

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(79) 384 final

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**PROPOSAL FOR A COUNCIL DIRECTIVE
ON THE MAJOR ACCIDENT HAZARDS OF
CERTAIN INDUSTRIAL ACTIVITIES**

(presented by the Commission to the Council)

COM(79) 384 final

EXPLANATORY MEMORANDUM

I. INTRODUCTION

The major accidents due to industrial activities and involving dangerous substances which have occurred in recent years in the various Member States have justifiably roused public opinion, social partners and the authorities and led the various interested parties in the Community to stiffen the measures to prevent major accidents and to limit the consequences of any such accidents for man and the environment.

Accidents like those at Flixborough in 1974, Beek in 1975, Seveso and Manfredonia in 1976 are only a few examples among others which had dramatic consequences for man, inside or outside the establishment, and the environment. They all emphasize the need to tighten up and make more specific the control which manufacturers themselves, and the public authorities, must exercise over potentially hazardous industrial activities.

The debates held on this subject in the European Parliament and in the Council following the Seveso disaster led the Commission to prepare this proposal for a Directive.

Only recently, on 27 April 1979, following the accident at Valbert, the European Parliament again called on the Commission to draw up proposals in this field with all speed.

This proposal comes under the action programmes on the environment and or safety and health at work. It is the product of work carried out by the Commission, specific studies on the subject, discussions with the European chemical industry within in CEFIC, and discussions with national experts in an ad hoc Working Party which has held six full meetings.

The Commission has also received the favourable opinion of the Advisory Committee on Safety, Hygiene and Health Protection at Work.

In addition, three Member States (the Netherlands, the United Kingdom and Italy) have informed the Commission that they intend to issue specific rules concerning the risk of major accidents. Such a law was promulgated in the Netherlands in 1977.

Policy concerning the prevention of major accidents is an important aspect of the harmonious development of economic activities throughout the Community referred to in Article 2 of the Treaty.

It has economic effects, the significance of which has gradually emerged following industrial development. The very great disparity in the substance and application of the provisions concerning major accident hazards which exists at present in the Community inevitably produces distortions of competition and has an unfavourable effect on the smooth functioning of the common market, particularly by affecting the cost price of products.

However, different requirements from one region to another in the Community as regards the types of industrial activity subject to control and as regards the relevant data taken into account may give rise to unbalanced investment conditions. A proposal for a Directive of this kind is therefore fully justified at Community level.

II. LEGISLATION IN THE MEMBER STATES CONCERNING INDUSTRIAL
ACTIVITIES LIKELY TO CAUSE MAJOR ACCIDENTS

There has long been a substantial body of laws and legislative and administrative instruments in the nine Member States of the Community designed to protect man and the environment.

Intended initially, more often than not, to make good any damage, over the years they have become focused to an ever greater extent on the protection first of all of man and then of the environment, either through new legislation or by transferring or extending the objectives of existing legislation.

It can therefore be observed that the existing control and prevention machinery with regard to certain types of pollution and nuisance due to human activities is compartmentalized divided between several administrative authorities. Focusing mainly on pollution control or the protection of workers in the normal operating conditions of industrial activities, legislation is more often than not incomplete as regards the risk of major accidents.

Elements of law and regulation concerned with containing the risks of major accidents inherent in certain industrial activities are to be found in general and specific legislation on the environment or the control of pollution caused by certain installations, in general legislation on health and safety at work and public health, and in legislation on regional development. The need to strength this machinery has been felt in several Member States.

Main legislation in force in the Member States

Belgium

The legislation in force today on insanitary, unpleasant or dangerous factories (derived from the Napoleonic Decree of 15 October 1810 and the law of 5 May 1888) is incorporated in the General Protection at Work Regulation (11 February 1946). It requires a licence for the building and operation of plant so classified (on the basis of a nomenclature). The licence application must provide certain information (plans, in particular) and state the measures planned to prevent or mitigate disturbances affecting the surrounding area.

The application and the decision are displayed publicly and in certain cases communicated in writing to those in the immediate vicinity of the establishment.

Permanent surveillance and monitoring of the operating conditions imposed are carried out mainly by technical officials who have free access to the establishments.

Denmark

The Nature and Environmental Protection Law of 13 June 1973 introduced a system of licensing at the construction stage for new polluting establishments (listed establishments) and for certain modifications to existing establishments. However, further provisions can always be imposed once the establishment is in operation, and existing facilities may be the subject of restrictions or, if necessary, prohibitions.

The licence application must be supported by plans and descriptions needed in order to understand the project, an indication of the nature and extent of present or expected pollution, and the pollution-control measures which will be taken.

No provision is made for consulting and informing the public. The Law requires those responsible for the industrial activities in question to keep them under surveillance, and in particular to inform the authorities of operating irregularities or failures capable of causing significant pollution.

