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COMMUNICATION FROM THE COMMISSION
TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

CONCERNING THE APPLICATION

OF DIRECTIVES

75/439/EEC, 75/442/EEC, 78/319/EEC AND 86/278/EEC

ON WASTE MANAGEMENT

INTRODUCTION

The various obligations incumbent on the Member States to report periodically to the Commission on the implementation of Community legislation on waste management provide a valuable means of monitoring the application of this policy. However, in practice the results have proved to be rather unreliable.

These reports should indicate the progress in applying Community legislation throughout the Community, guarantee a high level of transparency and provide public opinion with information on this subject. Efficient waste management which at the same time permits the proper functioning of the internal market also requires extended monitoring, but this objective has not been achieved. Only one report has been published since 1975 providing a summary of application of the four directives on waste (SEC/89/1455 final). This report was based on replies given by seven Member States.

To rectify the disparate nature of the provisions containing these obligations, as regards both timing and content, in 1991 the Council adopted Directive 91/692/EEC in an attempt to standardize and rationalize reports on the implementation of certain directives concerning the environment. In the waste sector national reports are drawn up every three years on the basis of a questionnaire prepared by the Commission. The first summary reports in the waste sector, covering the period 1995-97, must be published by the Commission in mid-1999.

The aim of this communication is to inform the European Parliament and the Council of the application, between 1989 and 1994, of the following Council Directives: Directive 75/439/EEC on the disposal of waste oils;[1] Directive 75/442/EEC on waste;[2] Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture;[3] and Directive 78/319/EEC on toxic and dangerous waste.[4] Thus, this report avoids any overlapping with the report to be established under Directive 91/692/EEC.

Austria, Sweden and Finland are not covered by this report since they only acceded to the European Union on 1 January 1995.

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1 OJ L 194, 25.7.1975, p. 23.

2 OJ L 194, 25.7.1975, p. 39.

3 OJ L 181, 4.7.1986, p. 6.

4 OJ L 84, 31.3.1978, p. 43.

COUNCIL DIRECTIVE 75/442/EEC ON WASTE, AS AMENDED BY DIRECTIVE 91/156/EEC

I. INTRODUCTION

Directive 75/442/EEC constitutes the legal framework for Community policy on waste management. After entering into force in 1977 it was amended in 1991 to take account of the new circumstances and to incorporate the guidelines set out in the Community strategy for waste management in 1989, namely, prevention, reutilization and ultimate disposal.

The Directive contains the main points on which Community waste management policy is based, in particular:

- a definition of waste;

- common terminology for the operations of reuse and ultimate disposal and different categories of waste as set out in the list established by Commission Decision 94/3/EC;

- a hierarchy of priorities to be applied by any waste management policy, beginning with prevention and followed by the promotion of reuse and finally hazard-free disposal;

- the principles of proximity and self-sufficiency applying to waste for final disposal and the establishment of an integrated network of disposal installations;

- the obligation on the part of the Member States to establish waste management plans, which are essential to the realization of this policy;

- the establishment of an obligatory licensing procedure for any company engaging in disposal or reuse operations plus a system of periodic control and recording of these operations.

Article 16 provides for Member States to report to the Commission every three years on the measures taken to implement the Directive. The Commission has to publish a consolidated report.

Despite this obligation and repeated requests from the Commission only nine of the twelve Member States concerned, namely, Belgium, Denmark, Germany, Spain, France, Luxembourg, the Netherlands, Portugal and the United Kingdom, have submitted their respective reports. Because of that, and also because of the amendment to Directive 75/442/EEC by Directive 91/156/EEC, which has not yet been transposed by all the Member States, the consistency and detail in these reports are not all they might be.

2. IMPLEMENTATION OF THE SPECIFIC PROVISIONS OF THE DIRECTIVE

2.1. Definition of "waste" and the European Waste Catalogue (Article 1(a))

Under the Directive "waste" is any substance or object in the categories set out in Annex I (categories of waste) which the holder discards or intends or is required to discard. Pursuant to Article 1(a), second subparagraph, the Commission adopted Decision 94/3/CE, the so-called European Waste Catalogue (EWC). This definition and the lists, supplemented by the definition and the list of hazardous waste, thus have the dual aim of environmental protection and the establishment and operating of the internal market.

Despite these provisions, the Commission notes major terminological disparity among the Member States. With regard to the classifications of waste, these vary considerably from one Member State to another, both in classification and in content. At the present time, none of the twelve Member States affected by this report has incorporated the EWC in its national legislation. Some refer to it in texts transposing the Directive, such as recent Irish law, but the EWC is not published in that country yet. Where Member States consider that the lists do not reflect entirely or correctly their conception of "waste", they are, at the present time, permitted to maintain or adopt more rigorous national provisions. However, these measures have to be notified to the Commission.

