FIRST SUPPLEMENT TO THE GIBRALTAR GAZETTE

No. 2,958 of 16th January, 1997.

I ASSENT,

HUGO WHITE,

GOVERNOR

16th January, 1997





GIBRALTAR

No. 3 of 1997

 \boldsymbol{AN} \boldsymbol{ACT} to transpose into the law of Gibraltar the provisions of Council Directive 88/609/EEC as amended by Council Directive 94/66/EC on the limitation of emissions of certain pollutants into the air from large combustion plants.

 $E_{\hbox{\scriptsize NACTED}}$ by the Legislature of Gibraltar.

Title and commencement.

1. This Act may be cited as the Public Health (Amendment) (No. 2) Act 1997 and shall come into effect on such day as the Governor may appoint by notice in the Gazette.

Amendment to the Public Health Act.

- 2. The Public Health Act shall be amended by-
 - (a) inserting after section 93 the following sub-heading and sections 93A to 93F as follows—

"large combustion plants

Interpretation.

93A. In this section and in all sections to section 93F-

"Combustion plant" means any technical apparatus in which fuels are oxidised in order to use heat which is generated as a consequence;

"emission" means the discharge of substances from the combustion plant into the air;

"emission limit value" means the permissible quantity of a substance contained in the waste gases from the combustion plant which may be discharged into the air during a given period calculated in terms of mass per volume of the waste gases expressed in mg/N m³, assuming an oxygen content by volume in the waste gas of 3% in the case of liquid and gaseous fuels and 6% in the case of solid fuels;

"fuel" means any solid, liquid or gaseous combustible material used to fire a combustion plant, with the exception of domestic refuse, toxic or dangerous waste;

"the Minister" means the Minister charged with responsibilities for public health;

"rate of desulphurization" means the ratio of the quantity of sulphur which is separated out at the combustion plant site over a given period by processes especially designed for this purpose, to the quantity of sulphur contained in the fuel which is

introduced into the combustion plant facilities and which is used over the same period;

"operator" means any natural or legal person who operates the combustion plant, or who is the manager responsible for the undertaking operating the plant;

"waste gases" means gaseous discharge containing solid, liquid or gaseous emission the volumetric flow rates of which shall be expressed in cubic metres per hour at standard temperature (273k) and pressure (101.3kPa) after correction for the water vapour content, hereinafter referred to as $\left(Nm^3/h\right)$.

Application.

- 93B. (1) Subject to sub-sections (3), (4) and (5) sections 93A to 93F shall apply to combustion plants in respect of which the rated thermal input is not less than 50MW, irrespective of whether the fuel used is in solid, liquid or gaseous form.
- (2) Sections 93A to 93F shall apply only to combustion plants designed for production of energy with the exception of those which make direct use of the products of combustion in manufacturing processes.
- (3) Sections 93A to 93F shall not apply to the following-
 - (a) combustion plants in which the products of combustion are used for the direct heating, drying, or other treatment of objects or materials including reheating furnaces and furnaces for heat treatment;
 - (b) post-combustion plants which is to say any technical apparatus designed to purify the waste gases by combustion which is not operated as an independent combustion plant;
 - (c) facilities for the regeneration of catalytic cracking catalysts;

- (d) facilities for the conversion of hydrogen sulphide into sulphur;
- (e) reactors used in the chemical industry;
- (f) coke battery furnaces;
- (g) cowpers;
- (h) plants powered by diesel, petrol or gas engines or gas turbines, irrespective of the fuel used.
- (4) Where two or more separate new plants which are installed in such a way that, taking technical and economic factors into account, their waste gases could, in the opinion of the Minister, be discharged through a common stack, the combination formed shall be treated as a single unit.

Licences.

