

# EUROPEAN PARLIAMENT

1999



2004

---

*Session document*

FINAL  
A5-0068/2001

27 February 2001

**\*\*\*II**

## **RECOMMENDATION FOR SECOND READING**

on the Council common position for adopting a European Parliament and Council directive on the limitation of emissions of certain pollutants into the air from large combustion plants  
(11070/1/2000 – C5-0562/2000 – 1998/0225(COD))

Committee on the Environment, Public Health and Consumer Policy

Rapporteur: Ria G.H.C. Oomen-Ruijten

### ***Symbols for procedures***

- \* Consultation procedure  
*majority of the votes cast*
- \*\*I Cooperation procedure (first reading)  
*majority of the votes cast*
- \*\*II Cooperation procedure (second reading)  
*majority of the votes cast, to approve the common position  
majority of Parliament's component Members, to reject or amend  
the common position*
- \*\*\* Assent procedure  
*majority of Parliament's component Members except in cases  
covered by Articles 105, 107, 161 and 300 of the EC Treaty and  
Article 7 of the EU Treaty*
- \*\*\*I Codecision procedure (first reading)  
*majority of the votes cast*
- \*\*\*II Codecision procedure (second reading)  
*majority of the votes cast, to approve the common position  
majority of Parliament's component Members, to reject or amend  
the common position*
- \*\*\*III Codecision procedure (third reading)  
*majority of the votes cast, to approve the joint text*

(The type of procedure depends on the legal basis proposed by the Commission)

## CONTENTS

	<b>Page</b>
PROCEDURAL PAGE .....	4
DRAFT LEGISLATIVE RESOLUTION.....	5
EXPLANATORY STATEMENT .....	29

## PROCEDURAL PAGE

At its sitting of 16 September 1999 Parliament confirmed as its first reading under the codecision procedure its vote of 14 April 1999 on the proposal for a European Parliament and Council directive on the limitation of emissions of certain pollutants into the air from large combustion plants (COM(1998) 415 - 1998/0225(COD)).

At the sitting of 16 November 2000 the President of Parliament announced that the common position had been received and referred to the Committee on the Environment, Public Health and Consumer Policy (11070/1/2000 - C5-0562/2000).

The committee had appointed Ria G.H.C. Oomen-Ruijten rapporteur at its meeting of 21 July 1998. Ria G.H.C. Oomen-Ruijten had been confirmed as rapporteur on 20 November 2000.

The committee considered the common position and the draft recommendation for second reading at its meetings of 23 January and 26 February 2001.

At the last meeting it adopted the draft legislative resolution by 38 votes, with 7 abstentions.

The following were present for the vote: Guido Sacconi, acting chairman; Alexander de Roo, vice-chairman; Ria G.H.C. Oomen-Ruijten, rapporteur and vice-chairman; Emmanouil Bakopoulos (for Mihail Papayannakis), Jean-Louis Bernié (for Jean Saint-Josse), Hans Blokland, David Robert Bowe, John Bowis, Martin Callanan, Dorette Corbey, Chris Davis, Bert Doorn (for Per-Arne Arvidsson, pursuant to Rule 153(2)), Den Dover (for Marialiese Flemming, pursuant to Rule 153(2)), Avril Doyle, Jillian Evans (for Hiltrud Breyer), Karl-Heinz Florenz, Cristina García-Orcoyen Tormo, Laura González Álvarez, Robert Goodwill, Heidi Anneli Hautala (for Marie Anne Isler Béguin), Mary Honeyball (for Marie-Noëlle Lienemann), Anneli Hulthén, Eija-Riitta Anneli Korhola, Bernd Lange, Peter Liese, Torben Lund, Jules Maaten, Minerva Melpomeni Malliori, Patricia McKenna, Emilia Franziska Müller, Rosemarie Müller, Riitta Myller, Giuseppe Nisticò, Karl Erik Olsson, Marit Paulsen, Dagmar Roth-Behrendt, Karin Scheele, Ursula Schleicher (for Maria del Pilar Ayuso González), Horst Schnellhardt, Inger Schörling, Jonas Sjöstedt, Dirk Sterckx (for Frédérique Ries), Marianne L.P. Thyssen (for Marielle de Sarnez), Antonios Trakatellis, Kathleen Van Brempt (for Béatrice Patrie) and Philip Whitehead.

The recommendation for second reading was tabled on 27 February 2001.

The deadline for tabling amendments will be indicated in the draft agenda for the relevant part-session.

## DRAFT LEGISLATIVE RESOLUTION

### **European Parliament legislative resolution on the Council common position for adopting a European Parliament and Council directive on the limitation of emissions of certain pollutants into the air from large combustion plants (11070/1/2000 – C5–0562/2000 – 1998/0225(COD))**

#### **(Codecision procedure: second reading)**

*The European Parliament,*

- having regard to the Council common position 11070/1/2000 – C5–0562/2001),
  - having regard to its position at first reading<sup>1</sup> on the Commission proposal to Parliament and the Council (COM(1998) 415<sup>2</sup>),
  - having regard to the Commission's amended proposal (COM(1999) 611<sup>3</sup>),
  - having regard to Article 251(2) of the EC Treaty,
  - having regard to Rule 80 of its Rules of Procedure,
  - having regard to the recommendation for second reading of the Committee on the Environment, Public Health and Consumer Policy (A5-0068/2000),
1. Amends the common position as follows;
  2. Instructs its President to forward its position to the Council and Commission.

---

<sup>1</sup> OJ C 219, 30.7.199, p. 175, and OJ C 54, 25.2.2000, p. 76

<sup>2</sup> OJ C 300, 29.9.1998, p. 6

<sup>3</sup> OJ C 212, 25.7.2000, p. 36.

