COMMISSION OF THE EUROPEAN COMMUNITIES

COM(83) 173 final
Brussels, 8 April 1983

Proposal for a COUNCIL DIRECTIVE

on the combating of air pollution from industrial plants

(submitted to the Council by the Commission)

COM(83) 173 final

EXPLANATORY MEMORANDUM

I. INTRODUCTION

- 1. The purpose of this proposal for a Directive is to implement a series of measures and procedures designed to prevent and reduce air pollution from stationary industrial plants within the Community.
- 2. It is becoming increasingly clear that consistent action is needed at national, Community and international level in order to control air pollution.
- 3. The Council of the European Communities and the Representatives of the Governments of the Member States meeting within the Council were aware of this need when, on 22 November 1973, they adopted the first Action Programme of the European Communities on the Environment. Part II, Title I, Chapter 1 of this Programme provides for the objective evaluation of the risks to human health and to the environment from pollution caused by a number of pollutants (sulphur compounds and suspended particulates, nitrogen oxides, carbon monoxide, photochemical oxidents, asbestos and vanadium) and the setting of environmental quality standards.

The Resolution of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting within the Council of 17 May 1977 on the Continuation and Implementation of an European Community Policy and Action Programme on the Environment specifically provides for the establishment of quality objectives, in particular for a number of air pollutants (lead, oxides of nitrogen, carbon monoxide, sulphur dioxide and suspended particulates, photochemical oxidants, asbestos, hydrocarbons, and vanadium) and the setting of quality standards.

- 4. Under these programmes major Directives have since been adopted by the Council of Ministers, viz:
 - the Council Directive of 15 July 1980 on air quality limit values and guide values for sulphur dioxide and suspended particulates (QJL 229 of 30 August 1980, p. 30);
 - The Council Directive of 3 December 1982 on limit value lead in the air (0.J. L 378 of 31 December 1982)

Mention should also be made of certain Directives setting product standards or emission standards for moving sources of air pollution, viz:

- the Council Directive of 24 November 1975 relating to the sulphur content of certain liquid fuels (0_J_ L 307 of 27 November 1975), which sets product standards;
- the Council Directive relating to measures to be taken against pollution of the air by gases from positive-ignition engines of motor vehicles, as last amended on 14 July 1978 (0.J. L 223 of 14 July 1978);
- the Council Directive on the lead content of petrol (0.J. L 197, 22 July 1978).
- 5. The Community is also a party to the Convention on Long-Range Transboundary Air Pollution (Council Decision of 11 June 1981, (O.J. L. 171 of 27 June 1981).
- 6. Chapter III, paragraph 21 of the 1982-86 Action Programme of the European Communities on the Environment 1) calls on the Commission to continue its efforts to establish air quality standards. For a number of frequently occurring pollutants this implies development of a policy directed towards stabilization of total emissions in the first phase followed by a progressive reduction, where appropriate achieved by establishing emission standards for certain types of source.

^{1) 0.}J. C 46 of 17 February 1983

According to the Programme, this would apply in particular to large stationary sources with high stacks which tend to distribute pollutants over a wide radius. This action will form part of the Commission's contribution to the efforts to resolve the problems of acid rain and long-range transboundary pollution. A restriction of this kind should also be considered for coal. Specific measures should be taken to reduce emissions of pollutants arising from this type of fuel, in particular sulphur dioxide, oxides of nitrogen and suspended particulates. These measures should be accompanied by the development and promotion of new, less polluting technology.

- 7. One further consideration is that the present national policies in this area are liable to lead to differing levels of protection against air pollution and to create unequal conditions of competition for the enterprises concerned, thus having a direct effect on the functioning of the common market another reason for Community action.
- 8. Air pollution problems were discussed at the recent Council of Environment Ministers meetings on 24 June 1982 and 17-18 December 1982 following the transmission of a memorandum on this subject by a national delegation. In addition, the ministerial conference on the acidification of the environment held from 28 to 30 June 1982 in Stockholm also highlighted the importance of these problems and defined guidelines for action at national and international level.
- 9. The emission of pollutants (smoke, vapour, gas, dust, etc.) from industrial plants is one of the main sources of air pollution (other sources include heating plants and motor vehicles).

The structure of emission sources as a whole varies from one Member State to another with regard to the categories of plants and to the pollutants and quantities emitted. There are several dozen categories of plants and several hundred pollutants.

