considers that the modelling techniques adopted provide an adequate level of information for the assessment of air quality with regard to—
 - (i) the target values;
 - (ii) the information threshold; and
 - (iii) the alert threshold;
- (b) he considers that 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.
- (7) The Secretary of State shall ensure that—
- (a) except where paragraph (6)(e) applies, concentrations of nitrogen dioxide are assessed at least half of the number of sampling points required to be installed for ozone in accordance with Part 4 of Schedule 5; and
 - (b) the measurement of nitrogen dioxide taken at any sampling point is continuous, except at rural background stations where other measurement methods may be used.
- (8) The Secretary of State shall locate all sampling points for ozone in accordance with the requirements set out in the relevant Parts of Schedule 6.

Other assessment requirements

16.—(1) When the Secretary of State undertakes assessments by methods other than fixed measurement, he shall 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 Secretary of State shall have regard to the relevant data quality objectives set out in Schedule 8.

(3) The Secretary of State shall undertake assessments in accordance with—

- (a) the relevant reference methods required by Schedule 9; or
- (b) any alternative reference methods, where he considers that the method in question is likely to give 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 shall be standardised at a temperature of 293K and a pressure of 101.3 kPa.