

2003 No. 342

ENVIRONMENTAL PROTECTION

Air Quality Regulations (Northern Ireland) 2003

Made - - - - - *22nd July 2003*

Coming into operation *1st September 2003*

The Department of the Environment, in exercise of the powers conferred upon it by Articles 15(1), (2) and 27(1) of the Environment (Northern Ireland) Order 2002(a) and of every other power enabling it in that behalf, having consulted such competent authorities as the Department considered appropriate, such bodies or persons which appeared to it to be representative of the interests of industry as it considered appropriate and such other bodies or persons as it considered appropriate, in accordance with Article 15(6) of that Order, hereby makes the following Regulations:

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Air Quality Regulations (Northern Ireland) 2003 and shall come into operation on 1st September 2003.

(2) In these Regulations “the Order” means the Environment (Northern Ireland) Order 2002

(3) For the purposes of these Regulations, any reference to a numbered provision is a reference to that numbered provision of the Order.

Relevant Authorities

2. A competent authority specified in column 1 of the Table shall be a relevant authority for the purposes of the corresponding provision specified in column 2 of the Table.

TABLE

Column 1 <i>Competent Authority</i>	Column 2 <i>Provision</i>
Department for Regional Development	Article 10(6)(c) & (7)(a)
Department for Social Development	
Department of Enterprise, Trade and Investment	
Department of Health, Social Services and Public Safety	
A District Council	
Northern Ireland Authority for Energy Regulation	
Northern Ireland Housing Executive	

(a) S.I. 2002/3153

Column 1 <i>Competent Authority</i>	Column 2 <i>Provision</i>
Department for Regional Development Department for Social Development Department of Enterprise, Trade and Investment Department of Health, Social Services and Public Safety Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 13(3), (7), (8) and (9)
Department for Regional Development Department for Social Development Department of Enterprise, Trade and Investment Department of the Environment Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 13(4)
Department for Regional Development Department for Social Development Department of Enterprise, Trade and Investment Department of Health, Social Services and Public Safety Department of the Environment Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 16(1) Schedule 2, paragraph 2
Department for Regional Development Department of Enterprise, Trade and Investment Department of Health, Social Services and Public Safety Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 16(2)
Department for Regional Development Department of Enterprise, Trade and Investment Department of Health, Social Services and Public Safety Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 16(3)
Department for Regional Development Department of Enterprise, Trade and Investment District Councils Northern Ireland Authority for Energy Regulation Northern Ireland Housing Executive	Article 21(1)

Relevant Periods

3.—(1) The relevant period for the purposes of Article 13(4) of the Order shall be, in relation to the preparation of an action plan to which that Article applies, the period of 3 months beginning with the date on which the district council preparing the action plan first consults the relevant authority in relation to the plan pursuant to Article 13(3) of the Order.

(2) The relevant period for the purposes of any other provision of Part III of the Order shall be, in relation to an air quality objective, the period beginning with the date on which these Regulations come into operation and ending on the date set out in the third column of the Table in the Schedule which relates to that objective.

Air Quality Objectives

4.—(1) It is an air quality objective for each substance listed in the first column of the Table in the Schedule that the level at which that substance is present in the air is restricted to a level set out in the second column of that Table for that substance by no later than the date set out in the third column of that Table for that substance and level.

(2) The achievement or likely achievement of an air quality objective prescribed by paragraph (1) shall be determined by reference to the quality of air at locations –

- (a) which are situated outside of buildings or other natural or man-made structures above or below ground; and
- (b) where members of the public are regularly present.

Sealed with the Official Seal of the Department of the Environment on 22nd July 2003.

(L.S.)

Judena Goldring

A senior officer of the Department of the Environment

SCHEDULE

Regulation 3(2) and 4(1)

Air Quality Objectives

<i>Pollutant</i> (1)	<i>Air Quality objective levels*</i> (2)	<i>Date to be achieved by</i> (3)
Benzene	16.25µg/m ³ (5ppb) when expressed as a running annual mean	31 December 2003
	3.25µg/m ³ when expressed as a running annual mean	31 December 2010
1,3-butadiene	2.25µg/m ³ (1ppb) when expressed as a running annual mean	31 December 2003
Carbon monoxide	10mg/m ³ (8.6ppm) when expressed as a maximum daily running 8 hour mean	31 December 2003
Lead	0.5µg/m ³ when expressed as an annual mean	31 December 2004
	0.25mg/m ³ when expressed as an annual mean	31 December 2008
Nitrogen dioxide	200µg/m ³ (105ppb) when expressed as a 1 hour mean, not to be exceeded more than 18 times a year	31 December 2005
	40µg/m ³ (21ppb) when expressed as an annual mean	31 December 2005
Sulphur dioxide	35µg/m ³ (132ppb) when expressed as a 1 hour mean, not to be exceeded more than 24 times a year	31 December 2004
	125µg/m ³ (47ppb) when expressed as a 24 hour mean, not to be exceeded more than 3 times a year	31 December 2004
	266µg/m ³ (100ppb) when expressed as a 15 minute mean, not to be exceeded more than 35 times a year	31 December 2005
Particles (PM ₁₀)	50µg/m ³ when expressed as a 24 hour mean, not to be exceeded more than 35 times a year	31 December 2004
	40µg/m ³ when expressed as an annual mean	31 December 2004

*µg/m³: micrograms per cubic metre

ppb/ppm: parts per billion/million

mg/m³: milligrams per cubic metre

Interpretation

For the purposes of this schedule:—

1. “PM₁₀” means particulate matter, which passes through a size-selective inlet with a 50% efficiency cut-off at 10µm aerodynamic diameter.