Federal Republic of Germany

The Federal Immission Protection Law of 15 March 1974 provides for a system of licences for facilities producing substantial emissions, or concentrations of facilities (on the basis of criteria set by the Law, a list of categories of facilities requiring a licence being laid down by Regulation).

A licence is needed for the building and operation of new facilities and the conversion of existing facilities. Provision is also made for simplified procedures involving fewer requirements and no publicity.

The licence application must contain precise information concerning technical facilities, processes, the nature and quantity of substances, emissions, and measures to protect workers, people in the vicinity and the environment. Updating if carried out every two years.

The public is consulted (in hearings which are public, but restricted to those who have raised objections), but has access only to a summary of the file if it contains business secrets, and is informed of the decision in the official gazettes and local press.

The regulation of 20 March 1975 on places of work provides - in respect of fire and explosion hazards - for the drawing up of contingency plans within firms and the organization of safety exercises.

France

The basis for legislation on the matter is the 1810 Decree (see Belgium) which was amended by the Laws of 19 December 1917 and 19 July 1976.

The objectives of this Law relate to the amenity of the surrounding area, health, safety, sanitation, agriculture, nature and environmental protection, and the conservation of beauty spots and monuments.

The list of facilities covered by the Law and subject to either a licence (granted after public enquiries), or a declaration is given in a nomenclature.

Existing facilities enjoy the acquired rights but are, nevertheless, subject to the surveillance of the department for the inspection of listed establishments and to certain formalities and contingent technical measures.

The file of the prior survey (which is available to the public for consultation) must include maps and plans of the facility and the surrounding area, an impact study, a study of major accident hazards and first-aid resources, and an account of the facility's conformity to hygiene and safety rules.

Publicity for the inquiry and the final decision is achieved by means of public notices and publication in local newspapers. Facilities are monitored by a body of inspectors with the right to inspect at all times.

Mention should also be made of the very important Nature Protection Law of 10 July 1976 which makes impact studies compulsory.

The Code de Travail (Labour Code) contains provisions regarding fire and explosion hazards at work which cover requirements relating to installations, operating procedures and behaviour in the event of accidents.

(Decreets of 15 March 1930 on plants where certain highly inflammable liquids are stored or handled and of 14 November 1962 on the protection of workers using electricity current).

The Decree of 20 March 1979, on safety training, which also forms part of this Code, strengthens existing provisions for the informing of workers, particularly as regards behaviour in the event of accident.

Ireland

There is no general system for the monitoring of particular types of establishments, but instead legislation on specific subjects (Public Health Act 1878, Alkali Act 1906, Local Authorities Acts 1963 and 1976, regional planning). The latter Acts provide for licences for dangerous new establishments (determined according to emissions) and changes in use.

They also empower a planning body to require an ecological impact report in addition to plans and general data on the facility.

The planning procedure is entirely public; any measures that are necessary can always be taken, case by case, by the planning authorities, which have full powers of inspection and surveillance.

Italy

Legislation is extremely disparate. There is an overall law (Testo Unico), relating to the 1934 Health Laws. There are many specific provisions, of which the following two important laws should nevertheless be mentioned: Law No 615 of 1966 on measures to control atmospheric pollution (Anti-smog Law) and Law No 219 of 1976 on rules for the protection of water against pollution (Merli Law) repealing in this respect the relevant Articles of the 1934 Law.

The Health Laws subject insanitary industries to a prior declaration system.

Technical reports are provided for in the Anti-smog Law. Licences are provided for in the Merli Law.

There are no provisions concerning publicity for the inquiry and the decision.

Consequently, faced with this multiplicity of systems, the Italian authorities have been prompted to prepare new legislation to make the control of industrial activities more rational and coherent.

Luxembourg

The law of 16 April 1979 on dangerous, insanitary or unpleasant establishments and the Grand-Ducal Regulation of 16 April 1979 determining the list and classification of dangerous, insanitary and unpleasant establishments constitute a complete reform of the Grand-Ducal Royal Decrees of 1872 and 1913, which have been repealed.

The provisions of the law of 16 April 1979 cover all industrial establishments, installations or manufacturing processes, the existence, running or operation of which may present hazards or inconvenience to the safety, health and comfort of the general public, the neighbourhood or the staff, or to the environment.

Licence applications for the type of establishment referred to in this Directive must be sent to the Inspectorate of Labour and Mines. The application must include information about the type and location of the establishment, installations and processes to be operated, the approximate quantities of products to be manufactured or stored, the measures planned to prevent or mitigate the disadvantages which the establishment might cause, and the approximate number of staff employed.

The Inspectorate of Labour and Mines may at all times ascertain that the rules governing the operation of establishments subject to this law are observed.

Netherlands

Licensing systems are provided for in a general law (the 1952 Nuisance Law), a Decree specifying the establishment subject to a licence, and specific laws (concerning air and water).

These laws apply to the setting-up, putting into service and alteration of establishments, and require a description of the site, the operations involved and pollution-control measures.