In **Belgium**, the elements of the Community definition of waste are included in Flemish and Brussels legislation, but the EWC is not mentioned. Walloon legislation does not define the term waste, referring only to a list which does not transpose the EWC.

Danish legislation adopts the text of the Directive 91/156/EEC word for word, but it refers to a list of categories of waste and does not transpose the EWC.

German legislation also adopts the Community definition but does not refer to the EWC. In addition, it makes a distinction between "waste intended for reuse" and "waste intended for elimination" which does not correspond to the Directive.

According to **Spanish** legislation waste is any substance or object which the holder discards or intends to discard under the terms of the provisions in force. This definition corresponds to that of the Directive 75/442/EEC before its amendment and, consequently, does not take account of the new elements of Directive 91/156/EEC. Moreover, no mention is made of the EWC. The situation in **Greece** and **Portugal** is similar to that of Spain.

Under **French** law, waste is any residue of a production, processing or use process , any substance, material, product or, more generally, any property abandoned by its owner. The EWC has not been transposed in France.

The Irish **legislation** adopts the Community definition of waste. However, the Irish wording adds a presumption which does not appear in the Community formula, namely, that the substances or objects treated as waste are deemed to be waste, unless proven otherwise. Irish legislation makes express reference to the EWC although it has not been published in Ireland.

Italian **legislation** defines waste as any substance or residue from a production or consumption process which might be re-used. This definition, and therefore application of the Directive, also includes materials and substances which have a commercial qualification officially recognized by goods exchanges, scales or special lists of the Chambers of Commerce.

The term waste is defined in **Luxembourg** legislation as any substance or object which falls within the categories established by that law, and, more generally, any property the owner abandons or intends or is required to abandon. Products and substances are also regarded as waste which are intended for reuse insofar as these products or substances, as well as secondary raw materials and the energy resulting from reuse, are reintroduced into the economic circuit. The law also defines various types of waste (domestic and bulky, assimilated, problematic, inert, dangerous, industrial, hospital, organic and unrecoverable).

Parts of the Community definition of waste are incorporated into **Netherlands** and **UK** legislation (except for Northern Ireland for which the Directive 91/156/EEC has not been transposed yet). However, no reference is made to the EWC .

2.2. Hierarchy of principles of waste management policy and implementation (Articles 3 and 4)

As was stated in the Community strategy of 1989 for waste management (SEC/89/934 final) and recalled in the Review of the same strategy (COM/96/399/final), and in the light of the provisions of Articles 3 and 4 of the Directive, Community policy on waste management must be geared first of all to preventing the generation of waste and to reducing its harmfulness before considering reuse and final elimination. Member States have to take the appropriate measures, and inform the Commission thereof, to promote this hierarchy and to ensure that these operations neither endanger human health nor harm the environment.

With regard to **Belgium**, a Brussels Order of 1991 transposes these provisions, but it has to be said that the elimination concept established by the Order includes both the collection, transport and processing of waste leading or otherwise to possible recovery, recycling, re-use, direct re-employment or any other use of waste. As regards the Flemish Region, these provisions are transposed by an amended Flemish decree of 1981 which prohibits, on the one hand, the abandonment or disposal of waste in contravention of the legal provisions and creates, on the other hand, an obligation, which is the responsibility of persons managing or eliminating waste, to reduce as far as possible the risks to health and the environment. In the Walloon Region, an amended decree of 1985 has as its objectives to prevent the generation of waste, to encourage recycling and recovery of energy and substances and to organize waste disposal. The decree only partly transposes Article 3 of the Directive in that it does not include the methods and means specified by the Directive of achieving the objectives set out. Neither does this decree lay down a clear hierarchy .

In **Denmark**, the principles of the Community hierarchy do not appear in the transposition text on waste, but in more general legislation concerning environmental protection. National plans in the fields of clean technologies and of reuse of waste have been adopted in order to implement the provisions of Article 3 of the Directive.

German legislation has contained this hierarchy since 1986. According to this legislation the generation of waste has, first and foremost, to be avoided. The law of 1994, which will enter into force at the end of 1996, quotes as means of preventing the generation of waste closed circuits of substances within an installation (*Kreislaufführung*), the design of products and consumer behaviour which should favour products generating little waste. German legislation also states that between recycling and reuse of energy the option which harms the environment less has to be preferred.

