STATUTORY RULES OF NORTHERN IRELAND

2002 No. 94

ENVIRONMENTAL PROTECTION

The Air Quality Limit Values Regulations (Northern Ireland) 2002

Made - - - -	*8th March 2002*
Coming into operation	*1st May 2002*

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 and commencement

1. These Regulations may be cited as the Air Quality Limit Values Regulations (Northern Ireland) 2002 and shall come into operation on 1st May 2002.

Definitions and interpretation

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 to be assessed or managed is justified;

"alert threshold" has the meaning given by regulation 8(2);

"ambient air" means outdoor air in the troposphere, excluding work places;

"assessment" means any method used to measure, calculate, predict or estimate the level of a relevant pollutant in the 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;

"level" means the concentration of a relevant pollutant in ambient air;

(**1**) S.I.1988/785
(**2**) 1972 c. 68

"limit value" has the meaning given in regulation 3(1);

"lower assessment threshold" has the meaning given in regulation 5(5);

"margin of tolerance" means the percentage of the limit value by which this value may be exceeded subject to the conditions laid down in Schedule 1;

"natural events" means volcanic eruptions, seismic activities, geothermal activities, wild-land fires, high-wind events or the atmospheric resuspension or transport of natural particles from dry regions;

"oxides of nitrogen" means the sum of nitric oxide and nitrogen dioxide added as parts per billion and expressed as nitrogen dioxide in microgrammes per cubic metre;

"$PM_{2.5}$" means particulate matter which passes through a size-selective inlet with a 50% efficiency cut-off at 2.5 μm aerodynamic diameter;

"PM_{10}" means particulate matter which passes through a size-selective inlet with a 50% efficiency cut-off at 10 μm aerodynamic diameter;

"relevant pollutants" means sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead;

"upper assessment threshold" has the meaning given in regulation 5(5);

"the Department" means the Department of the Environment;

"zone" means a part of the territory of Northern Ireland which is designated by the Department 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 of Environment, Transport and the Regions in January 2001, a copy of which is deposited at the offices of the Department, Calvert House, 23 Castle Place, Belfast BT1 1FY.

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

Duty to ensure that ambient air quality is improved

3.—(1) Northern Ireland departments shall take the measures necessary to ensure that throughout Northern Ireland in each zone concentrations of relevant pollutants in ambient air, as assessed in accordance with regulations 4 to 7, do not exceed the limit values set out in Schedule 1 from the dates specified in that Schedule.

(2) The measures taken shall—

(a) take into account an integrated approach to the protection of air, water and soil;

(b) not contravene Community legislation on the protection of safety and health of workers at work; and

(c) have no significant negative effects on the environment in the other Member States.

Assessment of ambient air quality

4. The Department shall ensure that ambient air quality is assessed in each zone in relation to each of the relevant pollutants in accordance with regulations 5 to 7.

Classification of zones

5.—(1) The Department shall classify each zone in relation to each of the relevant pollutants according to whether ambient air quality in that zone for that pollutant is required to be assessed by—

(**3**) 1954 c. 33 (N.I.)

(a) measurements;

(b) a combination of measurements and modelling techniques; or

(c) by the sole use of modelling or objective estimation techniques.

(2) Measurements must be used to assess ambient air quality in relation to a relevant pollutant in a zone if—

(a) the zone is an agglomeration;

(b) the levels of that pollutant in the zone are between the relevant limit values and upper assessment thresholds; or

(c) the levels of that pollutant in the zone exceed the limit values for that pollutant.

(3) A combination of measurements and modelling techniques may be used to assess ambient air quality in any zone in relation to a relevant pollutant where the levels of the pollutant over a representative period are below the relevant upper assessment thresholds.

(4) Where the levels of a relevant pollutant in any zone are below the relevant lower assessment thresholds, the sole use of modelling or objective estimation techniques for assessing levels of that pollutant is permissible unless—

(a) the zone is an agglomeration; and

(b) the pollutant being assessed is sulphur dioxide or nitrogen dioxide.

(5) The upper and lower assessment thresholds for the relevant pollutants are determined in accordance with Schedule 2.

(6) Where a zone is classified in relation to a pollutant under paragraph (1)(*a*), modelling techniques may be used for supplementing the measurements taken in order to provide an adequate level of information on ambient air quality in relation to a relevant pollutant in a zone.

(7) The classification of zones required by paragraph (1) shall include any zones which may be classified by the Department as exceeding limit values for—

(a) sulphur dioxide owing to concentrations of sulphur dioxide in ambient air due to natural sources;

(b) PM_{10} owing to concentrations of PM_{10} in ambient air due to—

(i) natural events which result in concentrations significantly in excess of normal background levels from natural sources; or

(ii) the resuspension of particulates following the winter sanding of roads.

Review of classifications

6.—(1) The Department shall review the classification of each zone under regulation 5 at least once in every five years in accordance with Part II of Schedule 2.

(2) The Department shall also review the classification of any zone under regulation 5 in the event of significant changes in activities affecting ambient concentrations in the zone of any of the relevant pollutants.

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 specified method for each relevant pollutant in accordance with its current classification.