The public is consulted; but powers to keep matters confidential are always reserved.

However, these laws vary, particularly as regards the amount of information to be provided or the degree of publicity to be given to an application.

Consequently, a general law on the environment has been laid before Parliament, its object being to unify legislation at the procedural level. There is also a proposal to include a provision for environmental impact report.

In addition, the 1934 Safety Law, which protects workers, was revised in 1977, making it compulsory to draw up a detailed safety report covering, among other things, accident hazards and the steps to be taken in the event of an accident within the firm.

United Kingdom

There are many specific laws designed to control polluting or dangerous establishments and protect the environment, e.g. the Alkali Act of 1906. However, special attention should be paid to the Health and Safety at Work Act of 31 July 1974. This Act protects workers and also the general public. Pursuant to this Act, draft rules concerning major accidents have been prepared which subject industrial plants to a system of notification consisting either of a simple declaration or a hazard survey report containing detailed information on substances, plants, accident hazard factors, prevention and control measures and emergency plans.

The obligation to notify depends on the nature and quantity of the substances involved, and applies to new and existing facilities and also when significant alterations are made, the notification must be updated every two years.

III. COMMENTS ON THIS PROPOSAL FOR A DIRECTIVE

1. General

Any industrial activity entails risks for man and the environment.

These risks can be divided into two categories:

- (i) routine risks in normal operating conditions (e.g. a particular concentration of a dangerous substance, in the working environment or a certain level of emissions into the environment);
- (ii) exceptional risks in abnormal operating conditions, i. e. risks of accidents: explosions, fires, massive emissions of dangerous substances when an activity gets out of control.

This proposal for a Directive covers the second category of risks and seeks to prevent major accidents as far as possible and to limit the consequences of such accidents where they occur despite everything.

- The risk of a major accident occurring depends essentially on the nature of the substances in question, their quantity, the type of technological process and the location of the industrial activity.

As it is unrealistic to imagine no risk situations, the first objective is to reduce, as early as the design stage, and throughout the operation of the plant facilities, the probability of such accidents occurring, by studying possible causes, monitoring critical points, anticipating the combinations of events which might lead to an accident, introducing safety measures which are correspondingly more stringent where factors which would increase the consequences of an accident for man and the environment are involved.

The next objective is to prevent such an accident - should one occur - from turning into a disaster, and hence to limit the consequences as much as possible. Surveillance and safety machinery must be set up and contingency plans prepared.

But which industrial activities require to be controlled?

By what criteria are they to be determined? An essential parameter is the nature of the substances which are or may be involved in the industrial activity. Since 1967, the Community has acquired considerable experience and built up a corpus of legislation in the field of dangerous substances and criteria for classifying them into categories of danger. Let us recall, among other provisions, the 1967 Directive on dangerous substances. The 6th amendment to this Directive, which was adopted by the Council on 19 June 1979, provides for a system of premarketing for all new substances.

This proposal for a Directive institutes rules designed to establish a system of Community standards concerning the premarketing phase, i.e. the production phase. It therefore covers industrial activities which involve, or may involve, the categories of dangerous substances defined in the 1967 Directive, i.e. substances which are explosive, oxidizing, easily flammable, flammable, toxic, harmful, corrosive, irritant and hazardous to the environment.

Since industrial activity is concerned, account must also be taken of the production stages in which such substances may be found, i.e. as products necessary for the technological process, manufactured products, by-products or waste.

The quantity of dangerous substances present in an industrial activity is also to be considered, and estimates have been made of the minimum quantities which should give rise to a major accident. This parameter makes it possible to select, to some extent, those industrial activities which require to be subjected to systematic checking. The next most important factors are the technology, which must be the most reliable possible, and the site, in order to protect man and the environment in the event of an accident.

The proposal for a Directive applies to new industrial activities, any alteration with implications for the safety of an industrial activity, and existing industrial activities for which certain periods of grace are allowed.

The proposal for a Directive can be regarded as falling into two parts with two different target areas.

The first part has the role of a framework directive intended to cover any industrial activity, including certain storage conditions which involve or may involve dangerous substances as defined in general by Council Directive 67/548/EEC. In general, it provides for taking the measures needed to prevent accidents and to limit the consequences of accidents which do occur. It also requires a safety report to be made available to the competent authorities and provides for informing workers and the public in the surrounding area.

The second part applies more particularly to industrial activities which involve or may involve particularly dangerous substances, clearly defined in a list and by means of criteria in the Directive, which are present or potentially present in the industrial activity in excess of a particular quantity .

The procedure chosen to monitor the safety of industrial activities more systematically is the notification procedure, under which the manufacturer sends the competent authorities a more detailed safety report concerning the substances, facilities and points where major accidents could occur. This report will contain, among other things, an analysis of the reliability of the facilities, and will seek to show the hazards which they entail for man and the environment and the safety measures needed as a result.