(Amendment 1)  
Recital 13a (new)

***Whereas the Commission is requested to put forward, before the end of 2001, specific proposals for EU-wide economic instruments, targeted for reducing emissions of SO<sub>2</sub> and NO<sub>x</sub> in the most cost-effective way; any taxes or charges proposed will be minimum requirements leaving the Member States the full freedom to set higher taxes or charges, if they so wish;***

*Justification:*

*First reading amendment. Emission limit values should preferably be complemented with economic instrument promoting emission reductions.*

(Amendment 2)  
Article 2(11)

'biomass' means products consisting of any whole or part of a vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content and the following waste used as a fuel:

- (a) vegetable waste from agriculture and forestry;
- (b) vegetable waste from the food processing industry;
- (c) vegetable waste from virgin pulp production and from production of paper from pulp;

- (d) cork waste;
- (e) wood waste with the exception of wood **waste** which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from

'biomass' means products consisting of any whole or part of a vegetable matter from agriculture or forestry which can be used as a fuel for the purpose of recovering its energy content and the following waste used as a fuel:

- (a) vegetable waste from agriculture and forestry;
- (b) vegetable waste from the food processing industry **if the heat generated is recovered;**
- (c) **fibrous** vegetable waste from virgin pulp production and from production of paper from pulp **if it is co-incinerated at the place of production and the heat generated is recovered;**

- (d) cork waste;
- (e) wood waste with the exception of wood **material** which may contain halogenated organic compounds or heavy metals as a result of treatment with wood preservatives or coating, and which includes in particular such wood waste originating from

construction and demolition waste;

construction and demolition waste;

*Justification:*

*To avoid any misunderstanding, the definition of 'biomass' needs to be legally and linguistically watertight and should tie in smoothly with the definition of 'waste' which does not include biomass. In other words, the scope of this directive should complement the scope of Directive 2000/76/EC on the incineration of waste (OJ L 332, p. 91).*

(Amendment 3)

Article 4(1)

1. Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants *which in the view of the competent authority are the subject of a full request for a licence before* \*, *provided that the plant is put into operation no later than* \*\*, contain conditions relating to compliance with the emission limit values laid down in part A of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.

\* 12 months from the date of entry into force of this Directive.

\*\* 24 months from the date of entry into force of this Directive.

1. ***Without prejudice to Article 18*** Member States shall take appropriate measures to ensure that all licences for the construction or, in the absence of such a procedure, for the operation of new plants *which in the view of the competent authority are the subject of a full request for a licence before* \*, *provided that the plant is put into operation no later than* \*\*, contain conditions relating to compliance with the emission limit values laid down in part A of Annexes III to VII in respect of sulphur dioxide, nitrogen oxides and dust.

\* 12 months from the date of entry into force of this Directive.

\*\* 24 months from the date of entry into force of this Directive.

*Justification:*

*To provide legal continuity in the case of plants licensed after 1 July 1987.*

(Amendment 4)  
Article 4(4)(a)

(a) the operator of an existing plant undertakes, in a written declaration submitted by 30 June 2004 at the latest to the competent authority, not to operate the plant for more than 20,000 hours starting from 1 January 2008;

(a) the operator of an existing plant undertakes, in a written declaration submitted by 30 June 2004 at the latest to the competent authority, not to operate the plant for more than 20,000 **operational** hours starting from 1 January 2008 **ending no later than 31 December 2012**;

*Justification:*

*Older large plants using lignite or oil as fuel are often used during peaks in electricity consumption. Therefore, these plants often run at 20-40% of base load, being 1600 – 3200 operational hours per year. The figure proposed by Council would allow some of these plants to run unabated well until 2020. This is not acceptable.*

(Amendment 5)  
Article 4(7)(aa) & (ab) (new)

**(aa) emissions from sea and air transport as well as proposals for curbing emissions from these sectors;**

**(ab) amounts of heavy metals emitted by large combustion plants;**

*Justification:*

*Sea and air transport are large emitters of pollutants. Reducing emissions from these sectors could be one of the most cost-efficient ways to curb emissions overall. Progress on reducing emissions from these sectors within international organisations has, so far, been slow.*

*An assessment of heavy metals emitted by large combustion plants should be a part of the Commission's report.*

(Amendment 6)  
Article 5(1)

***Plants, of a rated thermal input equal to or greater than 400 MW, which do not***

***Delete***



*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 800 mg/Nm<sup>3</sup>.*

*This provision shall not apply to new plants for which the licence is granted pursuant to Article 4(2).*

*Justification:*

*This exemption regards large plants with a thermal input equal or greater than 400 MW. Existing abatement techniques for this category of plants can reach emission levels below 100 mg/Nm<sup>3</sup>. The exception is therefore not justified.*

(Amendment 7)  
Article 5(2)

*Plants 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 the limit values laid down in Annex III.* **Delete**

*However, such plants shall at least comply with Annex VIII.*

*Justification:*

*This exemptions could be used in order to circumvent the emission limit values by using more polluting indigenous fuels.*

(Amendment 8)  
Article 5(3)

*Until 31 December 1999, the Kingdom of Spain may authorise new power plants with a rated thermal input equal to or greater than 500 MW burning indigenous or imported solid fuels, commissioned before the end of 2005 and complying with the following requirements:* **Delete**

*(a) in the case of imported solid fuels, a sulphur dioxide emission limit value of 800 mg/Nm<sup>3</sup>;*

*(b) in the case of indigenous solid fuels, at least a 60 % rate of desulphurisation,*

*provided that the total authorised capacity of such plants to which this derogation applies does not exceed:*

*– 2 000 MWe in the case of plants burning indigenous solid fuels;*

*– in the case of plants burning imported solid fuels either 7 500 MWe or 50 % of all the new capacity of all plants burning solid fuels authorised up to 31 December 1999, whichever is the lower.*