- 10. Among the categories of plants, for example, are plants from the chemical, iron and steel, oil and gas, electricity generation, coal, quarrying, cementmaking, non-ferrous metals, foundry, glass and ceramics industries.
- 11. Among the pollutants which have arouzed special attention, the most notable are sulphur dioxide, suspended particulates, heavymetal dusts and toxic or dangerous inorganic and organic substances.
- 12. From the economic point of view, it seems that the scale of investment devoted to limiting and preventing air pollution from these industrial plants can vary considerably from one sector of the economy to another and from country to country. The degree of detail in the statistics available varies from country to country and the present figures are still incomplete. With this reservation it can be said that air protection costs can amount to anything up to 25% of the total investment (e.g. coal-fired power stations equipped with flue-gas desulphurization equipment). In general, the figure is not as high as this, and amounts to a few percent. It is even more difficult to evaluate precisely the benefit of air protection for the national economy.

II. REASONS FOR COMMUNITY ACTION

- This proposal for a Directive fits in with one of the fundamental objectives of the Community's environment policy.
- 2. First, it is an initial attempt to implement Chapter III, paragraph 21 of the Thrid Action Programme of the European Communities on the Environment.
- 3. At the same time it is a first step towards harmonizing the national legislation in this field. All the Member States have provisions concerning air pollution by certain stationary industrial plants. Moreover, the general trend in the legislation is towards tigtening up the means of action already available. Several Member States are in the process of amending their existing provisions.

For example, on 16 August 1982 the Government of the Federal Republic of Germany wrote to the Commission in order to inform it, under the information procedure agreed on 5 March 1973, of a draft Administrative Regulation amending the First General Administrative Regulation under the Federal Immissions Control Law (Technical Instruction for Maintaining Air Purity). Similarly, an amendment to the present air pollution legislation is being considered in the Netherlands.

4. Without going into the consequences of this situation in detail, it is clear that they are significant both in terms of the degree of environmental protection and from the economic point of view.

Clearly, the financial burden on firms and on the main sectors of the economy affected can be considerable, and may differ from one country to another, a fact which does have an impact on the functioning of the common market.

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5. Any Community endeavours to increase the effectiveness of the action to control air pollution from plants must take into account the complexity of the situations and the fundamental principles on which the various national approaches are based, and must therefore be gradual.

III. LEGISLATIVE SITUATION IN THE MEMBER STATES

1. Although in certain respects the national provisions are based on the same principles, there are considerable differences on some major points. Generally speaking, the provisions specify to a greater or lesser extent the objectives pursued, i.e. the reduction or prevention of air pollution by emissions of pollutants from stationary industrial plants.

With a view to attaining this objective, they first of all entrust the competent authorities with the task of supervising the various stages in the activity of plants regarded as particularly likely to cause air pollution.

To this end, various licensing or notification systems have been established relating to the building, operation and alteration of specific categories of stationary industrial plants.

Licences are granted subject to compliance with conditions which are formulated more or less explicitly, and are binding to a greater or lesser degree. In some cases, the conditions are expressed in the form of general clauses. In others the licence is granted subject to compliance with quality standards and/or quantitative emission standards for specific categories of plants or for general application.

Conditions concerning the form of the licence application and procedural rules have also been laid down. Similarly, the supervision of plants, the enforcement of licensing conditions and the methods of measuring emissions and/or emissions are also

regulated to a greater or lesser extent. It seems that the existing monitoring and surveillance systems enable the competent national authorities to exercise greater or lesser flexibility where practical application is concerned.

In addition, some national legislation tackles the major problem of taking economic considerations into account in the licensing procedures.

Other provisions relate to particularly polluted areas and areas in need of special protection.

- 2. The main questions covered by the various laws concern:
 - (a) the categories of plants for which a licence is required; and
 - (b) the licensing conditions.

The national provisions on this subject are summarized below:

Germany

- (a) There is a schedule of plants requiring a licence (98 categories).
- (b) A licence is granted if building and operating the plant will not damage the environment and if all possible preventive measures have been taken in accordance with the state of the art.
- (c) A general Administrative Regulation (TA Luft) sets air quality standards concerning the deposition of dust and concentrations of suspended particulates. It also contains generally applicable emission limit values for over 200 gaseous pollutants. Leastly, the Regulation lays down specific emission limit values for some 30 specific categories of plant.

Belgium

- (a) There is a schedule (list of categories) of plants for which a licence or notification is required.
- (b) Belgium is partly subdivided into protected areas.
- (c) Emission standards are determined case by case when the licence is granted.
- (d) A Royal Decree lays down general emission standards for industrial combustion plants.