The objectives set out in Article 3 of the Directive are enshrined in **French** law. With regard to the prevention or reduction of production and harmfulness of waste, this objective will be implemented through measures geared to the manufacture and distribution of products. This law contains provisions on the production and distribution of products generating waste as well as provisions for recovery. With regard to the latter, the law lays down the methods of use of certain materials, elements or energy forms in order to facilitate recovery; its implementation refers to the adoption of decrees in Council of State. A national agency, the Environment and Energy Agency, is required in particular to encourage measures to limit the production of waste and deal with its elimination, recovery and reuse. The principle of elimination without harming the environment set out in Article 4 of the Directive is also transposed in French law. Thus, "any person who produces or holds waste, under conditions likely to produce harmful effects on the soil, the flora and the fauna, to degrade sites or landscapes, to pollute air or water, to generate noises and odours and generally to undermine the health of humans and the environment, is required to provide elimination of it (...) under conditions designed to avoid the aforementioned effects". With regard to the measures needed to prohibit abandonment, discharge and uncontrolled elimination of waste, the law lays down the cases where waste is abandoned, dumped or treated contrary to legal provisions by making for the possibility

for the policing authority to ensure automatic elimination of the said waste at the person responsible's expense.

Luxembourg law has transposed the provisions of Articles 3 and 4 of the Directive.

In the **Netherlands**, the chapter concerning the waste in the *Wet milieubeheer* adopts the Community hierarchy. Voluntary agreements (*convenant*) can be concluded between the industry and the competent authorities in order to promote the prevention and reuse of waste.

The hierarchy has been transposed in **UK** law except where Northern Ireland is concerned.

As regards the **other Member States**, it is difficult to judge to what degree the hierarchy is applied and what measures are taken to encourage it due to the lack of information and the non-transposition of Directive 91/156/EEC. Indeed, Greek, Spanish, Irish and Italian legislation does not adopt the Community hierarchy as regards waste management. A thorough analysis of the waste management plans would show a better picture of the measures taken to promote the objectives referred to in Articles 3 and 4 of the Directive, although the Commission is still far from being in a position to undertake this analysis (see point 2.5 below).

2.3. Establishment of an integrated network of disposal installations and application of the principles of self-sufficiency and proximity (Article 5)

To help achieve the general objective of minimizing the movements of waste, the Directive introduced into its Article 5 the principle of proximity, which means that waste has to be eliminated in one of the closest suitable facilities.

This conception of the principle of proximity is completed by the principle of self-sufficiency, as set out in Article 5 of the Directive. This provision shows that the Community as a whole has to endeavour to become self-sufficient, the Member States having to work individually towards this aim. It reflects, therefore, the general idea that waste produced within the Community should not be eliminated elsewhere.

To make these two principles as operational as possible, the same Article provides for the need to establish an integrated network of waste disposal installations, taking into account the best technologies available not involving excessive costs. The installations must have sufficient capacity and comply with the standards established in Community law as regards licences, technology used, and emissions into the environment, etc.

In **Belgium**, an amended Flemish decree of 1981 stipulates that the Flemish government can prohibit or regulate the import and export of waste in compliance with Regulation (EEC) No 259/93. An amended Walloon decree of 1985 stipulates that the regional government can establish the conditions whereby waste can be transferred outside the Region; similarly, the executive can subject to specific rules the use of controlled tips, dumps and disposal and reuse installations for waste from foreign countries and other regions. Accordingly, waste imported from other countries for disposal in the Walloon Region is prohibited by decree of 19 March 1987. The Court of Justice found this decree compatible, for waste other than toxic and hazardous waste, with Articles 30 - 36 of the Treaty, in particular because of the principles of self-sufficiency and proximity. In addition, interregional agreements on waste management have also been concluded for a five-year period renewable, which stipulate that each region attend to elimination, as far as possible, of its own waste within the confines of its territory. Lastly, given elimination capacity, it will be possible to give preference to waste from the other region over waste from a foreign country.

Denmark, which meets its own needs for waste disposal, has taken measures to establish a suitable network of disposal installations, in particular through the adoption of management plans and cooperation agreements between waste management companies to make for optimum use of their capacities and healthy dumping from the environmental point of view.

In **Germany**, waste exports for elimination are operated, in particular to the Netherlands, Belgium and France. Measures taken pursuant to Article 5 of the Directive also include cooperation agreements between companies of the *Länder* responsible for the treatment of special waste, and also between the Länder themselves, to make for optimum use of capacities (underground tips, incinerators, etc), the establishment of joint special waste treatment companies, the planning of tips and waste treatment installations from other treatment plants, and the identification of suitable sites and technologies to be used.

In **France**, one of the objectives defined by the law is to organize the transport of waste and to limit it in distance and in volume. The priorities to be set in order to achieve this objective and the measures to be taken to ensure its realization are set out in plans established by the competent administrative authority. These plans, which have to lay down the conditions of elimination of certain categories of waste, must also lead to the creation of coordinated waste disposal units.

In **Luxembourg**, various projects to ensure waste elimination are under development or in the planning phase, namely, a national tip for industrial waste in Haebicht, cleaning and extension of the domestic waste disposal tip in Muertendall, modernization of the domestic waste incinerator in Leudelange, regional composting facilities, and a national network of container parks, etc. The Grand-Duchy puts its degree of self-sufficiency at 73%, in 1994, for domestic and assimilated waste, and at 52% for hazardous waste.