*Justification:*

*First- reading amendment. Deletes obsolete part of the text.*

(Amendment 9)  
Article 6

*Member States may authorise plants burning indigenous lignite to exceed the emission limit values fixed in accordance with Article 4 if, notwithstanding the application of best available technology not entailing excessive costs, major difficulties connected with the nature of the lignite so require and provided that lignite is an essential source of fuel for the plants.* **Delete**

*The Commission shall immediately be informed of such cases, which shall be the subject of consultation with the Commission on the appropriate measures to be taken.*

***This provision shall not apply to new plants for which the licence is granted pursuant to Article 4(2).***

*Justification:*

*This exemption could be used in order to circumvent the emissions limit values by using more polluting indigenous fuels.*

(Amendment 10)

Article 9(1), first subparagraph

In the case of plants with a multi-firing unit involving the simultaneous use of two or more fuels, when granting the licence referred to in Articles 4(1) or 4(2), and in the case of such plants covered by Articles 4(3) or 11, the competent authority shall set the emission limit values as follows:

In the case of plants with a multi-firing unit involving the simultaneous use of two or more fuels, ***and for multi-fuel firing units using distillation and conversion residues from crude oil refining, exclusively or in combination with other fuels***, when granting the licence referred to in Articles 4(1) or 4(2), and in the case of such plants covered by Articles 4(3) or 11, the competent authority shall set the emission limit values as follows:

*Justification:*

*To simplify calculation of the emissions from the incineration of mixed fuels, it is better to take flue gas as the basis rather than thermal input. Annex II.1 of Directive 2000/76/EC on the incineration of waste (OJ L 332, p. 91) uses the same method of calculation for large combustion plants co-incinerating both fossil fuels and waste. Two methods of calculation for the same plant would cause problems unnecessarily.*

(Amendment 11)

Article 9(2)

***In multi-firing units using the distillation and conversion residues from crude-oil refining for own consumption, alone or with other fuels, the provisions for the fuel***

***Deleted***

*with the highest emission limit value (determinative fuel) shall apply, notwithstanding paragraph 1 above, if during the operation of the combustion plant the proportion contributed by that fuel to the sum of the thermal inputs delivered by all fuels is at least 50%.*

*Where the proportion of the determinative fuel is lower than 50%, the emission limit value is determined 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) firstly by taking the emission limit value relevant for each individual fuel and pollutant corresponding to the rated heat input of the combustion plant as given in Annexes III to VII,*
- (b) secondly by calculating the emission limit value of the determinative fuel (fuel with the highest emission limit value according to Annexes III to VII and, in the case of two fuels having the same emission limit value, the fuel with the higher thermal input); this value is obtained by multiplying the emission limit value laid down in Annexes III to VII 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) thirdly by determining the fuel-weighted emission limit values, which are 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 product of multiplication being divided by the sum of the thermal inputs delivered by all fuels,*
- (d) fourthly by aggregating the fuel-weighted emission limit values.*

*Justification:*

*There is no reason to use a more complicated method of calculation for the plants in question; they can therefore come under Article 9(1).*

(Amendment 12)  
Article 18(1)

1. Directive 88/609/EEC shall be repealed with effect from \*, without prejudice to the obligations of Member States concerning the time limits for transposition and application of that Directive listed in Annex X hereto.

1. ***Without prejudice to paragraph 2,*** Directive 88/609/EEC shall be repealed with effect from \*, without prejudice to the obligations of Member States concerning the time limits for transposition and application of that Directive listed in Annex X hereto.

***2. In the case of new plants licensed before the date referred to in Article 4.1 of this Directive, [Article 4.1, Article 5, paragraphs 2 and 3, Article 6, Article 15 paragraph 3, Annex III, IV, V, VI, VIII and Annex IX.A paragraph 2 of Directive 88/609 as amended by Directive 94/66] shall remain in effect until 1 January 2008 after which they shall be repealed.***

\* 12 months from the date of entry into force of this Directive.

\* 12 months from the date of entry into force of this Directive.

*Justification:*

*To provide for legal continuity in the case of plants licensed after 1 July 1987. This amendment may require further adaptation to be consistent with other amendments.*