- 93C.(1) No person shall operate a combustion plant without a licence from the Minister or other than in accordance with a licence granted to him by the Minister.
- (2) A licence shall specify the maximum permitted emissions as calculated in accordance with the provisions of this section.
- (3) In the case of a new combustion plant with a multi-fuel firing unit involving the simultaneous use of two or more fuels, the emissions limit values shall be calculated as follows-
 - (a) by taking the emission limit value relevant for each individual fuel and pollutant corresponding to the rated thermal input of the combustion plant as set out in Schedules 5A to 5G;
 - (b) by determining fuel-weighted emission limit values which are obtained by multiplying the above individual emission limit value by the thermal input delivered by each fuel, the product of multiplication being divided by the sum of the thermal inputs delivered by all fuels; and

- (c) by aggregating the fuel-weighted limit values.
- (4) In the case of multi-firing plants using the distillation and conversion residues from crude-oil refining for own consumption, along with other fuels, the provisions for the fuel with the highest emission limit value (determinative fuel) shall apply, notwithstanding sub-section (3) if that fuel to the sum of the thermal inputs delivered by all fuels is at least 50%.
- (5) Subject to sub-section (6) in the case of combustion plants where the proportion of the determinative fuel is lower than 50%, the emission limit value shall be calculated on a pro rata basis of the heat input supplied by the individual fuels in relation to the sum of the thermal inputs delivered by all fuels as follows—
- (a) by taking the emission limit value relevant for each individual fuel and pollutant corresponding to the rated heat input of the combustion plant, as set out in Schedules 5A to 5G;
- (b) by calculating the emission limit value of the determinative fuel (fuel with the highest emission limit value laid down in Schedules 5A to 5G for that fuel or, in the case of two fuels having the same emission limit value, the fuel with the higher thermal input) obtained by multiplying the emission limit value for that fuel by a factor of two, and subtracting from this product the emission limit value of the fuel with the lowest emission limit value;
- (c) by determining the fuel-weighted emission limit value, which is obtained by multiplying the calculated fuel emission limit value by the thermal input of the determinative fuel and the other individual emission limit values by the thermal input delivered by each fuel, the thermal inputs delivered by all fuels; and
- (d) by aggregating the fuel-weighted emission limit values.

- (6) As an alternative to the provisions of sub-section (4) where appropriate an emission limit value for sulphur dioxide of 1,000 mg $\,\mathrm{Nm}^3$ may be applied, averaged over all new combustion plants forming part of a refinery, irrespective of the fuel combinations used.
- (7) For the purposes of granting the licence referred to in sub-section (1) for a new plant with a multi-fuel firing unit involving the alternate use of two or more fuels, the emission limit values set out in Schedules 5A to 5D corresponding to each fuel used shall apply.
- (8) Where a licence is granted to extend a combustion plant by at least 50MW, the emission limit value to be applied to the new part of the plant shall be fixed in relation to the thermal capacity of the entire plant except in the cases referred to in sub-sections (5) and (6).
- (9) A licence granted under this section shall contain conditions specifying procedures to be carried out relating to malfunction or breakdown of the abatement equipment; and in particular—
- (a) that in event of a breakdown, the Minister shall be notified without delay and that the licensee shall comply with any consequential directions which may be given to him by the Minister;
- (b) the licensee shall reduce or close down operations as soon as practicable and until normal operations can be restored or to operate the plant using low polluting fuels;
- (c) the procedures to be adopted by the licensee to recommission the abatement equipment as soon as possible.
- (10) The Minister may, notwithstanding sub-section (9)(b) give directions overriding any relevant condition in a licence in order to maintain the public electricity supply.

- (11) Notwithstanding Schedule 5A, combustion plants commencing operation after the coming into effect of this Act—
- (a) with a rated thermal input equal to or greater than 400MW, which do not operate more than 2,200 hours a year (rolling average over a period of five years), shall be subject to a limit value for sulphur dioxide emissions of 800mg/Nm^3 ; and
- (b) which burn indigenous solid fuel, where the emission limit value set for sulphur dioxide for such plants cannot be met, owing to the particular nature of the fuel, without using excessively expensive technology, may exceed, provided that such plants shall at least achieve the rates of desulphurization laid down in Schedule 5A;
- (12) In order to ensure compliance with the emission limit values for oxides of nitrogen in Schedule 5D the licences referred to in sub-section (1) may contain conditions setting out appropriate design specifications.
- (13) Subject to sub-section (14) waste gases from combustion plants shall be discharged by the licensee in a controlled fashion by means of a stack.
- (14) The licence referred to in sub-section (1) shall contain conditions as to discharge and without prejudice to the generality of the foregoing the conditions shall in particular safeguard the public health and the natural environment.