In the **Netherlands**, approximately 12% of the hazardous waste produced was exported in 1994, and an equivalent quantity imported. No data on transfers are available concerning non-hazardous waste. However, the Netherlands institute RIVM considers that export / import movements of non- hazardous waste balance one another out.

The **United Kingdom** considers that 98.7% of its waste is disposed of or reused inside the country. Landfilling and disposal at sea are the most widely used methods of waste disposal in the United Kingdom.

For the **other Member States** concerned, the Commission has only scant information concerning the implementation of the principles of proximity and self-sufficiency. However, it can already be said that the efforts made until now to set up an integrated network of disposal installations have not been sufficient. These countries have not taken specific measures to set up such a network, the current system being based on municipal tips, many of which present serious problems in terms of location and operation.

2.4. The competent authorities (Article 6)

Under Article 6 of the Directive, Member States must establish or designate the respective authorities responsible for the implementation of the Directive.

In **Belgium**, the Regions of Brussels, Flanders and Wallonia are responsible for waste management policy. The collection of waste is the responsibility of the communes.

In **Denmark**, there are 275 competent authorities at local level (*Kommune*), 14 at regional level (*Amter*) and the authority at national level. Responsibility for the waste management plan is divided between the local and national level. The licensing and registering procedures tie in with the local and regional levels.

In **Germany**, there are 485 competent authorities at local level, 32 at regional level and 16 at the level of the *Länder*. All the levels are responsible for management plans, except for the Federal administration. The regional and local levels divide responsibilities for the issue of licences for disposal and reuse as well as for the registering of exemptions. Establishments or companies are registered at local level.

Greek law designates the authorities responsible at local, regional and national levels, namely, at national level, the Ministry of the Environment, which draws up the general technical specifications for waste disposal; at regional level, the Union of the communes and of municipalities of each prefecture and, where none exists, a group of various peripheral departments of the Ministries of Health, Economic Affairs, the Interior, Agriculture, the Environment. These authorities establish the waste management plans at regional level.

The competent authority at national level in **Spain** is the Ministry of Public Works, Transport and Environment which is responsible in particular for general planning and transfer of waste, both urban, toxic and hazardous waste. At regional level there are 19 competent authorities, the *Comunidades Autónomas,* which establish regional management plans for urban and hazardous waste and authorize and register the operations referred to in Articles 9, 10 and 12 of the Directive with regard to toxic and hazardous waste. The provinces, of which there are 43 not counting those belonging to uniprovincial autonomous Communities, can establish urban waste management plans for their areas. The 8 066 municipalities are responsible for urban waste management plans and the permits referred to in Articles 9 and 10 of the Directive for this type of waste.

In **France**, the competent authorities are the prefects of the departments, 99 in total, and these are responsible for household and assimilated waste management plans, the prefects of the regions, 22 in all, being responsible for the management plans for waste other than household and assimilated. The issue of permits for disposal and reuse operations is at two levels, regional and departmental. In addition, the disposal of waste resulting from the packagings of a product at all the stages of manufacture or marketing, other than consumption or household use, has to be carried out in an installation subject to approval, declaration or permit issued by the prefect of the department. The activities of transport, trading and brokerage of industrial and commercial packaging waste are subject to a declaration to the prefect of the department of the declarant.

A previous **Irish** law designated the local authorities and the Ministry of the Environment as the competent authorities. A subsequent law has given certain responsibilities to the *Irish Environmental Agency Protection* set up in 1992. Under the *1995 Irish Waste Bill* the competent authorities are the local authorities and the Agency.

In **Italy** the state is responsible for a series of tasks of a general nature (establishment of general criteria as regards waste disposal, coordination of regional of waste disposal plans, etc). The Regions are responsible for the development of waste management plans and the issue of permits. The Provinces are responsible for the control of the waste disposal. The communes, finally, attend to urban waste disposal, either directly or by means of specialized companies.

In **Luxembourg** the 118 communes are responsible for the disposal of bulky and similar waste in their jurisdiction, but under Article 6 of the Directive the only competent authority is the Ministry of the Environment which is responsible for issuing permits for elimination operations and for registering exemptions. Establishment of the management plans is the responsibility of the Environment Administration under the authority of the Ministry of the Environment. The registering of establishments or undertakings, as per Article 12 of the Directive, is not implemented in Luxembourg.

In the **Netherlands** the competent authorities are the Ministry of the Environment for central government, the 12 provinces and approximately 600 municipalities (*Gemeenten*). The central authority and the provinces have to establish waste management plans, whereas this point is optional for the municipalities.

In **Portugal** the local authorities (*autarquias locais*) are responsible for the collection and treatment of urban waste in their respective jurisdiction. At national level, it is the Directorate-General for the Environment which is responsible for drawing up the national waste management plan which then has to be approved by joint *Portaria* of the Ministers for Industry and Energy, Health and the Environment and Natural Resources. The sectoral plans are drawn up by the Directorate-General for Industry for industrial waste, the Directorate-General for Health for hospital waste and local authorities for urban waste.