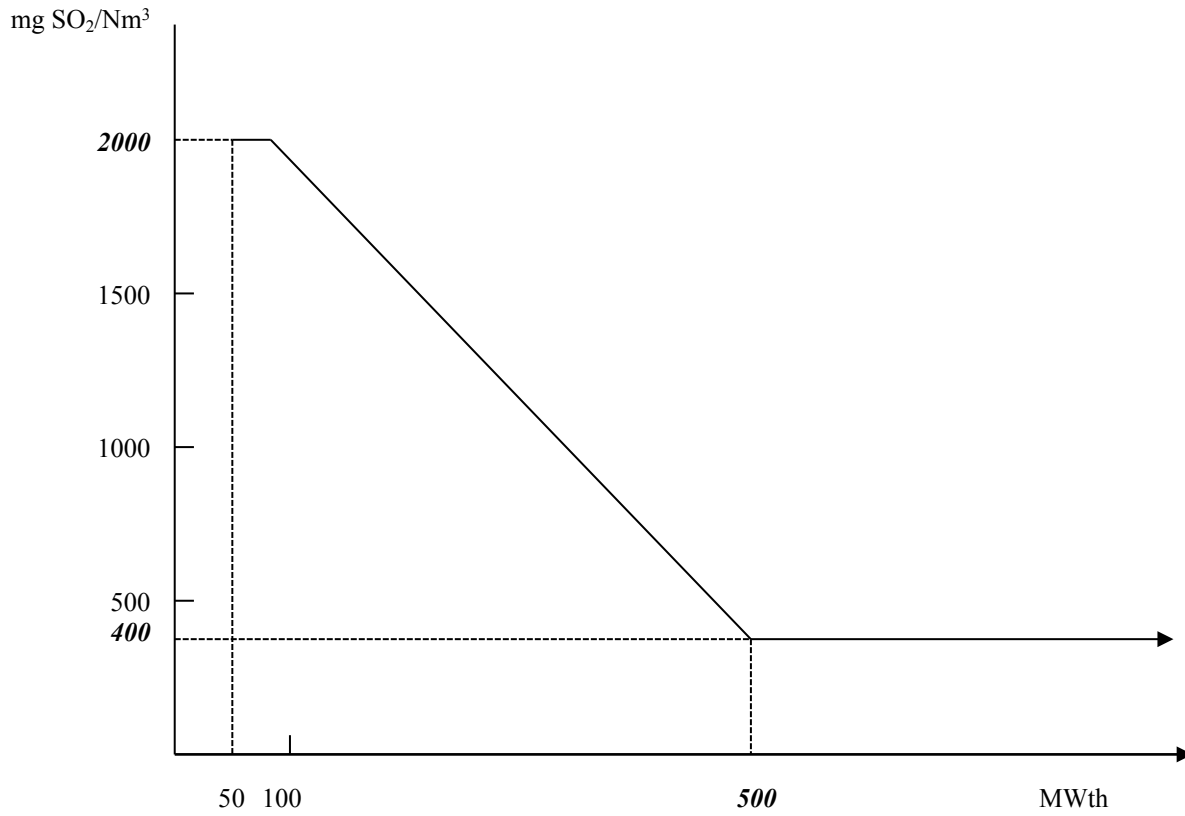
(Amendment 13)

Common position of the Council

ANNEX III.A

EMISSION LIMIT VALUES FOR SO<sub>2</sub>  
Solid fuel

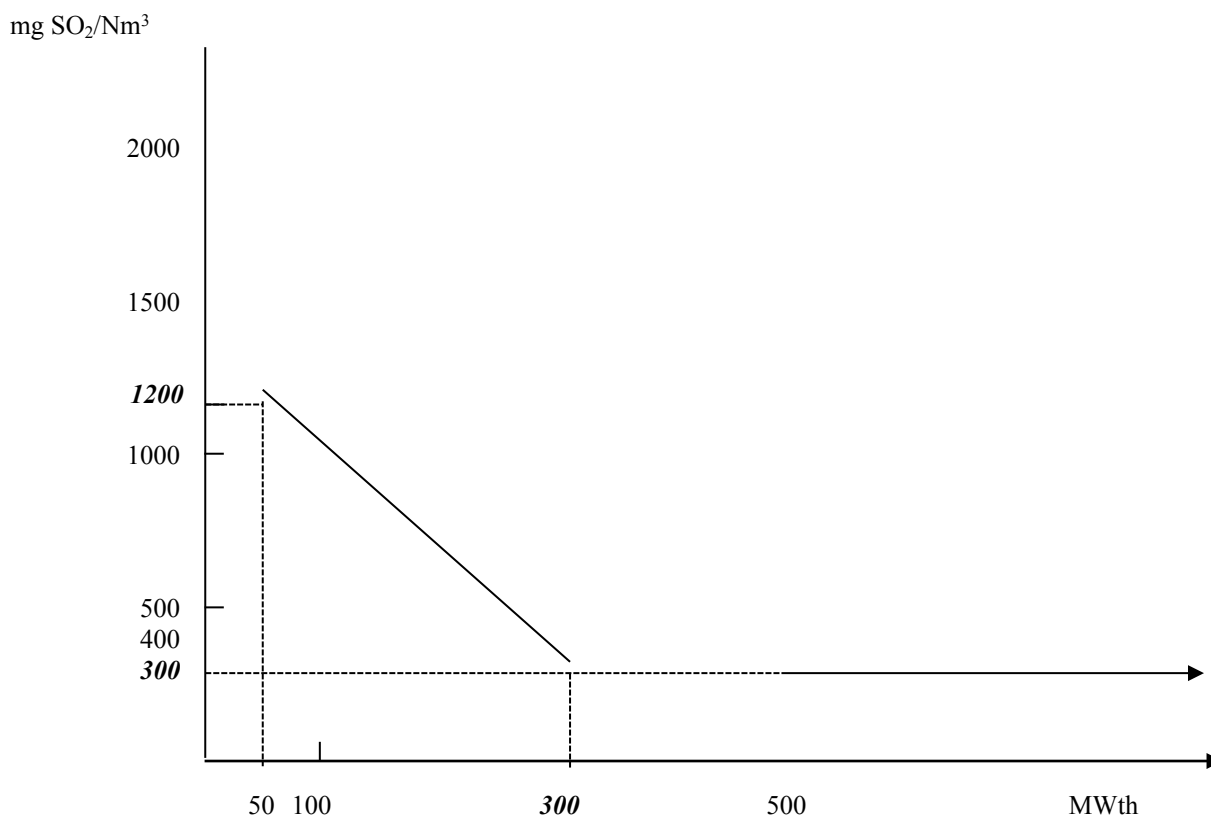
A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6%) to be applied by new and existing plants pursuant to Article 4(1) and 4(3) respectively:



Amendments

ANNEX III.A  
EMISSION LIMIT VALUES FOR SO<sub>2</sub>  
Solid fuel

- A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6%) to be applied by new and existing plants pursuant to Article 4(1) and 4(3) respectively:



*NB. Where the emission limit values above cannot be met due to the characteristics of the fuel a rate of desulphurisation of at least 90 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 300 MWth and in the case of plants with a rated thermal input greater than 300 MWth a rate of desulphurisation of at least 94 % together with a maximum permissible emission limit value of 500 mg/Nm<sup>3</sup> shall apply.*

*Justification:*

*Problems involving small and medium-size plants, in particular with fluidised bed combustion (CHP) need to be avoided. The largest emitters of volume are the high output plants > 300 MW.*

(Amendment 14)

Common position of the Council

ANNEX III.B

- B. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6%) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines.