Its scope has been restricted so as to ensure that competent authorities are not snowed under with notification, as that would make all monitoring impossible, but it has nevertheless been tailored to cover the major accidents which have occurred in recent years.

The advantage of the notification procedure is that it allows of a permanent dialogue between the various interested parties. The role of the public authorities, properly coordinated, should be geared to the checking of safety studies, the assessment of results and the measures chosen and the monitoring of their application and effectiveness. However, they would have the right to impose, at any time, measures which they regard as necessary.

It is also essential to inform the workers and the public in the surrounding area of the possible risks and to involve them in the prevention and safety measures, thereby increasing the effectiveness of the latter.

In addition, the proposal for a Directive provides for the competent authorities to be notified of major accidents and for the Commission to establish a data bank relating to accident hazards and major accidents which have actually occurred, in order to improve safety.

An essential instrument with which to improve and bring up to date the means of preventing accidents is the statistical machinery which is needed in order to analyse facts, interpret them and assess results and to make it possible to exchange and make use of the experience acquired.

2. Particular comments on certain Articles in the Directive

Article 3

This Article sets forth the general principle that manufacturers must take all requisite measures to prevent major accidents and to limit the consequences of such accidents for man and the environment.

Article 4

This Article provides (a) for ensuring that the measures to be taken under Article 3 have in fact been implemented, i.e., the drawing up of a safety report to be made available to the competent authorities and (b) for informing and training workers and informing the neighbouring population.

Article 5

This Article, together with Annex II, contains the most important provisions of the Directive, specifying the content of the notification: information relating to substances, installations and the possible occurrence of a major accident.

This notification must be updated periodically.

Article 7

This Article specifies the functions of the authorities designated by the Member States: in particular they will examine notifications, draw up external emergency plans, take all requisite measures with a view to preventing major accidents or limiting the consequences of such accidents and carry out inspections and checks.

Article 8

Paragraph 2 provides for derogations for existing industrial activities: one extra year for enforcing the provisions as a whole, and three years for applying Article 5 as regards the substances covered by the specific list in Annex II, so as not to require immediately the fairly considerable effort of carrying out tests on all existing substances.

Article 9

This Article concerns the information which manufacturers must give to the competent authority in the event of a major accident.

Article 10

This Article specifies the information which the Member States are to send to the Commission: extracts from the notifications concerning the hazards involved in the type of industrial activity in question, and information about major accidents occurring.

Article 11

This Article provides for the setting-up by the Commission of a data bank (for the information obtained under Article 10) to which the Member States are to have access, and for the organization of exchanges of information.

Article 13

The procedure of the Committee on Adaptation to Technical Progress applies to Annexes III, IV and V.

It also applies to Annex II (1) if the amendments are based on Annex II (2). In other words, the specific list of substances for which notification is compulsory can be adapted and added to as and when the substances are classified in one of the categories LD 50 or LC 50 provided for in paragraph 2 of Annex II. This in no way alters the scope of the proposal for a Directive, but makes it possible to remove any doubts of the notifier and those of the competent authority due to the lack of precision of the LD 50 and LC 50 values. Also the notifier will be relieved of the need to establish data or carry out tests for such a substance once it has been put on the specific list.

Annex I

This Annex specifies the categories of dangerous substances and their lower quantity limits which determine the inclusion of certain storage facilities in the industrial activities covered by this proposal for a Directive. The categories of dangerous substances have been selected on the basis of the actual existence of large stores.

Annex II

This Annex is closely linked with Article 5 and provides for the criteria for activating the notification procedure. These criteria are of two kinds: firstly, a specific list of dangerous substances or categories of dangerous substances includes:

1. Carcinogenic substances present in industrial processes, the effects of which could appear in man even after very brief contact or which persist in the environment and for which the quantitative threshold has been fixed by analogy with that of the most toxic substances;
2. toxic gases;
3. explosive or easily flammable gases and liquids.

For each substance or category of substance there is a lower quantitative limit from which notification is compulsory.

Secondly, a table sets out ranges of acute toxicity (LD 50 oral, LC 50 cutaneous, IC 50 by inhalation) with the corresponding quantitative thresholds.

IV. CONSULTATION OF THE EUROPEAN PARLIAMENT AND THE ECONOMIC AND SOCIAL COMMITTEE

Since this proposal for a Directive is based on Articles 100 and 235 of the Treaty setting up the European Economic Community, the Parliament and the Economic and Social Committee must be consulted.

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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,

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

Having regard to the objectives and principles of a Community environment policy fixed by the action programmes of the European Communities on the environment of 22 November 1973 (1) and 17 May 1977, and in particular the principle that the best policy consists in preventing the creation of pollution or nuisances at source; and whereas to this end technical progress must be conceived and directed so as to take into account the concern for the protection of the environment;

(1) OJ No C 112 of 20.12.1973, p.

(2) OJ No C 139 of 13.6.1977, p.