In the **United Kingdom** there are 220 competent authorities which regulate waste management at local level (*counties* and *districts*). These authoritles are also responsible for the establishment of the waste management plans. In addition, the establishment of a waste import and export plan is the responsibility of the Secretary of State for the Environment. The creation of 3 Agencies for the Environment is scheduled for 1996, which should take over some of the functions carried out until now by the local authorities .

2.5. Establishment of waste management plans (Article 7)

Under the terms of Article 7, Member States are obliged to require their competent authorities to draw up one or more waste management plans, covering in particular the types, quantities and origins of the waste to be recovered or disposed of, the general technical requirements, any special arrangements for particular waste and suitable disposal sites and installations. They are required to notify the Commission of them. Since the adoption of the Directive, in 1975, Member States have been slow to comply with this obligation - Italy and Greece have not notified any plans and Member States which have drawn up plans and notified them to the Commission, covering all the categories of waste required for their whole territory, are still a rarity. Several infringement procedures have been initiated by the Commission against certain Member States. Consequently, an overall evaluation of conformity with Article 7 of the Directive has not been yet possible.

The plans received by the Commission are highly diverse. As regards their territorial implementation, some Member States have communicated to the Commission only one plan covering all the national territory - e.g. Denmark and Luxembourg - while others have communicated plans at local level - e.g. the United Kingdom has submitted more than a hundred of these plans -. Often the national plans are to be expanded by regional plans - as in the case of Spain where the national hazardous waste plan refers to the plans of the *Comunidades Autónomas,* but so far none of these regional plans has been communicated to the Commission -. The duration of these plans can range between five and twenty years - e.g. the waste disposal plan of *Inverness District Council* in the United Kingdom -; certain plans are due for revision every three years. Finally, the subject and headings of these plans can be rather disparate - waste disposal plans and development plans (in the United Kingdom), household waste plans (in France), development plan (in

Luxembourg), plan relating to the prevention and management of waste (Brussels Region), clean technology plan and waste recovery plan (in Denmark), hazardous waste plan (in Spain), special waste plans (in Ireland and Germany), management plan for waste from vessels (in Bremen), etc.

The plan provides an essential tool for any waste management policy, but it is also a key instrument for establishing a suitable network of waste disposal installations. In order to achieve the goals of this policy, the criteria regarding the contents of the plans must be given concrete expression. Consequently, in addition to the current data, i.e. the type, quantity and origin of waste and existing recovery and disposal capacities, plans should contain indications of future developments in this field. This might consist of forecasts of the quantities of waste as well as on the potential for prevention and recovery and secondary targets. Measures arising out of these forecasts should be described. They could include public information programmes for everything to do with prevention potential as well as information on future needs in recovery and disposal equipment and possible locations. Finally, these plans should contain information for consultation by other Member States.

Under Article 7(2) Member States must collaborate, as appropriate, with the other Member States and the Commission to draw up these plans. But it emerges from the information received by the Commission that this collaboration is practically non-existent, except as regards transfers of waste, and only to a limited degree at that. Such is the specific case of the Working Party for cross-border waste management in the big Saar-Lor-Lux-Trier-West Palatinate Region. Currently "the interregional plan of industrial waste management for Lorraine, Sarre, Luxembourg and the Belgian province of Luxembourg" dated December 1990 needs to be brought up to date and supplemented. The regions concerned are drawing up "the basic study and the prospects for collaboration as regards industrial and commercial waste treatment in the big Saar-Lor-Lux-Trier-West Palatinate Region. Some cooperation also occurs between the *Neue Hanse interregio*, *Niedersachsen*, *Bremen* and certain Dutch provinces, as well as in the Franco-German council for the environment. Similarly, a certain amount of cooperation between the Netherlands provinces and Belgian regions has been established as regards hazardous waste management in terms of the capacity of treatment installations. The United Kingdom recently made contact with the other Member States to explore possible avenues for cooperation in the establishment of management plans and, in particular, export / import plans for waste.

2.6. Collection of waste (Article 8)

Article 8 of the Directive stipulates that Member States take the necessary measures to ensure that any holder of waste passes it on to a private or public collector or to a company which carries out disposal or recovery operations, or recovers or disposes of it himself in accordance with the provisions of the Directive.

To recover or dispose of waste or to have it recovered or disposed of, Member States have adopted the model whereby either the municipalities (in the majority of the Member States) or specialized agencies (in Germany) ensure the collection of household waste while industrial generators of waste are obliged to recover or dispose of it themselves or to pass it on to professional collectors authorized to do so. Despite this model, the diversity in the forms of implementation from one Member State to another is appreciable.

