S.I. No. 264/1996 — Air Pollution Act 1987 (Emission Limit Values For Combustion Plant) Regulations, 1996

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The Minister for the Environment, in exercise of the powers conferred on him by sections 10 and 51 of the Air Pollution Act, 1987 (No. 6 of 1987) and for the purpose of giving effect to the provisions of Council Directive 88/609/EEC of the 24th day of November, 1988[1] and Council Directive 94/66/EC of the 15th day of December, 1994[2], hereby makes the following Regulations:—

[1]O.J. No. L336/1 of 7 December, 1988

[2]O.J. No. L337/83 of 24 December, 1994

1. (1) These Regulations may be cited as the Air Pollution Act, 1987 (Emission Limit Values for Combustion Plant) Regulations, 1996.

(2) These Regulations shall come into operation on the 1st day of October, 1996.

2. (1) In these Regulations:—

(a) a reference to an article or schedule which is not otherwise identified is a reference to an article or schedule of these Regulations;

(b) a reference to a sub-article or paragraph which is not otherwise identified is a reference to the sub-article or paragraph in which the reference occurs.

(2) In these Regulations:—

"the Act" means the Air Pollution Act, 1987 ;

"combustion plant" means any industrial plant, with a rated thermal input of 50 megawatts (50MW) or more, in which fuels are oxidised in order to use the heat thus generated for the production of energy, other than such plant which makes direct use of the products of combustion in a manufacturing process or which is powered by a petrol, diesel or gas engine or by a gas turbine;

"fuel" means any solid, liquid or gaseous combustible material used to fire a combustion plant, other than domestic refuse and toxic and dangerous waste;

"multi-fuel firing unit" means any new combustion plant which may be fired by two or more types of fuel, alternately or simultaneously;

"new combustion plant" means, subject to articles 3 and 4, any combustion plant for which an application for a licence under Part IV of the Environmental Protection Agency Act 1992 (No. 7 of 1992) falls to be considered on or after the coming into operation of these Regulations, other than a combustion plant in which the production of energy is an established activity in accordance with section 3 of that Act.

"rated thermal input" means the operating thermal input of a plant designated by the manufacturer of the plant;

"waste gases" means gaseous discharges containing solid, liquid or gaseous emissions.

3. Where two or more new combustion plants are installed in such a way that, taking technical and economic factors into account, their waste gases could be discharged through a common stack, the combination formed by such plants shall be regarded as a single plant for the purposes of these Regulations.

4. Where a proposed alteration to, or reconstruction of, a combustion plant would add at least 50 megawatts rated thermal input to the capacity of the plant, the emission limit values relating to the alteration or reconstruction shall be determined in accordance with article 5 as if the relevant rated thermal input was the total thermal input envisaged for the plant upon completion of the alteration or reconstruction.

5. The following emission limit values for new combustion plant are hereby specified:

(a) the emission limit value relating to sulphur dioxide, shall, in the case of a plant using solid fuel, be as set out in the First Schedule,

(b) the emission limit value relating to sulphur dioxide, shall, in the case of a plant using liquid fuel, be as set out in the Second Schedule,

(c) the emission limit value relating to sulphur dioxide, shall, in the case of a plant using gaseous fuel, be as set out in the Third Schedule,

(d) the emission limit value relating to oxides of nitrogen shall be as set out in the Fourth Schedule,

(e) the emission limit value relating to dust shall be as set out in the Fifth Schedule.

6. (1) Notwithstanding article 5:—

(a) in the case of a new combustion plant with a rated thermal input equal to or greater than 400MW which is not operated for more than 2200 hours per year, calculated on a rolling average basis over a period of 5 years, the emission limit value relating to sulphur dioxide shall be 800mg/Nm(^{3}).

(b) where two or more fuels are used simultaneously in a multi-fuel firing unit the emission limit values for the new combustion plant concerned shall be determined as specified in the Sixth Schedule.

(2) Notwithstanding sub-article (1)(b), in the case of a multi-fuel firing unit in a refinery in which the distillation and conversion residues from the refining of crude oils will be used alone or simultaneously with other fuels, the emission limit values for the new combustion plant concerned shall be as specified in the Seventh Schedule.

(3) In the case of a multi-fuel firing unit involving the alternate use of two or more fuels, the emission limit values as specified in the First, Second, Third, Fourth and Fifth Schedules shall apply in relation to each such fuel.

7. (1) The emission limit values specified in article 5 and 6 shall be regarded as having been complied with where—

(a) in the case of measurements carried out on a continuous basis none of the calendar monthly mean values exceed the said emission limit values and 97% of all the 48 hourly mean values for emissions of sulphur dioxide and dust and 95% of all the 48 hourly mean values for emissions of oxides of nitrogen do not exceed 110% of the respective emission limit values for operating hours within a calendar year.