Having regard to the objectives of a Community policy of health and safety at work fixed by the Council Resolution of 29 June 1978 on an action programme of the European Communities on safety and health at work (3), and in particular the principle that the best policy consists in obviating possible accidents at source by the integration of safety at the various stages of design, construction and operation and by developing a spirit of health and safety through education and training;

Whereas the Advisory Committee on Safety, Hygiene and Health Protection at Work, set up by Council Decision 74/325/EEC (4), has been consulted;

Whereas safety and health protection at work and the protection of the public and the environment call for particular attention to be given to certain industrial activities capable of causing major accidents; whereas many such accidents have occurred in the Community during recent years and have had serious consequences for workers, and more generally, for the public and the environment;

Whereas disparity between provisions already applicable or being prepared in the various Member States on measures to prevent major accidents and limit the consequences thereof for man and the environment may create unequal conditions of competition and hence directly affect the functioning of the common market; whereas the approximation of provisions laid down by laws, regulation or administrative action laid down in Article 100 of the Treaty must therefore be implemented in this field;

Whereas it is necessary to combine this approximation of laws with action by the Community aimed at attaining one of the Community objectives in the field of environmental protection and health and safety at work; whereas, in pursuance of this aim, certain specific provisions

(3) OJ No C 165 of 11.7.1978, p.

(4) OJ No L 185 of 9.7.1974, p.

must therefore be laid down; whereas, since the necessary powers have not been provided by the Treaty, Article 235 of the Treaty must be invoked;

Whereas, for every industrial activity which uses or may use dangerous substances and which, in the event of a major accident, would have serious consequences for man and the environment, the manufacturer must take all necessary measures to prevent such accidents and limit the consequences thereof;

Whereas it is necessary to provide that the manufacturer shall draw up a safety report to assess the hazards from major accidents and reduce the probability thereof accordingly;

Whereas the training and information of workers can play a particularly important part in preventing major accidents and bringing the situation under control in the event of such accidents; whereas, moreover, the holding of safety exercises within the undertaking can significantly help to reduce the consequences of a major accident;

Whereas it is necessary to lay down that any person outside the establishment liable to be affected by a major accident should be appropriately informed of the hazards involved and of the safety measures relating to such an accident;

Whereas, in the case of industrial activities which involve or may involve substances that are particularly dangerous in certain quantities, it is also necessary to provide that a more comprehensive report on safety be supplied to the competent authorities, with a view to reducing the hazards of major accidents and enabling the necessary steps to be taken to reduce the consequences thereof; and whereas, in respect of every such activity, plans must be laid down for emergency action to be taken inside or outside an establishment in which a major accident could occur, so that such a situation may be dealt with rapidly and in a coordinated manner;

Whereas, if a major accident occurs, the manufacturer must immediately inform the competent authorities and communicate the information necessary for assessing the impact of that accident;

Whereas the analysis of the hazards from major accidents by type of industrial activity and the analysis of such accidents at Community level could significantly help to reduce the hazards from major accidents of the same type and the consequences thereof in the future,

HAS ADOPTED THIS DIRECTIVE:

Article 1

1. The aim of this Directive is to prevent major accidents which might result from certain industrial activities and to limit the consequences of any such accidents for man and the environment.
2. For the purposes of this Directive:
 - a) "Industrial activity" means
 - any operation carried out in an industrial establishment, together with all associated transport and storage within the establishment, involving or possibly involving one or more dangerous substances in physical or chemical processes and capable of giving rise, in the event of a major accident, to serious consequences for man, and in particular, workers and the neighbouring population, and the environment.
 - any other storage under the conditions specified in Annex I.

b) "Substances" means

chemical elements and their compounds as they occur in the natural state or as produced by industry.

c) "Dangerous substances" means

substances capable of falling within the risk categories defined by Council Directive 67/548/EEC of 27 June 1967 on the approximation of provisions laid down by law, regulation and administrative action relating to the classification, packaging and labelling of dangerous substances. (1), in its version of 1979 (2).

d) "Manufacturer" means

any person in charge of an industrial activity as defined in this article.

e) "Major accident" means

a major emission, fire or explosion resulting from uncontrolled developments in the course of an industrial activity, leading to a serious, immediate or delayed, danger to man and/or the environment, inside or outside the establishment, and involving one or more dangerous substances.

Article 2

This Directive does not apply to the following:

- nuclear facilities and plants for the processing of radioactive substances and material,

(1) OJ n° 196 of 16.8.1967, p.1

(2) OJ ...

- military installations,
- explosives factories,
- mining operations,
- installations for the elimination of toxic and dangerous waste, covered by Community regulations.

• Article 3

The Member States shall adopt the provisions necessary to ensure that, in the case of any industrial activity as specified in Article 1, the manufacturer is obliged to take all the necessary measures to prevent major accidents and to limit the consequences for man and the environment.