Type of fuel	50 to 100 MWth	100 to 300 MWth	> 300 MWth
Biomass	200	200	200
General case	850	<b>850 to 200</b> <i>(linear decrease)</i>	200

Amendments

ANNEX III.B

- B. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6%) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines.

Type of fuel	50 to 100 MWth	100 to 300 MWth	> 300 MWth
Biomass	200	200	200
General case	850	<b>200</b>	200

*NB. Where the emission limit values above cannot be met due to the characteristics of the fuel a rate of desulphurisation of at least 92 % shall be achieved in the case of plants with a rated thermal input of less than or equal to 300 MWth and in the case of plants with a rated thermal input greater than 300 MWth a rate of desulphurisation of at least 95 % together with a maximum permissible emission limit value of 400 mg/Nm<sup>3</sup> shall apply.*

*Justification:*

*The proposed ELVs for new plants are compatible with existing abatement techniques.*

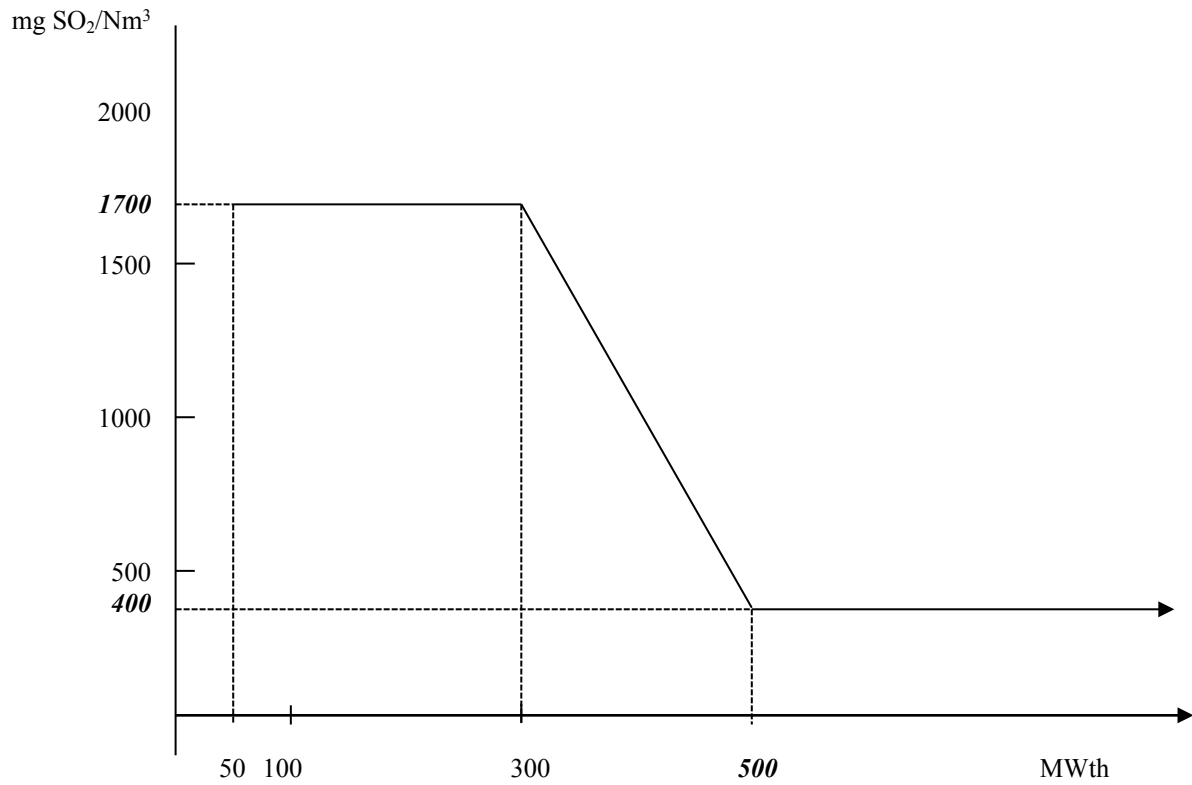
(Amendment 15)