2.7. Authorization procedures, exempts and registering of establishments (Articles 9, 10, 11, 12, 13 and 14)

One of the key parts of the Directive is the establishment of an obligatory authorization procedure for any company which carries out disposal or recovery operations, as well as of a registering system and periodic inspections of these operations, as set out in Articles 9 to 14. As regards the authorization system, provision is made for exemptions under certain conditions (Article 11). In addition, establishments carrying out recovery or disposal operations, and possibly the producers of waste, must keep a record of their activities and provide, on request, the requisite information to the competent authorities (Article 14).

With regard to **Belgium**, in the Region of Brussels the Executive subjects operations by waste disposal establishments to specific conditions, which can cover the disposal site itself and safety precautions, which are included in the authorizations issued under the terms of more general laws. The Executive can also subject to declaration, registering, approval or authorization any persons whom he designates and who produce or manage waste. The principle of the prior authorization of the disposal and recovery operations is provided for by Flemish legislation. It also provides for the approval of collectors, brokers and traders and the registering of the carriers non approved in any other way. The obligation to keep a record provided for in Article 14 is also included, as is provision for an inspection system to be carried out by the public authorities. In the Walloon Region, the regional Government is entitled to subject to declaration, approval or authorization anyone producing, managing, buying or selling waste other than household waste. In the absence of a properly kept record, the regional Government can impose on persons producing, carrying, holding, recovering and disposing of waste other than household waste the obligation to inform the administration of the holding and movement of waste.

In **Denmark**, exemptions as under Article 11 have been established for slag, fly ash and sludge; the local and regional authorities are responsible. Waste disposal and recovery establishments have to keep a record the information required in Article 14 in a standardized and computerized form established by the Ministry of the Environment. The producer of waste is not subject to the obligation to keep a record.

In **Germany** the regional and local administrations are responsible for issuing permits and granting exemptions. Establishments or undertakings are registered at the local level. General rules on authorization exemptions are in preparation. The record of companies and of establishment activities, as well as of the producers of waste, as set out in Article 14 of the Directive, is obligatory. It should be noted, nevertheless, that the way this is done varies from one *Land* to the other.

In **Greece** the prefect, assisted by a committee, is the only person responsible for the authorizations relating to dumping, tipping, treating and transporting waste, as well as on the spot controls and inspection.

Spain has not adopted any general rules for granting the exemptions provided for in Article 11 of the Directive. Managers of hazardous waste have to submit an annual report on a standard form and to keep a record of their activities containing following information: origin of waste, quantity, nature, composition and identifying code of waste, date of acceptance and receipt of waste, storage time and dates and treatment and elimination operations, dates, data concerning the various methods and subsequent destination of waste. Hazardous waste producers are also subject to a similar record system and must also submit an annual statement on a standard form.

In **France** no general rules for granting the exemptions provided for in Article 11 have been adopted. Moreover, where the producers of certain waste generating harmful effects do so in quantities of more than 0.1 tonnes per month or where this load exceeds 0.1 tonnes, they must, on passing on this waste to third parties, issue an accompanying slip. Producers, collectors, carriers, importers and the owners of storage, grouping, pretreatment or elimination facilities for this waste must keep a record accounting for the respective operations carried out in relation to waste disposal.

Irish **legislation** transposing the original Directive exempted urban waste disposal installations from the authorization obligation. Accordingly, the Commission had taken the relevant legal measures and the Irish authorities agreed to make changes to the law. The *1995 Irish Waste Bill* also provides for an authorization system applicable to municipal facilities.

Italian legislation transposing the original Directive refers only to an authorization system for waste disposal. Responsibility for this authorization is with the regional authorities. The authorization has to indicate, inter alia, the site, the type and quantity of waste that can be accommodated, the maximum life of the tip, necessary work, etc. Controls on the part of the competent authority are carried out by the producers and managers of waste.

In **Luxembourg** the Minister responsible for the authorization required under the terms of Articles 9 and 10 can exempt establishments or companies which collect and transport road work waste and excavation and demolition rubble not containing hazardous waste, establishments which collect and transport waste in tiny quantities from their own activities and the companies which recover waste on site from the products they make which cannot be put on sale. The registration of establishments or companies under Article 12 of the Directive is not put into effect in Luxembourg. Under Article 14 of the Directive companies and establishments carrying out disposal or recovery operations have to keep a record. A Grand-Ducal draft Regulation concerning hazardous waste is in preparation which provides for these records for the producers of hazardous waste .

In the **Netherlands** the issue of permits for disposal and recovery operations is at three territorial levels, the municipalities being responsible for collection. The central government makes an non-objection statement where there is a provincial authorization. As regards registration and exemption, the central government is responsible for waste oils, the remainder coming under the provincial or local authorities. General rules for granting the exemptions provided for in Article 11 of the Directive have been adopted. An obligation to keep a record exists under Article 14 for the establishments and companies referred to in Articles 9 and 10. Producers are also required to comply with the provisions of Article 14 as part of the authorization they need.