Article 4

1. The Member States shall take the measures necessary to ensure that every manufacturer is obliged:
 - to draw up a safety report concerning the risks of major accidents and make it available to the competent authorities specified in Article 7;
 - to inform any person working on the site of the risks of major accidents arising from the industrial activity;

- to take adequate measures to ensure that all persons working on the site are appropriately trained and equipped as regards safety measures in connection with the risks of major accidents arising from the industrial activity;
 - to organize periodical safety drills;
 - to update periodically the measures taken in accordance with the preceding indents.
2. The Member States shall take the necessary measures to ensure that persons outside the establishment who are liable to be affected by a major accident are informed in an appropriate manner of the risks in question and of the safety measures relating to such an accident.

Article 5

1. If an industrial activity as defined in Article 1 involves or is recognized as possibly involving the presence of one or more dangerous substances corresponding to the criteria laid down in Annex II, as:
- products necessary for the technological process,
 - a product of manufacture,
 - by-products,
 - residues,

the Member States, without prejudice to Article 4, shall take the necessary measures to oblige the manufacturer to give the competent authorities as specified in Article 7 notification of the following:

a) information relating to substances corresponding to the criteria laid down in Annex II:

- data and information listed in Annex III;
- phase of the activity in which the substances are involved or may be involved;
- quantity (order of magnitude);
- nominal chemical and/or physical behaviour during the process;
- forms in which the substances may occur or into which they may be transformed in the case of foreseeable irregularities;
- other dangerous substances involved in the process.

b) information relating to the installations :

- the geographical situation of the installation and predominant meteorological conditions;
- the average number of persons working on the site;
- a general description of the technological processes;
- the safety limits of the technical equipment and the manufacturing processes control systems;
- a reliability analysis of the installations, an assessment of the risks of major accidents and a description of the preventive measures planned;

c) information relating to the possible occurrence of a major accident :

- emergency plans, including safety equipment, alarm systems and available methods of dealing internally with a major accident;
- proposed emergency plans for use outside the establishment;
- the names of a qualified person and his deputies responsible for safety and authorized to set the emergency plans in motion on their own responsibility and to alert the competent authorities specified in Article 7.

2. In the case of new installations, the notification referred to in paragraph 1. shall be submitted to the competent authorities within a reasonable period before the industrial activity commences.
3. The notification specified in paragraph 1 shall be updated periodically.

Article 6

In the case of any modification of an industrial activity as specified in Article 1 which could have consequences as regards the risk of a major accident, the Member States shall take appropriate measures to ensure that the manufacturer:

- revises the measures and safety report specified in Articles 3 and 4;
- informs the competent authorities referred to in Article 7 of any modification affecting the information contained in the notification specified in

Article 5 , within a reasonable period of time before the modification to the industrial activity is undertaken.

Article 7

1. The Member States shall set up or appoint the competent authority or authorities who, without prejudice to the responsibility of the manufacturer, are to be responsible for:
 - receiving the notification as specified in Article 5 and the communication relating to any modification as specified in Article 6;
 - examining the information provided;
 - ensuring that an emergency plan is drawn up for use outside the establishment in respect of whose industrial activity notification has been given;and, if necessary, for
 - requesting supplementary information;
 - stipulating at any time, after consultation with the manufacturer, appropriate measures in connection with the various operations involved in an industrial activity for which notification has been given, with a view to preventing major accidents and, providing means for limiting the consequences thereof.

2. The competent authorities shall be responsible for carrying out
 - periodical inspections at the site of an industrial activity for which notification has been given;
 - spot checks to ensure that the provisions set out in Articles 3 and 4 above are observed.
3. To this end, the establishment and the plants must be accessible to the agents of the competent authorities of the Member State in question.

Article 8

1. The Member States shall take the necessary measures to ensure that no new industrial activity or any modification which could affect the safety of an existing industrial activity can be undertaken unless it fulfils the conditions laid down in this Directive.
2. In the case of existing industrial activities, the provisions laid down in this Directive shall apply within 1 year after the date specified in Article 17.

The provisions of Article 5 shall however apply to these activities only if they involve substances or categories of substances covered by the specific list contained in Annex II, and with a time limit of 3 year after the date specified in Article 17.

Article 9

1. The Member States shall take the necessary measures to ensure that, in the event of a major accident, the manufacturer shall be compelled:

- a) to inform the competent authorities as specified in Article 7 without delay;
- b) to provide them without delay with the following information as soon as it becomes available:
 - the circumstances of the accident;
 - the dangerous substances involved;
 - the data available for assessing the effects of this accident on man and the environment;
 - the emergency measures taken.
- c) to inform them of the medium- and long-term action envisaged.

2. The Member States shall require the competent authorities:

- a) to take any emergency and medium and long-term measures which may prove necessary;
- b) to collect, if appropriate, the information necessary for a full analysis of the major accident.

