
STATUTORY RULES OF NORTHERN IRELAND

2007 No. 265

The Air Quality Standards Regulations (Northern Ireland) 2007

PART 2

Group A and Group B pollutants and ozone

CHAPTER 4

Assessment

Duty to assess air quality

12. The Department shall assess the concentrations of each pollutant within each zone, in accordance with regulations 13 to 16.

Assessment methods

13.—(1) Subject to paragraph (2), the Department 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 (Northern Ireland) 2002⁽¹⁾ (“the 2002 Regulations”) and the Air Quality (Ozone) Regulations (Northern Ireland) 2003⁽²⁾ (“the 2003 Regulations”) the Department may continue to use the method by which concentrations of a Group A pollutant were assessed within that zone under the 2002 and 2003 Regulations (“the 2002 and 2003 method”).

(3) Except where fixed measurement is required by paragraph (1) or it continues to use the 2002 and 2003 method in accordance with paragraph (2), and, in the case of nitrogen dioxide, subject to the requirements imposed by regulation 15(7), the Department may assess concentrations of a Group A pollutant by any 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 concentration of the pollutant in the zone concerned are below the relevant lower assessment threshold.

(4) The Department 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.

(1) S.R. 2002 No. 94 amended by S.R. 2002 No.357 and S.R. 2004 No. 514

(2) S.R. 2003 No. 240 amended by S.R. 2004 No. 514

(5) Except where fixed measurement is required by paragraph (4), the Department 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 Department shall determine the representative concentrations in accordance with Part 3 of Schedule 4.

(7) The Department 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 Department continues to use the 2002 and 2003 method, the date from which the period of review commences is the later of—

- (a) the date the zone was classified under regulation 5(1) of the 2002 Regulations, and regulation 6(1) of the 2003 Regulations; or
- (b) the date on which that classification was last reviewed under regulation 6 of the 2002 Regulations.

(9) The Department 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 Department may assess concentrations of ozone by—

- (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 and combined measurement

14.—(1) Where the Department assesses concentrations of a Group A or Group B pollutant by fixed measurement or by combined measurement it 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 Department assesses concentrations of a Group A or Group B pollutant by fixed measurement, it may supplement information from sampling points for fixed measurement with information from modelling techniques in so far as it considers this will provide an adequate level of information on ambient air quality.

(3) Where the Department assesses concentrations of ozone by fixed measurement—

- (a) it 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) it may supplement information from sampling points with information from modelling techniques or indicative measurements.

Sampling points

15.—(1) Where the Department assesses concentrations of a Group A or Group B pollutant by fixed measurement it 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 Department assesses concentrations of a Group A or Group B pollutant by—

- (a) fixed measurement, in cases where it obtains information from modelling techniques under regulation 14(2); or
- (b) combined measurement,

it shall install the number of sampling points it 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 Department 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 Department assesses concentrations of ozone by fixed measurement it 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 Department may determine the number of sampling points in accordance with Part 5 of Schedule 5.

(6) In the case of zones in which the Department 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), it may reduce the number of sampling points for ozone provided that—

- (a) it 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) it 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 50,000km²,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 Department shall ensure that—
- (a) except where paragraph (6)(e) applies, concentrations of nitrogen dioxide are assessed at least at 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 Department 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 Department undertakes assessments by methods other than fixed measurement, it 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 Department shall have regard to the relevant data quality objectives set out in Schedule 8.

(3) The Department shall 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 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 101.3kPa.