In **Portugal** the body responsible for issuing permits for urban waste management is either the Regional Director or the Director-General for the Environment. Portuguese legislation does not provide for exemptions. The record of the operators' activities in waste management and of producers' activities, as set out in Article 14 of the Directive, is obligatory.

The **United Kingdom** has adopted general rules for granting the exemptions provided for in Article 11 of the Directive. UK legislation also obliges establishments and companies engaged in waste recovery and disposal to keep a record. Apart from the accompanying documents that all establishments disposing of (and transporting) hazardous waste have to have, the installations involved in this type of operation must keep a record of the site of each deposit of waste. All producers of hazardous waste must keep a record of all accompanying documents issued at the time of transfer of waste. All other producers of waste must, on transfer of waste, complete and keep a transfer document specifying the type and the quantity of waste. They must also keep a copy with a more detailed description of the nature and origin of the waste. This information must be made available at the request of the competent authorities.

3. CONCLUSIONS

The Commission notes a certain reticence on the part of the Member States to actually implement the Directive or some of its provisions. This reticence is reflected both in late, only part and even non-existent transposition of the Directive and in numerous cases of poor implementation.

The Commission has found that national laws transposing the Community texts often use definitions and classifications of waste which depart from the Community terminology - industrial waste, non-recoverable waste, secondary raw materials , special waste, etc. - and often even add other considerations to these definitions - destination of waste, origin from an economic sector, etc. But using different terminology compromises transparency and any organizational and economic buffers and only causes problems for the economic players and administrations involved. The Community definition of "waste" is far from solving all the problems thrown up by the distinction between waste and product. It should be noted, however, that this definition encourages the creation of an integrated waste management system in the context of the internal market and it is accompanied by a detailed list of waste, the European Waste Catalogue - like hazardous waste for which a Community definition and list exist already -. These definitions and lists thus have the dual aim of protecting the environment and establishing and making operative an internal market in waste. These two objectives will only be achieved when all the Member States incorporate the Community definitions and lists of waste into their national laws.

It is difficult to say to what extent the Community hierarchy concerning waste is followed in the Member States. As has already been said, some have not even transposed the Directive, and most have not informed the Commission of how they intend to put this hierarchy in place. Only a detailed study of the various waste management plans will give more revealing results. At the present stage, the Commission is not in a position to carry out this evaluation.

Given the latest legal developments in the shipment of waste, the aim of Community self-sufficiency in waste disposal can be said to be practically achieved - Regulation (EEC) No 259/93 on the supervision and control of shipments of waste within, into and out of the European Community provides for a total ban on exports of waste for disposal outside the Community, except to the EFTA countries which are members of the Basle Convention -. That said, the degree of self-sufficiency reached by the Member States is rather uneven.

Whether or not the principle of proximity is put into practice cannot be said without taking account of the existence or otherwise of a network of waste disposal plants. At present, this network does not yet exist at Community level, even though some Member States made considerable strides in this direction.

Where the competent authorities are concerned, the number of them by country and their level of responsibility is determined by the diverse nature of the territorial breakdown of the Member States. The situation varies appreciably from one Member State to another.

Despite the fact that since 1975 Member States have committed themselves to establishing waste management plans, this has not taken the form of satisfactory results. This instrument, which is of capital importance in any waste management policy, has only very recently been deployed by the Member States, and only in piecemeal fashion at that. Member States have to find the political will needed to establish and implement such plans.

All the Member States now have a system of authorization and recording of companies and establishments carrying out waste recovery and disposal operations, but the procedures and the authorities responsible for these systems vary enormously from one country to another.

Finally, the Commission notes a certain reticence on the part of certain Member States to provide the information due under Article 16 of the Directive. As pointed out above, only eight of the twelve Member States concerned have sent the Commission their national reports. In future, to avoid incomplete or inconsistent reports, Member States will have to make more effort to comply with the obligation of submitting a progress report on the transposition of the Directive. These obligations have henceforth to be seen in the light of Council Directive 91/692/EEC and Commission Decision 94/741/CE drawing up, inter alia, a questionnaire concerning the transposition and implementation of the Directive 75/442/EEC.

DIRECTIVE 78/319/EEC OF 20 MARCH 1978 ON TOXIC AND HAZARDOUS WASTE

I. INTRODUCTION

Directive 78/319/EEC on toxic and hazardous waste was adopted by the Council on 20 March 1978, and entered into force on 22 March 1980.
On 12 December 1991, the Council adopted Directive 91/689/EEC[5] on hazardous waste. Due to the delay in adopting the list of hazardous waste referred to in Article 1, paragraph 4, of this Directive, the Council adopted, on 27 June 1994, Directive 94/31/EC[6] postponing the entry into force of Directive 91/689/EEC and the repealing of Directive 78/319/EEC until 27 June 1995.