Article 10

1. Once a year, by 31 December, the Member States shall forward to the Commission the information specified in Annex IV regarding the industrial activities carried out during that year and covered by the provisions of Article 5. Such information shall not include the identity of the undertakings concerned.
2. In addition the Member States shall inform the Commission as soon as possible of any major accident occurring on their territory and shall provide the Commission with the information specified in Annex V as soon as it becomes available.

Article 11

1. The Commission shall set up a data bank, to which the Member States shall have access, containing information:
 - on the risks of major accidents, considered by type of industrial activity, on the hazards which might arise in the case of major accidents and on the appropriate measures for reducing the risks;
 - on major accidents which have occurred within the territory of the Member States.
2. The Commission shall periodically organize an exchange of information on the topics referred in paragraph 1 with a view to improving prevention measures.

Article 12

1. The information obtained by the competent authorities in pursuance of Articles 5, 6 and 7 and by the Commission in pursuance of Article 10 may not be used for any purpose other than that for which it was requested.
2. With the exception of the information with which the public are to be provided as specified in Article 4, and that supplied to the persons responsible for safety and industrial medicine within the undertaking who are bound by the obligation of professional secrecy, the competent authorities of the Member States and the Commission, together with their officials and other agents, must not disclose any information obtained by virtue of Articles 5, 6, 7 and 10(1).
3. The provisions of paragraphs 1 and 2 shall not preclude the publication of general statistical data or information on matters of safety, containing no specific details regarding particular undertakings or groups of undertakings.

Article 13

1. The modifications necessary for updating the Annex II, paragraph 1, and the Annexes III to V in the light of technological progress shall be laid down in accordance with the procedure specified in Article 15.

However, modification to Annex II, may be made in accordance with the procedure laid down in Article 15 below, only on the basis of the criteria laid down in Annex II, paragraph 2.

Article 14

1. There is hereby established a Committee for adapting this Directive in the light of technological progress hereinafter called "the Committee", consisting of representatives of the Member States under the chairmanship of a representative of the Commission.
2. The Committee shall draw up its own internal rules of procedure.

Article 15

1. Proposals for the application of the procedure laid down in this Article shall be put before the Committee by its Chairman, acting either on his own initiative or at the request of a representative of a Member State.
2. The representative of the Commission shall submit to the Committee a proposal for measures to be taken. The Committee shall issue its opinion on this proposal within a time limit which may be fixed by the Chairman in the light of the urgency of the question in hand. Pronouncements by the Committee shall be made by a majority of 41 votes, the votes of the Member States being weighted as laid down in Article 148 (2) of the EEC Treaty. The Chairman shall not take part in the voting.
3. a) The Commission shall introduce the proposed measures if they are in accordance with the opinion of the Committee.

- b) If the proposed measures are not in accordance with the opinion of the Committee, or in the absence of such an opinion, the Commission shall without delay submit to the Council a proposal regarding the measures to be taken. The Council shall act by a qualified majority.
- c) If the Council fails to reach a decision within three months of receiving a proposal, the proposed measures shall be adopted by the Commission.

Article 16

- 1. The Member States shall report to the Commission every three years on the situation within their territory as regards the prevention of major accidents and the reduction of their consequences, in the case of industrial activities as specified in Article 1.
- 2. The Commission shall report to the Council and the European Parliament every three years on the application of this Directive.

Article 17

- 1. The Member States shall bring into force the necessary provisions in order to comply with this Directive by at the latest and shall forthwith inform the Commission thereof.
- 2. The Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive.

Article 18

This Directive is addressed to the Member States.

ANNEX I

Categories of substances and quantities in connection with storage as specified in the second paragraph of Article 1, 2. a)

CATEGORIES OF SUBSTANCES	QUANTITIES
Explosives	$> 5 \text{ t}$
Easily flammable gases and liquids	$> 15 \text{ t}$
Flammable	$\geq 150 \text{ t}$
Combustive	$\geq 1\ 000 \text{ t}$

- The above figures refer to the quantities per establishment, or per group of establishments belonging to the same manufacturer if the distance between each establishment is not more than 500 m.
- Any combustive substance which is also explosive automatically comes under the category "explosives".

ANNEX II

CRITERIA FOR THE APPLICATION OF ARTICLE 5

- The figures below refer to quantities per establishment, or per group of establishments belonging to the same manufacturer if the distance between each establishment is not more than 500 m.

1. The specific list below shows the dangerous substances or categories of dangerous substances and the corresponding limits above which notification is compulsory.