2.—(1) A running annual mean is a mean, which is calculated on an hourly basis, yielding one running annual mean per hour. The running annual mean for a particular substance at a particular location for a particular hour is the mean of the hourly levels for that substance at that location for that hour and the preceding 8759 hours.

(2) For the purpose of the calculation of a running annual mean, the hourly level for a particular substance at a particular location is either –

- (a) the level at which that substance is recorded as being present in the air at that location during the hour on the basis of a continuous sample of air taken during that hour for at least 30 minutes: or
- (b) the mean of the levels recorded at that location on the basis of 2 or more samples of air taken during the hour for an aggregate period of at least 30 minutes.

3.—(1) A maximum daily running 8-hour mean is calculated on a daily basis. The maximum daily running 8-hour mean for a particular substance at a particular location for a particular day is the maximum of the running 8-hour means ending during that day.

(2) For the purpose of sub-paragraph (1) a “running 8-hour mean” is a mean, which is calculated on an hourly basis, yielding one running 8 hour mean per hour. The running 8-hour mean for the relevant substance at the relevant location for a particular hour is the mean of the hourly means for the substance at the location for the hour and the preceding 7 hours.

4.—(1) An annual mean is a mean, which is calculated on a yearly basis, yielding one annual mean per calendar year. The annual mean for a particular substance at a particular location for a particular calendar year is –

- (a) in the case of lead, the mean of the daily levels for that year;
- (b) in the case of nitrogen dioxide, the mean of the hourly means for that year;
- (c) in the case of PM₁₀, the mean of the 24-hour means for that year;
- (d) in the case of benzene, either the mean of the daily levels for that year or the mean of the hourly means for that year.

(2) For the purpose of the calculation of the annual mean for lead, the daily level for lead at a particular location for a particular day is the level at which lead is recorded as being present in the air at that location during the week in which the day occurs on the basis of a continuous sample of air taken throughout that week (each day in that week therefore being attributed with the same daily level).

(3) For the purpose of sub-paragraph (2) “week” means a complete week beginning on a Monday, except that it also includes any period of less than seven days from the beginning of the calendar year until the first Monday in that year to the end of that year.

(4) For the purpose of any calculation of the annual mean for benzene on the basis of the mean of the daily levels, the daily level for benzene at a particular location for a particular day is the level at which benzene is recorded as being present in the air at that location during the fortnight in which the day occurs on the basis of a continuous sample of air taken throughout that fortnight (each day in the fortnight therefore being attributed with the same daily level).

(5) For the purpose of sub-paragraph (4) “fortnight” means a complete fortnight, that is a period of two weeks beginning on a Monday (no particular week in a calendar year being included in more than one fortnight), except that it also includes –

- (a) in any calendar year beginning on a day other than a Monday, the period from the beginning of the year until the first Monday in that year; and
- (b) in any year, the period from the end of the last complete fortnight in the year to the end of that year.

5. An hourly mean is a mean calculated every hour. The hourly mean for a particular substance at a particular location for a particular hour is the mean of the levels recorded for that substance at that location –

- (a) in the case of benzene, at a frequency of not less than once during the hour; and
- (b) in the case of carbon monoxide, nitrogen dioxide and sulphur dioxide, at a frequency of not less than once every 10 seconds during the hour.

6. A 24-hour mean is a mean calculated every 24 hours. The 24 hour mean for a particular substance at a particular location for a particular 24 hour period is the level at which that substance is recorded as being present in the air at that location on the basis of a continuous sample of air taken throughout the period.

7. A 15-minute mean is a mean calculated every 15 minutes. The 15 minute mean for a particular substance at a particular location for a particular 15 minutes is the mean of the levels recorded, at a frequency of not less than once every 10 seconds, for that substance at that location during that 15 minutes.

8. The reference to a number of micrograms or milligrams per cubic metre of a substance is a reference to the number of micrograms or milligrams per cubic metre of that substance when measured with the volume standardised at a temperature of 293K and at a pressure of 101.3 kPa.

EXPLANATORY NOTE

(This is not part of the Regulations.)

These Regulations prescribe the relevant authorities for particular provisions of Part III of the Environment (Northern Ireland) Order 2002. Part III of the Environment (Northern Ireland) Order 2002 requires district councils to review the quality of air within their area. The reviews have to consider the air quality for the time being and the likely future air quality during “the relevant period” (a period to be prescribed by regulations). Such reviews have to be accompanied by an assessment of whether any prescribed air quality objectives are being or are likely to be achieved within the relevant period.

These Regulations prescribe the relevant period (regulation 2(2)) and set out the air quality objectives to be achieved by the end of that period (regulation 3 and the Schedule).

Where any of the prescribed objectives are not likely to be achieved within any part of a district council’s area within the relevant period, the district council concerned will have to designate that part of its area as an air quality management area. An action plan covering the designated area will then have to be prepared setting out how the district council and prescribed relevant authority intend to exercise their powers in relation to the designated area in pursuit of the achievement of the prescribed objectives. The Regulations prescribe the period within which a prescribed relevant authority will have to submit proposals to a district councils, which is preparing an action plan within the district councils area (regulation 2(1)).

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