Denmark

- (a) Schedule of plants (heavily polluting installation; 96 categories).
- (b) A licence is granted after the effect of pollution has been examined in the light of the advantages and disadvantages for the community as a whole. The Danish Environmental Protection Agency is empowered to set emission standards, but has never exercised this power. Emission guidelines have been set.

France

- (a) Schedule of plants (approximately 300 types of plants which cause air pollution).
- (b) Emission limit values are set case by case, by means of technical instructions.
- (r There are certain general standards (for refineries, combustion plants and cement works).

Greece

- (a) Schedule of plants.
- (b) The authorities can decide on emission values for particular cases more or less at their own discretion.

Luxemburg

- (a) Schedule of plants.
- (b) Wide discretion concerning the values to be imposed in particular cases.

Ireland

- (a) Schedule of industries (concerning 25 processes).
- (b) The "best practicable means" constitutes the reference basis for determining the emission standards to be imposed.
- (c) Usually standards are fixed case by case, under the Planning Act.

Italy

- (a) Schedule of plants.
- (b) When determining emission standards, reference is made to the available technology and account is taken of the subdivision of Italy into two protection areas.

United Kingdom

- (a) Schedule of industries (61 processes), supervised by an independent authority set up by law; other industries are under the supervision of the local authorities.
- (b) The "best practicable means" must be used.
- (c) The Chief Alkali Inspector determines the best practicable means, in particular by imposing emission limit values.

Netherlands

- (a) Schedule of plants (Hinderwet); some 25 categories of plant require licences from the regional authorities. Recently adopted legislation lays down national standards.
- (b) The authorities have a large measure of discretion, and lay down the limit values to be complied with by the plant in question on a case by case basis.

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On a number of other problems (e.g. licence applications, procedures, supervision, measurement, particularly polluted areas and areas needing special protection) the arrangements in the various Member States seem to vary considerably.

IV. COMMENTS ON THE PROPOSAL FOR A DIRECTIVE

Article 1

This Article sets out the objective of the proposal -namely, to take a first step towards implementation of a consistent set of measures and procedures designed to prevent and reduce air pollution from stationary industrial plants within the Community.

Article 2

Article 2 lays down a number of basic definitions essential if the Member States are to make progress towards harmonizing and implementing the measures and procedures covered.

The definition of air pollution is broad and based on Article 1 of the Convention on Long-range Transboundary Air Pollution. It includes an objective element - "the introduction into the air, directly or indrectly, of substances or energy".

It then proceeds to specify the impact of such introduction, with reference to certain values to be protected, including human health, biological resources, ecosystems, material goods, amenity value and other legitimate uses of the environment.

"State of the art" is also defined. Reference is to be made to the state of development of advanced processes or equipment, which, however, must exhibit practical utility in restricting emissions. What is more, the measures must not have an unacceptable economic impact on the undertaking concerned, i.e. they must not generate disproportionate costs.

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This Article stipulates that the Member States must take the requisite measures to ensure that prior authorization is required for certain activities connected with the operation of stationary industrial plants.

These activities include the building, operation and substantial alteration of plants particularly likely to cause air pollution.

For greater clarity, Article 3 makes reference to Annex I to the Directive, which lists the categories of plants for which a licence should be required in all cases.

However, it also states that the Member States may be more strict and require authorization of prior notification for other categories of plant as well. Some national legislation provides for alternative licensing or notification procedures, depending on the gravity of the situation to be prevented.

Article 4

The licensing conditions are laid down in this Article.

It should be noted that these conditions apply without prejudice to the requirements laid down by national and Community provisions in areas other than the control of air pollution.

Article 4, it must be stressed, is worded negatively, stipulating that no licence can be granted unless the licensing conditions have been fulfilled.

These three conditions combine the "quality objectives" and "emission standards" approaches.

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The first licensing condition is that the building and operation of the plant must pose no hazard to human health and have no significant harmful effect on human beings or on the environment.

The second condition is that all preventive measures made possible by the state of the art (as defined by Article 2) must be taken to reduce emissions of the substances considered to cause the greatest air pollution, with a view to avoiding their dangerous and harmful effects; the substances concerned are listed in Annex II to the Directive.

Third, the air quality limit values and emission limit values laid down by Community or national law must not be exceeded.

Article 5

Article 5 provides that in particularly polluted areas and in zones requiring special protection particular measures can be taken.