Monitoring.

- 93D.(1) A licensee shall monitor the level of emissions in accordance with the provisions of this section.
- (2) The level of emissions from combustion plants and all other values required shall be measured in accordance with Schedule 5G.

- (3) Both the measuring methods and equipment used in order to calculate the concentrations of sulphur dioxide, dust, oxides of nitrogen and oxygen and the other values required in order to monitor implementation of these provisions, and all other equipment used in order to evaluate the results, shall correspond to the best industrial measurement technology not involving excessive cost and shall provide reproducible and comparable results.
- (4) In the event of continuous measurements, the emission limit values set out in Schedules 5A to 5F shall be regarded as having been complied with if the evaluation of the results indicates, for operating hours within a calendar year, that—
- (a) none of the calendar monthly mean values exceeds the emission limit values; and
- (b) in the case of—
 - (i) sulphur dioxide and dust, 97% of all the 48 hourly mean values do not exceed 110% of the emission limit values;
 - (ii) oxides of nitrogen, 95% of all the 48 hourly mean values do not exceed 110% of the emission limit values.
- (5) Start up and shut down periods shall be disregarded.
- (6) In cases where only discontinuous measurements or other appropriate procedures for determination are required, the emission limit values set out in Schedules 5A to 5F shall be regarded as having been complied with if the results of each of the series of measurements or of the procedures defined and determined according to such rules as the Minister may make do not exceed the emission limit values.
- (7) In the cases referred to in section 93D(11)(b), the rates of desulphurization shall be regarded as having been complied with if the evaluation of measurements carried out pursuant to paragraph A.2 of Schedule FG, indicates that all of the

calendar monthly mean values or all of the rolling monthly mean values achieve the required desulphurization rates.

- (8) In the event that monitoring reveals that due to unforeseen circumstances, the emission limit value is not being complied with, the Minister shall give directions to the operator to take all appropriate primary measures to achieve compliance as soon as practicable and in any case within one year.
- (9) The Minister shall take all necessary steps to enable the European Commission to be informed of such cases and of the results of the remedial measures taken.
- (10) The operator shall inform the Minister of the results of the monitoring measurements, the checking of the measuring equipment, and the individual measurements and of all other measurements carried out in order to assess compliance with sections 93A to 93F.
- (11) The Minister may make rules specifying-
- (a) the permitted determination methods for the purposes of sub-section (3);
- (b) less stringent emission limits for a period not exceeding 6 months in respect of designated plants which use low-sulphur fuel in the event that the operator is suffering an interruption in the supply of low-sulphur fuel resulting from a serious shortage.

Penalties.

93E. Any person who without reasonable excuse contravenes section 93C(1) shall be guilty of an offence and shall on summary conviction be liable to a fine not exceeding level three on the standard scale.

Bordering states and Community information.

93F.(1) In the event that a licence is granted under section 93C for the construction of a combustion plant which is likely

to have a significant effect on the environment in another member State, the Minister may direct that he be consulted so that he can ensure that all appropriate information is exchanged and that consultation takes place, in accordance with Article 7 of Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment.

- (2) The Minister may direct any person in possession of information required for the purpose of meeting obligations under Council Directives 88/609/EEC and 94/66/EEC to provide information to the European Commission to supply that information to the Minister for that purpose.";
- (b) by inserting after Schedule 5 the following new Schedules-

"SCHEDULE 5A

Section 93C(5(a)(b), (7), (11)

EMISSION LIMIT VALUES FOR SO_2 FOR NEW PLANTS

Solid fuel

SCHEDULE 5B

Section 93C(5)(a)(b), (7)

EMISSION LIMIT VALUES FOR SO_2 FOR NEW PLANTS

Liquid fuels

SCHEDULE 5C

Section 93C(5)(a)(b), (7), (11)