<u>CAS Nr.</u>	<u>Substance or category of substances</u>	<u>Quantity</u> >>
	<u>NOM</u>	
53-96-3	2-Acetylaminofluorene (2-Fluorenylacamide)	1 kg
92-67-1	4-Aminobiphenyl	1 kg
92-87-5	Benzidine	1 kg
	Dialkylnitrosamine	1 kg
60-11-7	4-Dimethylaminoazobenzene	1 kg
648-93-5	1-Metyl-1-nitrosourea	1 kg
91-59-9	2-Naphtylamine	1 kg
92-93-3	4-Nitrobiphenyl	1 kg
13115-28-1	3-Nitro-2-naphtylamine	1 kg
1304-56-9	Beryllium oxide	1 kg
542-88-1	Bis-(chloromethyl)ether	1 kg
1633-83-6	1,3-Propanesultone (1,2-Oxathiolane-2,2-dioxide)	1 kg
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxine	1 kg
	Arsenif and its inorganic compounds:	
	• liquid and gases	1 kg
	• solids	500 kg
7782-41-4	Fluorine	20 t
75-44-5	Phosgene	20 t
7782-50-5	Chlorine	100 t
7783-06-4	Hydrogen sulphide	100 t
107-13-1	Acrylonitrile	200 t
74-90-8	Hydrogen cyanide	200 t
7746-09-5	Sulphur dioxide	200 t
75-15-0	Carbon disulfide	200 t
7726-95-6	Bromide	400 t
7664-41-7	Ammonia	1000 t
74-86-2	Acetylene (Ethyne)	20 t
1333-74-0	Hydrogen	20 t
75-21-8	Etylene oxide	50 t
75-56-9	Propylene oxide	50 t
	Organic Peroxides	50 t
	Nitrocellulose compounds	500 t
775-09-9	Sodium chlorate	5000 t
6484-52-2	Ammonium nitrate	5000 t
7782-44-7	Liquid Oxigen	10000 t

Easily flammable gases	150 t
Liquids easily flammable at temperatures above their boiling point (at a pressure of 1 bar) and at pressures greater than 1.34 bar, including easily flammable gases in solution	200 t
LPG (e.g. commercial propane, butane and other mixtures) ..	300 t
Easily flammable liquified gases under refrigeration with boiling points below 0°C at a pressure of 1 bar	500 t
Easily flammable liquids	100 000 t

2. The table below gives the LD 50 or LC 50 limits for all other dangerous substances and the corresponding quantity limits above which notification is compulsory.

LD 50 (or.) ⁽¹⁾ mg/kg body weight	LD 50 (cut.) ⁽²⁾ mg/kg body weight	LC 50 ⁽³⁾ mg/l (air)	Quantity (kg)
≤ 1	≤ 2	≤ 0.02	≥ 1
$1 < LD 50 \leq 5$	$2 < LD 50 \leq 10$	$0.02 < LC 50 \leq 0.1$	≥ 500
$5 < LD 50 \leq 25$	$10 < LD 50 \leq 50$	$0.1 < LC 50 \leq 0,5$	$\geq 2\ 000$

(1) LD 50 oral in the rat

(2) LD 50 cutaneous in the rat or rabbit

(3) LC 50 inhalation (4h) in the rat

ANNEX III

DATA AND INFORMATION TO BE SUBMITTED IN THE NOTIFICATION

PROVIDED FOR IN ARTICLE 5

If it is not possible to provide any of the following information, reasons must be given.

1) IDENTITY OF THE SUBSTANCE

Chemical name

CAS Number

Name according to the IUPAC nomenclature

Other names

Empirical formula

Composition of the technical product

Purity (%)

Impurities, including isomers and secondary products

Percentage of main impurities

Detection and determination methods available to the installation

Description of the methods used or bibliographic references

Methods and precautions laid down by the manufacturer in connection with handling, storage and fire

Emergency methods laid down by the manufacturer in case of accidental dispersion

Available methods of rendering the substance harmless

ANNEX IV

Information to be submitted to the Commission by the Member States
in application of Article 10.1

- Type of activity
- Substance(s) corresponding to the criteria laid down in Annex II, and quantities (order of magnitude)
- Potential risks to man and the environment specific to the type of activity and processes (summary)
- Emergency plans provided for within and outside the establishment (schematic description) (including preventive measures).

ANNEX V

Information to be submitted to the Commission by the Member States
in application of Article 10.2

REPORT OF MAJOR ACCIDENT

Member State:

Authority responsible for report:

Address:

1. General data

Date and time of the major accident:

Country, Administrative region, etc.:

Address:

Type of industrial activity:

2. Type of major accident

Explosion

Fire

Emission of
dangerous
substances

Substance(s) emitted

3. Description of the circumstances of the major accident

4. Emergency measures taken

5. Cause of major accident

Known

Not known

If known:

Human error

Faulty equipment

Design fault

Organizational errors

Other

(Please specify)

6. Nature and extent of damage

a) Within the establishment

- Casualties

..... killed

..... injured

..... poisoned

..... exposed

- Material damage

- The danger is still present

- The danger no longer exists

b) Outside the establishment

- Casualties

..... killed

..... injured

..... poisoned

..... exposed

- Material damage

- Damage to the environment

- The danger is still present

- The danger no longer exists

7. Medium and long term measures, particularly those aimed at preventing the recurrence of similar major accidents. (This information is to be submitted as it becomes available).