Articles 6, 9, 10, 11 and 13

These Articles lay down the rules of procedure and formalities regarded as the minimum requirements for the substantive harmonization sought.

Article 7

Since it is the Member States who will determine the state of the art, by granting or refusing authorization for a plant, it is important to arrange exchanges of views on the knowledge and experience aquired. This will help to promote further progress in this field.

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This Article expresses the important principle that it may prove necessary to impose further conditions on plants already licensed, in the light of technological developments and/or of the state of the environment.

It clearly states that economic factors must be taken into consideration. In practice it will not be possible to subject licensed plants to any further condition which would not be economically feasible, either for the specific undertaking in question or for the categroy of plants under consideration in general.

Article 14

This Article defines the basic principle and procedure for applying the Directive to existing plant.

Article: 15

This Article allows each Member State to practice stricter standards.

<u>Article 17</u>

A Committee on Adaptation to Technical Progress must be set up to make such amendments as are necessary to Annexes I and II.

Annex I (see Article 3)

Annex I lists the categories of plant for which prior authorization is required. Plants from the energy, metal production and processing, non-metallic minerals, chemical and food industries are included.

Annex II (see Article 4, indent 2)

This Annex consists of a list of polluting substances.

CONSULTATION OF PARLIAMENT AND OF THE ECONOMIC AND SOCIAL COMMITTEE

Since this proposal for a Directive is based largely on Article 100 of the Treaty establishing the European Economic Community, Parliament and the Economic and Social Committee must be consulted.

PROPOSAL FOR A COUNCIL DIRECTIVE ON THE COMBATING OF AIR FOLLUTION FROM INDUSTRIAL PLANTS

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community and in particular Articles 100 and 235 thereof;

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Maying regard to the opinion of the Economic and Social Committee,

Whereas the 1973¹, 1977² and 1983³ Action Programmes of the European Communities on the Evironment stress the importance of the prevention and reduction of air pollution;

Whereas the 1973 and 1977 Action Programmes in particular provide not only for the objective evaluation of the risks to human health and to the environment from air pollution but also for the formulation of quality objectives and the setting of quality standards, especially for a number of air pollutants regarded as the most hazardous;

Whereas the Council has already adopted several Directives under these programmes;

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⁽¹⁾ OJ No C 112, 20.12.1973, p.1 (2) OJ No C 139, 13.6.1977, p.1

⁽³⁾ OJ No C 46, 17.2.1983, p.1

Whereas, moreover, under Council Decision 81/462/EEC¹ the Community is a party to the Convention on Long Range Transboundary Air Pollution;

Whereas the 1983 Action Programme calls on the Commission to continue its efforts to establish air quality standards and also to develop a policy directed towards stabilization of total emissions in the first phase followed by progressive reduction, where appropriate achieved by establishing emission standards for certain types of source;

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¹OJ No L 171, 27.6.1981, p.11

Whereas all the Member States have laws, regulations and administrative provisions concerning the combating of air pollution from stationary industrial plants; whereas several Member States are in the process of amending the existing provisions;

Whereas the disparities between the provisions concerning the combating of air pollution from industrial installations currently in force, or in the process of amendment, in the Member States are liable to create unequal conditions of competition and thus have a direct effect on the functioning of the common market; whereas, therefore, approximation of the laws in this field is required, as provided for by Article 100 of the Treaty;

Whereas one of the essential tasks of the Community is to promote throughout the Community a harmonious development of economic activities and a continuous and balanced expansion, tasks which are inconceivable in the absence of a campaign to combat pollution and nuisances or of an improvement in the quality of life and in the protection of the environment; whereas since the Treaty has not provided the powers necessary to this end, Article 235 of the Treaty must be invoked;

Whereas the Community should and must to help increase the effectiveness of action undertaken by the Member States to combat air pollution from stationary industrial plants;

Whereas in order to achieve this end certain principles aiming at the implementation of a series of measures and procedures designed to prevent and reduce air pollution from industrial plants within the Community should be introduced;

Whereas the Community's endeavours to introduce these principles can be only gradual, bearing in mind the complexity of the situations and the fundamental principles on which the various national policies are based;

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Whereas initially a general framework should be introduced to permit the Member States to adapt, where necessary, their existing rules to the principles adopted at Community level;

Whereas the Member States should therefore introduce a system of prior authorization for the building, operation and substantial alteration of stationary industrial plants likely to cause air pollution;