EMISSION LIMIT VALUES FOR SO_2 FOR NEW PLANTS

Gaseous fuels

Type of fuel	Limit values (mg/Nm^3)
Gaseous fuels in general Liquefied gas Low calorific gases from gasification of refinery residues, coke oven gase,	35 5
blast furnace gas	800

SCHEDULE 5D

Section 93C(5)(a(b), (7), (11), (12)

EMISSION LIMIT VALUES FOR NO_2 FOR NEW PLANTS

Type of fuel	Limit values (mg/Nm ³)
Solid in general Solid with less than	650
10% volatile compounds Liquid	1,300 450
Gaseous	350

SCHEDULE 5E

Section 93C(5)(a)(b), (7), (11)

EMISSION LIMIT VALUES FOR DUST FOR NEW PLANTS

Type of fuel	Thermal capacity (MW)	Emission limit values (mg/Nm ³)
Solid	>500	50
	< 500	100

Liquid(1)	all plants	50
Gaseous	all plants	5

(1) A limit value of 100 mg/Nm^3 may be applied to plants with a capacity of less than 500 MWth burning liquid fuel with an ash content of more than 0.06%.

SCHEDULE 5F

Section 93C(5)(a)(b), (7), (11)

RATES OF DESULPHURIZATION

SCHEDULE 5G

Section 93C(5)(a)(b), (7), (11)

METHODS OF MEASUREMENT OF EMISSIONS

- A. Procedures for measuring and evaluating emissions from new plants.
- 1.(a) Concentrations of SO_2 , dust, oxides of nitrogen and oxygen shall be measured continuously in the case of new plants with a rated thermal input of more than 300MW. However, monitoring of SO_2 and dust may be confined to discontinuous measurements or other appropriate determination procedures in cases where such measurements or procedures (which must be verified and approved by the Minister) may be used to obtain concentration.
- (b) In the case of plants not covered by sub-paragraph (a), the Minister may give directions that continuous measurements of those three pollutants and of oxygen be carried out where he considers it necessary. Where such directions are not given discontinuous measurements or appropriate determination procedures as approved by the Minister shall be used regularly

to evaluate the quantity of the above-mentioned substances present in the emissions.

- 2. In the case of plants which must comply with the desulphurization rates fixed by section 93C, the requirements concerning SO_2 emission measurements established under sub-paragraph 1 shall apply and in addition the sulphur content of the fuel which is introduced into the combustion plant facilities must be regularly monitored.
- 3. The operator shall inform the Minister of substantial changes in the type of fuel used or in the mode of operation of the plant. The Minister shall decide whether the monitoring requirements laid down in sub-paragraph 1 are still adequate or require adaptation.
- 4. Continuously-operating measuring systems shall be checked at regular intervals in consultation with the Minister. The instruments for the measurement of concentrations of SO_2 , dust, oxides of nitrogen, and oxygen shall undergo basic calibration and an examination of their operation at appropriate regular intervals. The continuously-operating measuring equipment shall be calibrated in accordance with a reference measuring method approved by the Minister.

B. Determination of total annual emissions of new plants

The Minister shall calculate the total annual emissions of SO_2 and oxides of nitrogen. When continuous monitoring is used, the operator shall add up separately for each pollutant the mass of pollutant emitted each day, on the basis of the volumetric flow rates of waste gases. Where continuous monitoring is not in use, estimates of the total annual emissions shall be determined by the operator on the basis of paragraph A.1 to the satisfaction of the Minister. The Minister shall send to the Governor for onward transmission to the Commission the total annual SO_2 and oxides of nitrogen emissions of new combustion plants.".

Amendment to the Town Planning Act.

3. The Town Planning Act shall be amended by inserting after section 18 the following new section-

"Large Combustion Plants.

18A. The Commission shall not grant a permit under section 18 in respect of development involving the use of premises for the operation of a combustion plant unless satisfied that the structure in which it is contained is designed to prevent the discharge of sulphur dioxide, oxides of nitrogen and dust into the air exceeding the limits set out in sections 93A to 93D of the Public Health Act.".

Passed by the Gibraltar House of Assembly on the 7th day of January, 1997.

D. J. REYES,

Clerk to the Assembly.