STATUTORY RULES OF NORTHERN IRELAND

2003 No. 240

ENVIRONMENTAL PROTECTION

The Air Quality (Ozone) Regulations (Northern Ireland) 2003

Made - - - -	*17th April 2003*
Coming into operation	*9th September 2003*

The Department of the Environment, being a Department designated(**1**) for the purposes of section 2(2) of the European Communities Act 1972(**2**) in relation to measures relating to the control of pollution in ambient air, in exercise of the powers conferred on it by that section and of every other power enabling it in that behalf, hereby makes the following Regulations:

Citation, commencement and interpretation

1.—(1) These Regulations may be cited as the Air Quality (Ozone) Regulations (Northern Ireland) 2003 and shall come into operation on 9th September 2003.

(2) The Interpretation Act (Northern Ireland) 1954(**3**) shall apply to these Regulations as it applies to an Act of the Northern Ireland Assembly.

Definitions

2.—(1) In these Regulations:

"agglomeration" means a zone with a population concentration in excess of 250,000 inhabitants, or, where the population concentration is 250,000 inhabitants or less, a population density per km^2 for which the Department considers that the need for ambient air be assessed or managed is justified;

"alert threshold" has the meaning given by Regulation 9(3);

"ambient air" means outdoor air in the troposphere, excluding workplaces;

"assessment" means any method used to measure, calculate, predict or estimate the level of ozone precursor substances in ambient air;

"fixed measurements" means measurements taken at fixed sites either continuously or by random sampling, the number of measurements being sufficiently large to enable the levels observed to be determined;

(**1**) S.I. 1988/785
(**2**) 1972 c. 68
(**3**) 1954 c. 33 (N.I.)

"information threshold" has the meaning given in Regulation 9(3);

"level" means the concentration of ozone precursor substances in ambient air;

"long-term objective" has the meaning given in Regulation 4;

"ozone precursor substances" means substances which contribute to the formation of ground-level ozone, including those listed in Schedule 4;

"public" has the meaning given in Regulation 8(6);

"rural background station" has the meaning given by Part I of Schedule 2;

"target value" has the meaning given by Regulation 3;

"volatile organic compounds" or "VOCs" means all organic compounds from anthropogenic and biogenic sources, other than methane, that are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight;

"the Department" means the Department of the Environment; and

"zone" means an area within Northern Ireland which is designated for the purposes of these Regulations and shown on a map published by the Department, the Scottish Executive, the National Assembly for Wales, and the Department for Environment, Food and Rural Affairs in January 2001, a copy of which is deposited at the offices of the Department, Calvert House, 23 Castle Place, Belfast, BT1 1FY.

Target values

3.—(1) The target values for ozone concentrations in ambient air are set out in Part II of Schedule 1.

(2) The definitions and provisions of Part I of Schedule 1 shall apply to Parts II and III of that Schedule.

Long-term objectives

4. The long-term objectives for ozone concentrations in ambient air are set out in Part III of Schedule 1.

Assessment of concentrations of ozone and ozone precursor substances in ambient air

5. The Department shall take the measures necessary to ensure that throughout Northern Ireland in each zone, concentrations of ozone and ozone precursor substances are assessed in accordance with Regulations 6 to 7.

Classification of zones

6.—(1) The Department shall classify each zone in relation to ozone according to whether ambient air quality for ozone is required to be assessed by –

(a) fixed continuous measurement; or

(b) a combination of measurement campaigns of short duration and results from emissions inventories and modelling.

(2) Fixed continuous measurement must be used to assess ambient air quality in relation to ozone in a zone if within the last five years concentrations of ozone in that zone have exceeded a long-term objective.

(3) A combination of measurement campaigns of short duration, at times and locations likely to be typical of the highest pollution levels, and results from emissions inventories and modelling,

may be used to assess ambient air quality in relation to ozone in a zone if fewer than five years' data are available to determine exceedances.

Method of assessment of ambient air quality

7.—(1) The Department shall ensure that ambient air quality is assessed in each zone by following the appropriate method for ozone in accordance with its current classification.

(2) For each zone classified under Regulation 6(2) in relation to ozone, the Department shall ensure that the minimum number of fixed sampling points determined in accordance with Part I of Schedule 3 is used for sampling the concentrations of ozone in that zone.

(3) For zones to which Regulation 7(2) applies, the Department shall ensure that measurements of nitrogen dioxide are made at a minimum of 50 per cent of the ozone sampling points required by Part I of Schedule 3.

(4) The measurements of nitrogen dioxide required by paragraph (3) shall be continuous, except at rural background stations, where other measurement methods may be used.

(5) For zones to which Regulation 7(3) applies, the number of fixed sampling points required by Part I of Schedule 3 may be reduced provided that –

(a) the supplementary methods prescribed by Regulation 6(3) provide an adequate level of information for the assessment of air quality with regard to target values, information and alert thresholds;

(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 in accordance with the data quality objectives specified in Part I of Schedule 5 and lead to assessment results as specified in Part II of Schedule 5;

(c) the number of sampling points in each zone amounts to at least one sampling point per two million inhabitants, or one sampling point per 50,000 km^2, whichever produces the greater number of sampling points;

(d) each zone contains at least one sampling point; and

(e) nitrogen dioxide is measured at all remaining sampling points except rural background stations.

(6) The results of modelling and/or indicative measurements carried out in zones to which paragraph (5) applies shall be taken into account for the assessment of air quality with respect to target values.