Whereas, moreover, the competent national authorities cannot grant such authorization unless a number of conditions have been fulfilled, including the requirements that the building and operation of the plant pose no hazard to human health and have no significant: harmful effect on human beings or on the environment, that all preventive measures allowed by the current state of the art are taken, and that the air quality limit values and emission limit values in force are not exceeded;

Whereas special provisions should apply in particularly polluted areas and in areas in need of special protection;

Whereas the rules applicable to the authorization procedures and to the measurement of emissions must satisfy certain requirements;

Whereas in certain situations the competent authorities must explore the need to impose further requirements, which however, must be economically feasible;

Whereas these provisions are to be applied gradually to existing plants, taking due account of the costs which this will generate;

Whereas provision must be made for cooperation between the Member States and the Commission to facilitate implementation of the measures designed to prevent and to reduce air pollution and to develop preventive technology;

Whereas provision must be made for a Committee on Adaptation to Technical Progress to adapt the list of plants for which a licence is required and the list of the most polluting substances,

The purpose of this Directive is the implementation of measures and procedures designed to prevent and reduce air pollution from industrial plants within the Community.

Article 2

For the purposes of this Directive:

- 1. "Air pollution" means: the introduction by man, directly or indirectly, of substances or energy into the air resulting in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property and impair or interfere with amenities and other legitimate uses of the environment.
- 2. "Plant" means: any establishment or other stationary plant used for an industrial or any other purpose.
- 3. "Existing plant" means: a plant the building and operation of which were authorised before the date of notification of this directive, or which was built before that date.
- 4. "State of the art" means: the state of development of advanced processes or equipment indicating the practical feasibility of an emission limitation measure which does not impose unreasonable costs. In determining the state of the art, reference should be made in particular to comparable processes and equipment which have proved their value in plants.
- 5. "Air quality limit values" means: the concentration of polluting substances in the air, which is not to be exceeded within a specified period.

6. "Emission limit values" means: the concentration or mass of of polluting substances in emissions from plants, to be established in general or for specific categories of plants, not to be exceeded during a specified period.

Article 3

- 1. Member States shall take the necessary measures to ensure that the building, operation and substantial alteration of plants which are likely to cause air pollution require prior authorization by the competent authorities.
- 2. The categories of plants listed in Annex I shall in particular require an authorisation. Member States may require other categories of plant to be subject to authorisation or, so far as national legislation so provides, prior notification.

Article 4

Without prejudice to the requirements laid down by national and Community provisions with a purpose other than that of this Directive, authorization may be granted only when all the following conditions are fulfilled:

- 1. The building and operation of the plant do not entail any danger for the health of the population and of workers or any significant harm for human beings or the environment as a result of air pollution,
- 2. All appropriate preventive measures are taken, in accordance with the state of the art, to prevent dangerous or harmful effects as referred to in paragraph 1, especially in order to reduce the emission of substances referred to in Annex II;
- 3. The air quality and emission limit values laid down by Community or national law are not exceeded.

Article 5

Member States shall define particularly polluted areas as well as areas to be specially protected, within which air quality and emission limit values more stringent than those referred to in Article 4 must be complied with or within which specified categories of plant may not be built or operated unless special conditions are complied with.

Applications for authorisation of a plant shall include a description of the projected plant containing the necessary information for the purposes of the decision to grant authorization in accordance with Articles 4 and 5.

Article 7

Member States shall, on their own initiative or at the request of the Commission, exchange information regarding their experiences and knowledge of measures for prevention and reduction of air pollution, as well as technical processes and equipment and national air quality and emission limit values.

Article 8

The Council shall if necessary, acting by qualified majority on a proposal from the Commission, fix emission limit values at Community level, particularly for the polluting substances listed in Annex II.

Article 9

- 1. Member States shall take the necessary measures to ensure that applications for authorisation are published for the attention of people liable to be affected by significant air pollution caused by the plants in question.

 affected by significant air pollution caused by the plants in question
- 2. Paragraph 1 shall apply without prejudice to specific national or Cummunity provisions concerning the assessment of the environmental impact of public and private projects and subject to observance of the provisions regarding commercial secrecy.

Article 10

The Member States shall make available to the other Member States concerned, as a basis for all necessary consultation within the framework of their bilateral relations, the same information as is

Article 11

Member States shall take the necessary measures to ensure that emissions from plants are determined regularly in order to monitor compliance with the obligations referred to in Article 4. The measuring methods and equipment used shall require approval by the competent authorities.