(2) Where a zone is classified under regulation 5(1)(*a*) or (*b*) in relation to a relevant pollutant—

(a) measurements of that pollutant must be taken at fixed sites either continuously or by random sampling; and

(b) the number of measurements must be sufficiently large to enable the levels of that pollutant to be properly determined.

(3) Schedule 3 shall have effect for the purposes of determining the location of sampling points for the relevant pollutants.

(4) For each zone classified under regulation 5(1)(*a*) the Department shall ensure that, in respect of a relevant pollutant, the minimum number of sampling points for fixed measurement of concentrations determined in accordance with Schedule 4 is used for sampling the concentrations of that pollutant in that zone.

(5) For each zone classified under regulation 5(1)(*b*) the Department shall ensure that, in respect of a relevant pollutant, the number of sampling points for fixed measurement of that pollutant in that zone, and the spatial resolution of other techniques, shall be sufficient for the concentrations of that pollutant to be established in accordance with Part I of Schedule 3 and Part I of Schedule 5.

(6) Reference methods for—

(a) the analysis of sulphur dioxide, nitrogen dioxide and oxides of nitrogen;

(b) the sampling and analysis of lead; and

(c) the sampling and measurement of PM_{10}

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.

(7) The Department shall ensure that—

(a) measuring stations to supply representative data on concentrations of $PM_{2.5}$ are installed and operated using the method for the sampling and measurement of $PM_{2.5}$ that it considers suitable; and

(b) sampling points for $PM_{2.5}$ are, where possible, co-located with sampling points for PM_{10}.

(8) For zones which are classified under regulation 5(1)(*b*) or (*c*), the Department shall ensure that the information set out in Part II of Schedule 5 is compiled.

(9) For sulphur dioxide, nitrogen dioxide and oxides of nitrogen the volume must be standardised at a temperature of 293°K and a pressure of 101,3 kPa.

Action plans

8.—(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 limit values for any of the relevant pollutants, or the alert thresholds for sulphur dioxide or nitrogen dioxide, being exceeded, in order to reduce that risk and to limit the duration of such an occurrence.

(2) The alert threshold for sulphur dioxide is that set out in paragraph 1.2 of Part I of Schedule 1, and the alert threshold for nitrogen dioxide is that set out in paragraph 2.2 of Part II of Schedule 1.

Action to be taken where limit values are exceeded

9.—(1) The Department shall draw up a list of zones in which the levels of one or more of the relevant pollutants are higher than—

(a) in a case where there is no margin of tolerance shown in Schedule 1 in relation to a limit value, the limit value;

(b) in any other case, the limit value plus the margin of tolerance shown in Schedule 1.

(2) The Department shall draw up a list of zones in which the levels of one or more of the relevant pollutants are between the limit value and the limit value plus any margin of tolerance.

(3) Subject to paragraphs (6), (8) and (9), the Department, after consultation with other Northern Ireland departments, shall draw up for each zone listed under paragraph (1) a plan or programme for attaining the limit values for the pollutants in question within the time limits specified in Schedule 1; and the Department and those other Northern Ireland departments shall ensure that the plan or programme is implemented.

(4) The plan or programme shall at least include the information listed in Schedule 7.

(5) Where in any zone the level of more than one pollutant is higher than the limit values, an integrated plan covering all the pollutants in question shall be prepared.

(6) For any zone designated under regulation 5(7)(*a*), the Department may provide that plans or programmes shall only be required under this regulation where the limit values are exceeded owing to man-made emissions.

(7) Plans or programmes for PM_{10} which are prepared in accordance with this regulation shall also have the aim of reducing concentrations of $PM_{2.5}$.

(8) For any zone designated under regulation 5(7)(*b*)(i), the Department may provide that plans or programmes shall only be required where the limit values are exceeded owing to causes other than natural events.

(9) For any zone designated under regulation 5(7)(*b*)(ii), the Department may provide that plans or programmes shall only be required where the limit values are exceeded owing to PM_{10} levels other than those caused by winter road sanding.

(10) Where the level of a pollutant exceeds, or is likely to exceed, the limit value plus the margin of tolerance or, as the case may be, the alert threshold following significant pollution originating in another Member State, the Department shall notify the Secretary of State for Environment, Food and Rural Affairs.

Zones where the levels are lower than the limit value

10.—(1) The Department shall draw up a list of zones in which the levels of the relevant pollutants are below the limit values.

(2) Northern Ireland departments shall ensure that the levels of the relevant pollutants in these zones are maintained below the limit values and shall endeavour to preserve the best ambient air quality compatible with sustainable development.

Public information

11.—(1) The Department shall ensure that up-to-date information on ambient concentrations of each of the relevant pollutants is routinely made available to the public.

(2) Information on ambient concentrations of sulphur dioxide, nitrogen dioxide and particulate matter shall be updated—

(a) in the case of hourly values for sulphur dioxide and nitrogen dioxide, where practicable on an hourly basis;

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

(3) Information on ambient concentrations of lead shall be updated on a three-monthly basis.

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

(a) an indication of the extent to which limit values and alert thresholds for particular pollutants have been exceeded over the averaging periods specified in Schedule 1; and

(b) a short assessment of those exceedances and their effects on health.