Common position of the Council



ANNEX IV.A  
EMISSION LIMIT VALUES FOR SO<sub>2</sub>  
Liquid fuels

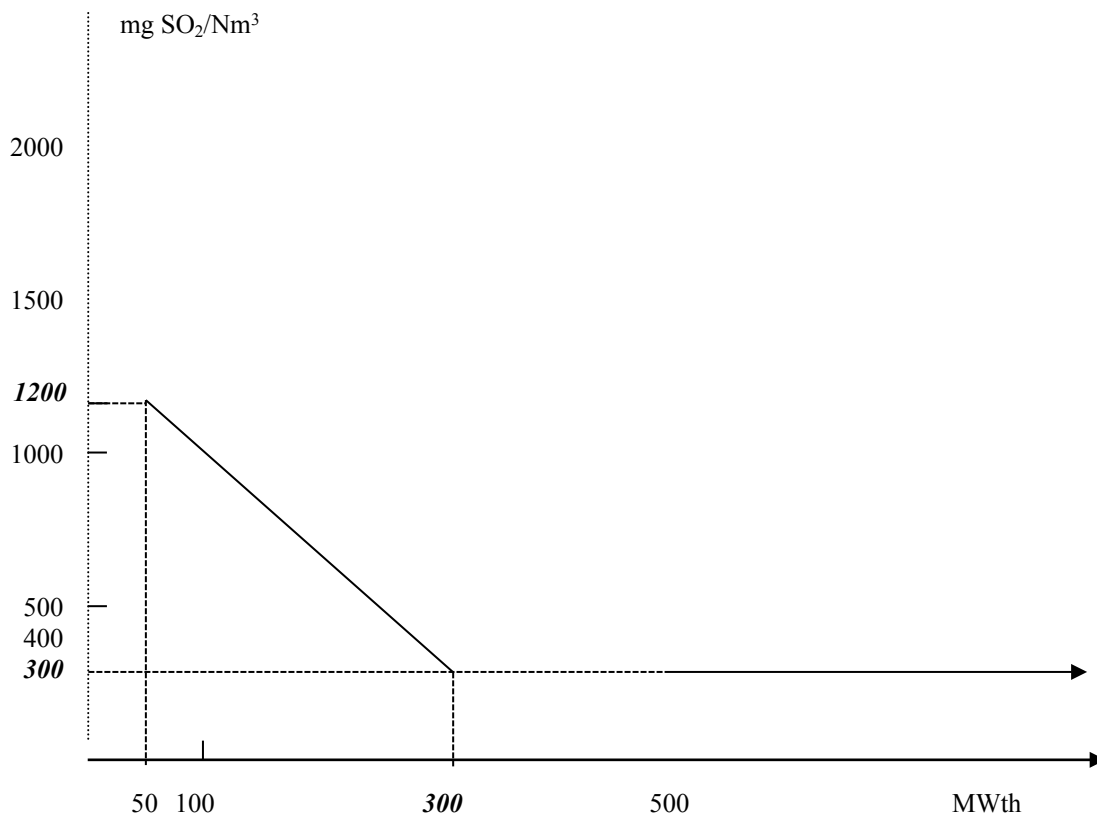
A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 3%) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:



Amendments

ANNEX IV.A  
EMISSION LIMIT VALUES FOR SO<sub>2</sub>  
Liquid fuels

- A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 3%) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:



*Justification:*

*Problems with small and medium plants, in particular with combined heat and power, need to be avoided. The largest emitters in terms of volume are plants with an output > 300 MW.*

(Amendment 16)

Common position of the Council

ANNEX IV.B

EMISSION LIMIT VALUES FOR SO<sub>2</sub>

Liquid fuels

- A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 3%) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines:

50 to 100 MWth	100 to 300 MWth	> 300 MWth
850	<b>850-200</b> <i>(linear decrease)</i>	200

Amendment by Parliament

ANNEX IV.B

EMISSION LIMIT VALUES FOR SO<sub>2</sub>

Liquid fuels

- A. SO<sub>2</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 3%) to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines:

50 to 100 MWth	100 to 300 MWth	> 300 MWth
850	<b>200</b>	200

*Justification:*

*The proposed emission limit values for new plants can be achieved with a large margin of safety with currently available abatement techniques. The limits proposed would also set a more level playing-field for the liberalised European electricity market.*

(Amendment 17)

Common position of the Council

ANNEX VI.A  
EMISSION LIMIT VALUES FOR NO<sub>x</sub> (measured as NO<sub>2</sub>)

- A. NO<sub>x</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6% for solid fuels, 3% for liquid and gaseous fuels) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:

Type of fuel	Limit values (mg/Nm <sup>3</sup> )
Solid in general	<b>650</b>
<b><i>Solid with less than 10% volatile compounds</i></b>	<b>1300</b>
Liquid	<b>450</b>
Gaseous	<b>350</b>

Amendments

ANNEX VI.A  
EMISSION LIMIT VALUES FOR NO<sub>x</sub> (measured as NO<sub>2</sub>)

- A. NO<sub>x</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 6% for solid fuels, 3% for liquid and gaseous fuels) to be applied by new and existing plants pursuant to Article 4(1) and 4(3), respectively:

Type of fuel	Limit values (mg/Nm <sup>3</sup> )	Plants > <b>300 MW</b>
Solid in general	<b>350</b>	<b>200</b>
Liquid	<b>350</b>	<b>200</b>
Gaseous	<b>250</b>	<b>200</b>

*Justification:*

*These limit values can be achieved with new and old plants using modern catalyst technology. Distortion of competition must be avoided, particularly in the light of the forthcoming enlargement.*

(Amendment 18)

Council common position

ANNEX VI.B

NOx emission limit values expressed in mg/Nm<sup>3</sup> to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

Solid fuels (O<sub>2</sub> content 6%)

	50 to 100 MWth	100-300 MWth	> 300 MWth
General case and biomass	<b>400</b>	<b>300</b>	<b>200</b>

Amendments by Parliament

(Amendment 17)

ANNEX VI.B

NOx emission limit values expressed in mg/Nm<sup>3</sup> to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

Solid fuels (O<sub>2</sub> content 6%)

	50 to 100 MWth	100-300 MWth	> 300 MWth
General case and biomass	<b>200</b>	<b>200</b>	<b>200</b>

*Justification:*

*The proposed emission limit values for new new plants are compatible with available abatement techniques.*

(Amendment 19)

Council common position

ANNEX VI.B

NOx emission limit values expressed in mg/Nm<sup>3</sup> to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

Liquid fuels (O<sub>2</sub> content 3%)

50 to 100 MWth	100-300 MWth	> 300 MWth
<b>400</b>	<b>300</b>	<b>200</b>

Amendments by Parliament

ANNEX VI.B

NOx emission limit values expressed in mg/Nm<sup>3</sup> to be applied by new plants pursuant to Article 4(2) with the exception of gas turbines

Liquid fuels (O<sub>2</sub> content 3%)

50 to 100 MWth	100-300 MWth	> 300 MWth
<b>200</b>	<b>200</b>	<b>200</b>

*Justification:*

*The proposed emission limit values for new new plants are compatible with available abatement techniques.*

(Amendment 20)

Common position of the Council  
ANNEX VI, Section B  
Gas Turbines

NO<sub>x</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 15% ) to be applied by a single gas turbine unit pursuant to Article 4(2) (the limit values apply only above 70% load):

	> 50 MWth (thermal input at ISO conditions)
Natural gas <sup>(Note 1)</sup>	50 <sup>(Note 2)</sup>
Liquid fuels <sup>(Note 3)</sup>	120
Gaseous fuels (other than natural gas)	120

Gas turbines for emergency use that operate less than 500 hours per year are excluded from these limit values. The operator of such plants is required to submit each year to the competent authority a record of such used time.