The competent authorities shall examine the development of the state of the art and/or that of the environmental situation with a view, where necessary, to imposing additional conditions on a plant authorised in accordance with this Directive.

No such additional condition may be imposed which would not be economically feasible for the undertaking concerned or for plants of the category in question.

Article 13

The decision to grant or withhold authorization shall be in writing, and shall be made known to the persons concerned according to the applicable national provisions.

Article 14

- 1. The provisions of this Directive shall be progressively applied to existing plants, taking into account their technical characteristics and the cost occasioned by such application.
- 2. Application of this Directive may in no event have the effect of permitting applicable emission limit values to be exceeded by the plants concerned.

Article 15

Member States may, in order to protect the environment, adopt provisions stricter than those provided for in this Directive.

This Directive shall not prejudice the adoption by Member States of derogations required by considerations of national defence.

Article 17

Such amendments as are necessary for adapting Annexes I and II to technical progress shall be adopted in accordance with the procedure laid down in Articles 18 and 19.

Article 18

A Committee on Adaptation to Technical Progress of Annexes I and II (hereinafter called "the Committee") is hereby set up. It shall consist of representatives of the Member States and be chaired by a representative of the Commission.

The Committee shall draw up its own rules of procedure.

Article 19

- 1. Matters shall be referred to the Committee by the chairman, either on his own initiative or at the request of the representative of a Member State.
- 2. The representative of the Commission shall submit to the committee a draft of the measures to be adopted. The Committee shall deliver its opinion on the draft within a period to be set by the chairman having regard to the urgency of the matter. Opinions shall be adopted by a majority of 45 votes, the votes of the Member States being weighted as provided for in Article 148 (2) of the Treaty. The chairman shall not vote.
- 3. a) The Commission shall adopt the measures envisaged where they are in accordance with the opinion of the Committee.
 - b) Where the measures envisaged are not in accordance with the opinion of the Committee or if no opinion is adopted, the Commission shall without delay propose to the Council the measures to be adopted. The Council shall act by a qualified majority.

c) If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

Article 20.

- Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 1 January 1985 and shall forthwith inform the Commission thereof.
- 2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

Article 21

This Directive is addressed to the Member States.

Done at Brussels,

ANNEX I

CATEGORIES OF PLANTS

(covered by the provisions of the second sentence of Article 3)

1. Energy industry

- Coke ovens
- Petroleum refineries (excluding undortakings manufacturing only lubricants from crude oil)
- Coal gasification and liquefaction plants
- Thermal power stations (excluding nuclear power stations) and other combustion installations with a heat output of more than 50 Megawatts

2. Production and processing of metals

- Roasting and sintering of more than 1000 t of ore per year
- Integrated plants for the production of crude iron and crude steel
- Foundries having smelting installations with a capacity of over 5 t per unit
- Plants for the production, refining, smelting and rolling of non-ferrous metals, having installations with a fusion capacity of over 1 t per unit in the case of heavy metals and 500 kg in that of light metals

3. Manufacture of non-metallic mineral products

- Plants for the production of cement or lime
- Plants for the extraction and processing of asbestos
- Plants for production of glass
- Coarse ceramics industry

4. Chemical industry

- Chemical plants for the production of olefins, derivatives of olefins, monomers and polymers
- Chemical plants for the manufacture of basic organic intermediates
- Plants for the manufacture of basic inorganic chemicals

5. Food industry

- Plants for manufacture of sugar
- Plants for slaughter of animals
- Fish meal and fish oil factories processing 100 tonnes or more of source material per day
- Production of oil or fat from plant or animal sources
- other food production plants

6. Waste disposal

- Plants for the disposal of solids or liquids by combustion or chemical decomposition
- Plants for the disposal of animal carcases
- Plants for the treatment and reclamation of solid fuel wastes.

7. Industrial livestock rearing installations

8. Other industries

- Manufacture of pulp, paper and board with a production capacity of 25000 tonnes or more per year.

ANNEX II

LIST OF MOST IMPORTANT POLLUTING SUBSTANCES

(within the meaning of Article 4.2)

- 1. Sulphur dioxide and other sulphur compounds
- 2. Oxides of nitrogen and other nitrogen compounds
- 3. Carbon monoxide
- 4. Organic compounds and hydrocarbons (except methane)
- 5. Heavy metals and metal compounds
- 6. Particulate emissions and asbestos
- 7. Chilorine and its compounds
- 8. Fluorine and its compounds