(b) in the case of discontinuous measurements or other appropriate determination procedures, the results of each of the series of measurements or other procedures do not exceed the said emission limit values.

(2) For the purposes of assessing compliance with the emission limit values the periods during which a plant is started up or is shut down shall be disregarded.

8. The Air Pollution Act, 1987 (Combustion Plant) Regulations, 1992 (S.I. No. 273 of 1992) are hereby revoked.

FIRST SCHEDULE

Emission Limit Values for Sulphur Dioxide: SOLID FUEL

Rated Thermal Input of Plant	Limit Value (mg/Nm^3)
not less than 50 MW and not greater than 100MW	2000
greater than 100MW and not greater than 500MW	2400—4ti*
greater than 500MW	400

* where ti is the rated thermal input of the plant expressed as megawatts (MW)

SECOND SCHEDULE

Emission Limit Values for Sulphur Dioxide: LIQUID FUEL

Rated Thermal Input of Plant	Limit Value (mg/Nm^3)
not greater than 300MW	1700
greater than 300MW and not greater than 500MW	3650—6.5ti*
greater than 500MW	400

* where ti is the rated thermal input of the plant expressed as megawatts (MW)

THIRD SCHEDULE

Emission Limit Values for Sulphur Dioxide: GASEOUS FUEL

Type of Fuel	Limit Value (mg/Nm^3)
gaseous fuels in general	35
liquefied gas	5
low calorific gases from gasification of refinery residues, coke oven gas, blast-furnace gas.	800

FOURTH SCHEDULE

Emission Limit Values for Oxides of Nitrogen

Type of Fuel	Limit Value (mg/Nm^3)
solid in general	650

solid with less than 10% volatile compounds	1300
liquid	450
gaseous	350

FIFTH SCHEDULE

EMISSION LIMIT VALUES FOR DUST

Type of Fuel	Rated Thermal Input	Limit Value (mg/Nm^3)
solid	equal to or greater than 500MW	50
solid	less than 500MW	100
liquid	all plant	50
blast-furnace gas	all plant	10
gases produced by the steel industry which can be used elsewhere	all plant	50
other gases	all plant	5

SIXTH SCHEDULE

Determination of emission limit values: multi-fuel firing units using two or more fuels simultaneously.

1. Determine the emission limit values for sulphur dioxide, oxides of nitrogen and dust in respect of each individual fuel in accordance with the First Second or Third Schedule and the Fourth and Fifth Schedules to these Regulations, as appropriate.

2. Multiply each such emission limit value by the thermal input of the fuel with which it is associated.

3. Divide each resulting product by the sum of the thermal inputs delivered by all the fuels.

4. Aggregate the resulting fuel-weighted emission limit values.

SEVENTH SCHEDULE

Determination of emission limit values: multi-fuel firing units in a refinery using distillation and conversion residues from crude oil refining, alone or with other fuels.

1. Where the fuel with the highest emission limit value (hereinafter referred to as

the determinative fuel) contributes at least 50% to the sum of the thermal inputs delivered by all the fuels used in the plant the emission limit value of that fuel determined in accordance with the First, Second or Third Schedule and the Fourth and Fifth Schedules to these regulations by reference to the nature of the fuel used shall be the appropriate emission limit value.

2. Where the fuel with the highest emission limit value contributes less than 50% to the sum of the thermal inputs delivered by all fuels used in the plant, the emission limit value shall be determined as follows—

(i) determine the emission limit values for sulphur dioxide, oxides of nitrogen and dust in respect of each individual fuel in accordance with the First, Second or Third Schedule and the Fourth and Fifth Schedules to these Regulations, as appropriate.

(ii) calculate the emission limit value of the determinative fuel (in the case of two fuels having the same emission limit values, the fuel with the higher thermal input being the determinative fuel) by:

(a) multiplying the individual emission limit value for that fuel by two,

(b) subtracting from that product the individual emission limit value for the fuel with the lowest emission limit value,

(iii) multiply the result of (ii) (b) by the thermal input of the determinative fuel,

(iv) multiply the other individual emission limit values by the thermal input delivered by their associated fuel,

(v) divide each product of (iv) by the sum of the thermal inputs delivered by all the fuels, and

(vi) aggregate the individual results of (v) to obtain the fuel-weighted emission limit value.

Given under the Official Seal of the Minister for the Environment this

6th day of September, 1996

Brendan Howlin

Minister for the Environment

EXPLANATORY NOTE

These Regulations transpose Directive 94/66/EC into Irish law by specifying emission limits for emission of sulphur dioxide from large combustion plant, with rated thermal input between 50MW and 100MW, using solid fuels.

The Regulations also re-state the emission limit values for large combustion plant with rated thermal input greater than 100MW, specified in the Air Pollution Act, 1987 (Combustion Plant) Regulations, 1992 which are now repealed by these Regulations.