Note 1: Natural gas is naturally occurring methane with not more than 20% (by volume) of inerts and other constituents.

Note 2: 75 mg/Nm<sup>3</sup> in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:

- gas turbines, used in combined heat and power systems **having an overall efficiency greater than 75%**;
- gas turbines used in combined cycle plants having an **annual** average overall electrical efficiency greater than 55%;
- gas turbines for mechanical drives.

For **single cycle** gas turbines not falling into any of the above categories, but having an efficiency greater than 35% – **determined at ISO base load conditions** – the emission limit value shall be  $50 \cdot \eta / 35$  where  $\eta$  is the gas turbine efficiency expressed as a percentage (**and at ISO base load conditions**).

Note 3: This emission limit value only applies to gas turbines firing light and middle distillates.

Amendment

## Gas Turbines

NO<sub>x</sub> emission limit values expressed in mg/Nm<sup>3</sup> (O<sub>2</sub> content 15% ) to be applied by a single gas turbine unit pursuant to Article 4(2) (the limit values apply only above 70% *turbine* load):

	> 50 MWth (thermal input at ISO conditions)
Natural gas <sup>(Note 1)</sup>	50 <sup>(Note 2)</sup>
Liquid fuels <sup>(Note 3)</sup>	120
Gaseous fuels (other than natural gas)	120

Gas turbines for emergency use that operate less than 500 hours per year are excluded from these limit values. The operator of such plants is required to submit each year to the competent authority a record of such used time. *The exception shall also apply to gas turbines with multi-fuel combustion operated with light fuel oil as emergency fuel for less than 500 hours annually.*

Note 1: Natural gas is naturally occurring methane with not more than 20% (by volume) of inerts and other constituents.

Note 2: 75 mg/Nm<sup>3</sup> in the following cases, where the efficiency of the gas turbine is determined at ISO base load conditions:

- gas turbines, used in combined heat and power systems having a **gross energy efficiency of the overall plant at the design point greater than 75% in relation to the inspection value, corrected to ISO environmental conditions, the new state of the plant and the design steam requirement for tapping decoupling;**
- gas turbines used in combined cycle plants having an **gross electrical efficiency in the design point greater than 55%. The efficiency shall be the reduction value corrected to ISO environmental conditions, condenser pressure of 0.04 bar and the new state of the plant. For gas turbines of less than 250 MW the overall efficiency under the same conditions must be greater than 50%**
- gas turbines for mechanical drives.

For gas turbines not falling into any of the above categories, but having a **gross efficiency in the design point related to the reduction value, corrected to ISO environmental conditions and the new state of the plant** greater than 35% the emission limit value shall be  $50 \cdot \eta / 35$  where  $\eta$  is the gas turbine (**gross**) efficiency **under the same conditions.**

Note 3: This emission limit value only applies to gas turbines firing light and middle distillates.

### *Justification*

*Liquid fuels play an important role in the emergency operation of gas turbines because they can*



*be stored locally, Liquid fuels should be included in the exemption for reasons of security of supplies (bottlenecks in natural gas supplies or pipeline failures).*

*Because of their substantially better fuel efficiency, combined heat and power plants and combined power stations contribute towards reducing CO<sub>2</sub> emissions and hence to protection of the climate. A restriction as a result of minimum energy efficiency therefore restricts the capacity to reduce CO<sub>2</sub> which is also present at less efficient plants.*

*For technical reasons such plants cannot be optimally designed in terms of thermal use and energy production. In the light of the state of the art and operating requirements, an energy efficiency of 70% can be regarded as appropriate and as an ambitious objective.*

*While combination power stations with large gas turbines (> 250 MWh) can reach an overall efficiency > 55%, this is not the case for power stations with small gas turbines. The latest gas turbines of this type achieved about 5% less.*

*Placing the (gross) efficiency in the context of the design and reduction conditions creates an unambiguous basis for measuring.*