(7) For zones where five years of measurement have been carried out, and during each of the previous five years of measurement concentrations are below the long-term objectives, the number of continuous measurement stations shall be determined in accordance with Part II of Schedule 3.

(8) Schedule 2 shall have effect for determining the location of sampling points for the fixed measurement of ozone.

(9) For ozone precursor substances, the Department shall ensure that –

(a) at least one measuring station to supply data on concentrations of the ozone precursor substances listed in Schedule 4 is installed and operated within Northern Ireland; and

(b) in choosing the number and siting of measuring stations for ozone precursor substances, account shall be taken of the objectives, methods and recommendations set out in Schedule 4.

(10) Reference methods for analysis of ozone are set out in Schedule 6, and these methods must be used unless other methods are used which the Department considers can be demonstrated to give equivalent results.

(11) For ozone, measurements of volume must be standardised at a temperature of 293K and a pressure of 101.3kPa.

Programmes and measures to address ozone levels

8.—(1) The Department shall draw up a list of zones in which:

(a) levels of ozone in ambient air, as assessed in accordance with Regulations 6 and 7, are higher than target values;

(b) levels of ozone in ambient air, as assessed in accordance with Regulations 6 and 7, are higher than the long-term objectives, but equal to or below the target levels; and

(c) ozone levels meet the long-term objectives.

(2) The Department, after consultation with other Northern Ireland Departments, shall draw up and implement for each zone listed under paragraph (1)(a), a plan or programme for attaining the target values from the date specified in Part II of Schedule 1.

(3) Paragraph (2) will not apply if the Department considers that attaining the target values would not be achievable through proportionate measures.

(4) The Department, after consultation with other Northern Ireland Departments, shall, in drawing up and implementing plans or programmes under paragraph (2), ensure that where appropriate, these are integrated with plans or programmes under Regulation 9 of the Air Quality Limit Values Regulations (Northern Ireland) 2002.

(5) Plans or programmes drawn up under paragraph (2) shall at least contain the information specified in Schedule 7 to The Air Quality Limit Values Regulations (Northern Ireland) 2002, and shall be made available to the public.

(6) For the purposes of paragraph (5), the public includes, but is not limited to, health care bodies and organisations having an interest in ambient air quality and representing the interests of sensitive populations, consumers and the environment.

(7) The Department shall prepare and implement for each zone listed under paragraph (1)(b) measures which it considers to be cost-effective with the aim of achieving the long-term objectives.

(8) The Department shall ensure that the measures described in paragraph (7) are, at least, consistent with the plans or programmes drawn up under paragraph (2).

(9) The Department shall, for zones to which paragraph (1)(c) applies –

(a) as far as factors including the transboundary nature of ozone pollution and meteorological conditions permit, ensure that ozone levels are kept below long-term objectives;

(b) preserve through proportionate measures the best ambient air quality which it considers to be compatible with sustainable development and a high level of protection for the environment and human health.

Public Information

9.—(1) The Department shall ensure that up-to-date information on concentrations of ozone in ambient air is routinely made available to the public.

(2) The information on concentrations of ozone in paragraph (1) shall be updated –

(a) where appropriate and practicable, on an hourly basis; and

(b) in all other cases, as a minimum, on a daily basis.

(3) The information threshold and alert threshold for ozone set out in Part I of Schedule 7 shall apply.

(4) Information made available under paragraph (1) shall include –

(a) an indication of each time and the extent to which ozone concentrations exceeded –

(i) the long-term objectives for the protection of health;

(ii) the information threshold; or

(iii) the alert threshold for the relevant averaging period; and

(iv) a short assessment of those exceedances and their effects on health;

(b) comprehensive annual reports; and

(c) timely information about actual or predicted exceedances of the alert threshold.

(5) The annual reports referred to in paragraph (4)(c) shall, at least, contain –

(a) for human health, an indication of all exceedances of the target value, long-term objective or alert threshold for the relevant averaging period;

(b) for vegetation –

(i) an indication of any exceedance of the target value or long-term objective; and

(ii) where appropriate, a short assessment of the effects of any such exceedance.

(6) The information referred to in paragraph (5)(b) may include, where appropriate –

(a) further information and assessments on vegetation protection, which sets out for suburban, rural and rural background stations based on one hour averaging, accumulated from May to July, a report of value for each year, where levels of ozone concentrations in ambient air exceed 6,000$\mu g/m^3 \cdot h$; and

(b) information on precursor substances insofar as these are not covered by existing European Community legislation.

(7) Information and reports required to be published by these Regulations shall be published by appropriate means, including, as appropriate, broadcast media, press, publications, information screens, the internet or other computer network services.

(8) Where there has been an exceedance of the information threshold or alert threshold for ozone, the information specified in Part II of Schedule 7 shall be supplied to the public.

(9) Where practicable, the information specified in Part II of Schedule 7 shall be provided to the public where an exceedance of the information threshold or alert threshold for ozone is predicted.

(10) Information made available to the public under this Regulation shall be clear, comprehensible and accessible.

Action plans

10.—(1) The Department, after consultation with other Northern Ireland Departments, shall draw up action plans indicating the measures to be taken in the short term where there is any risk of the alert threshold being exceeded –

(a) if there is in its opinion significant potential to reduce such a risk; and

(b) in order to reduce the duration or severity of such an occurrence.

(2) In making the assessment required by paragraph (1), the Department shall take account of national geographical, meteorological and economic conditions.

(3) The Department shall make available to the public –

(a) the results of investigations undertaken in the preparation of action plans under these Regulations;

(b) the action plans; and

(c) information on the implementation of the action plans.