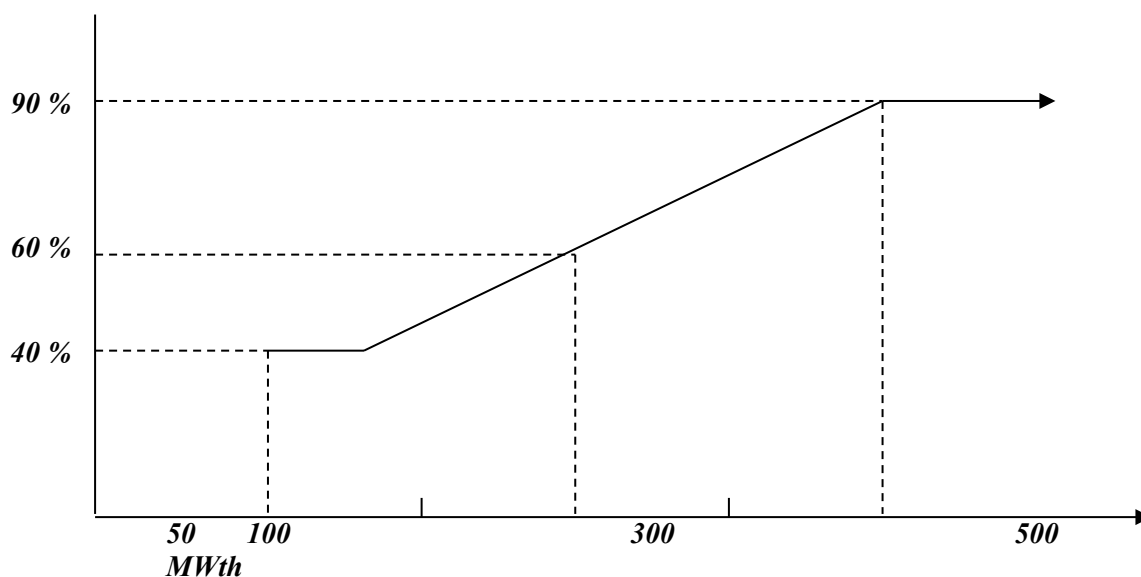
(Amendment 21)

Common position of the Council

ANNEX VIII

**RATES OF DESULPHURISATION**  
(pursuant to Article 5(2))

A. *Rates of desulphurisation for new and existing plants pursuant to Article 4(1) and 4(3), respectively.*



B. *Rates of desulphurisation for new plants pursuant to Article 4(2):*

50 to 100 MWth	100 to 300 MWth	> 300 MWth
92%	92%	92%
<i>NB: Installations which achieve 300 mg/Nm<sup>3</sup> SO<sub>2</sub> are exempt from application of the relevant rate of desulphurisation.</i>		

Amendments

ANNEX VIII

***Deleted***

*Justification:*

*Through amendments to Annex III, similar provisions to those in Annex VIII have been incorporated in the previous Annex.*

(Amendment 22)  
ANNEX IX.A.6

The values of the 95% confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Sulphur dioxide	<b>20%</b>
Nitrogen oxides	<b>20%</b>
Dust	<b>30%</b>

The values of the 95% confidence intervals of a single measured result shall not exceed the following percentages of the emission limit values:

Sulphur dioxide	<b>5%</b>
Nitrogen oxides	<b>5%</b>
Dust	<b>10%</b>

*Justification:*

*The fact that measuring inaccuracies of 20 - 30% benefit the licence holder is justifiable in the case of individual readings. Given that in accordance with Article 15 this margin applies to continuous readings for calculating monthly averages, for example, this is statistically wrong. A margin of one or two percentage points is enough. Otherwise this erroneous wording would result in all limit values for all large plants (obliged to carry out continuous readings) being increased by 20-25%.*

(Amendment 23)  
ANNEX IX.Ba (new)

***Member States shall take appropriate steps to disseminate up-to-date information on total national as well as plant-by-plant total annual emissions of SO<sub>2</sub> and NO<sub>x</sub> to the public by means of, for example, broadcast media, press, information screens or computer network services and by notification of appropriate organisations. A list of the organisations notified shall be sent to the Commission at the same time as information transmitted under Annex IX(B) new of this directive.***

*Justification:*

*This amendment was adopted at Parliament's first reading. The annual emission inventories are important for monitoring of compliance, to provide information for future emission abatement strategies, and for promoting public information and awareness in the line of the requirements of the Århus Convention and the revision of the directive on access to environmental information.*

## EXPLANATORY STATEMENT

### 1. Introduction

There are around 2000 large combustion plants (LCPs) - with a thermal input of 50 megawatt (MW) or more - in operation throughout the Community today. Some 500 of these plants are operated in order to produce electricity and around 1500 are used as industrial power generation plants, for example in the chemical industry. These plants are responsible for cross-border acidifying and eutrophying air pollution through emissions of sulphur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) as well as contributing to public health problems. In 1990 this sector emitted 63% of all sulphur dioxide (SO<sub>2</sub>) and 21% of all nitrogen oxide (NO<sub>x</sub>) emitted in the EU's present fifteen member states( ).

### 2. The Council's Common Position

The purpose of the proposed Directive is to update the emission limit values applicable to plants licensed after the Directive enters into force and to extend the scope to include gas turbines. The Council has also included plants licensed before 1 July 1987 within the scope of the Directive, in line with the most important amendments introduced by the European Parliament at first reading. The new Directive will as a consequence cover three categories of plants,

- **existing plants**, licensed before 1 July 1987,
- **old new plants**, licensed after 1 July 1987 and before the entry into force of the proposed Directive,
- **new new plants**, licensed after the entry into force of the Directive.

The proposed Directive lays down two sets of emission limit values – one set for the two first categories and one set of more stringent limit values for the last category.

### 3. Comments on the Common Position

The Rapporteur welcomes the Council's move to include the pre-1987 plants within the scope of the Directive since this category of plants account for more than three-quarters of overall SO<sub>2</sub> emissions from large combustion plants. However, the emission limit values proposed by the Council and their timing must be more ambitious, especially in the light of the Kyoto problem. The Council's Common Position also includes a number of important exceptions. The levels proposed by Parliament at first reading for this category of plants could to a large extent be achieved by low-cost measures, especially for the smallest category of plants. Such emission limit values would also be important in providing a level playing-field for the liberalised European electricity market in view of the enlargement. It should also be noted that the oldest plants are often the least energy efficient ones, thereby having disproportionately high emissions of the greenhouse gas carbon dioxide.

The emission limit values for new new plants could also be tightened since the price of abatement techniques has decreased significantly in recent years as well as becoming more efficient.

It is the rapporteur's strong view that more polluting fuels should not be given a competitive advantage through derogations or higher emissions ceilings.