In accordance with Article 16 of Directive 78/319/EEC, every three years and for the first time three years following the notification of the Directive, Member States are obliged to draw up a situation report on the disposal of toxic and dangerous waste in their respective countries, and shall forward it to the Commission, which in turn will circulate it to the other Member States.
The Commission is obliged to report every three years to the Council and to the European Parliament on the application of the Directive.

The present report aims at informing the European Parliament and the Council of the application of Directive 78/319/EEC for the years 1989-1994, by giving a general picture concerning the transposition of the Directive into national legislation.

To this end, a request of information and a questionnaire were sent to the Member States in May 1995. A second request was sent to the Member States in July 1995. Only six Member States (Denmark, Germany, Spain, France, the Netherlands, the United Kingdom), plus the Flemish Region for Belgium, have replied to this request and filled in the questionnaire. As regards certain provisions of the Directive, the Commission has relied on other information available to its services (waste management plans, notified legislation, exchange of letters, proceedings of meetings) to try to make this report more complete. However, this additional information may only be partial.

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[5] **O.J. L 377, 31.12.1991, P. 20.**

[6] **O.J. L 168, 2.7.1994, P. 28.**

II. IMPLEMENTATION OF THE DIRECTIVE

The conclusions drawn from the information available at the Commission are summarized below. The amount of information on the different Member States may vary according to the detailed information sent to the Commission.

Article 1, letter b: **Definition of toxic and dangerous waste**

According to this Article, "toxic and dangerous waste" means any waste containing or contaminated by the substances or materials listed in the Annex to the Directive, of such a nature, in such quantities or in such concentrations as to constitute a risk to health or the environment. The Directive therefore leaves it to the discretion of the Member States to set out the nature, the concentration or the quantity of the substances or materials which constitute a risk to health or the environment.

This definition has not been followed as such by the legislation applicable in the **Brussels and the Walloon Regions of Belgium**.

The following substances or materials (and their compounds) are considered to be a risk to health or the environment in **Flanders**:

a) When their concentration exceeds 1000 mg/Kg: organic-halogen compounds (excluding inert polymeric materials and other substances referred to in Directive 78/319/EEC or other Directives concerning the disposal of toxic and dangerous waste); chlorinated solvents.

b) When their concentration exceeds 500 mg/Kg: arsenic, cadmium.

c) When their concentration exceeds 250 mg/Kg: beryllium, cyanides (organic and inorganic).

d) When their concentration exceeds 100 mg/Kg: mercury, thallium.

e) When their concentration exceeds 10%: organic solvents.

Biocides and phyto-pharmaceutical substances and pharmaceutical compounds, as well as chemical laboratory materials, not identifiable and/or new, whose effects on the environment are not known, are always considered toxic or dangerous.

In **Denmark**, chlorinated solvents, chemical laboratory materials (not identifiable and/or new, whose effects on the environment are not known), asbestos (dust and fibres) and acids and/or basic substances used in the surface treatment and finishing of metals, are always considered toxic or dangerous, regardless of their quantity or concentration.

For the other substances listed in the Directive's annex, the classification is made case by case on the basis of local authorities' assessment of the potential risk for health and environment. To this end, a weighing is made between different elements such as quantity, concentration, chemical and physical state, potential disposal possibilities, risk of physical contact, diffusion, leaching, evaporation, transformation and so on.

Germany has not defined toxic and dangerous waste by reference to the substances or material listed in the Annex to the Directive. Toxic and dangerous wastes are evaluated according to their effects on human health and on the environment with a view to the envisaged treatment such as recycling and disposal (landfilling and incineration).

In **Spain**, the national legislation does not set out any limit of quantity or concentration above which a substance or material is considered to constitute a risk to health or environment.
Instead, a number of criteria for the characterization of toxic and dangerous waste, such as flashpoint, corrosion, physical reactions, and so on, has been produced. These criteria correspond to the methods set out by Directive 84/449/EEC[1], adaptation to technical progress of Directive 67/548/EEC[2] on classification, labelling and packaging of dangerous substances.

France followed a different approach from the one set out by the Directive, preparing a "national inventory" of industrial waste requiring special treatment.

The **Irish** legislation does not include any specific definition of toxic and dangerous waste. However, this legislation provides that any word or expression used in both the legislation and the Directive has, unless the contrary appears, the meaning that it has in the EC Directive. However, no guidance is given as regards concentrations or quantities.

The legislation in the **Netherlands** makes reference to the Annex to Directive 78/319/EEC. The following substances or materials (and their compounds) are considered to be a risk to health or the environment:

a) When their concentration exceeds 50 mg/Kg: arsenic, mercury, cadmium, thallium, beryllium, chrome 6, antimony, cyanides (organic and inorganic), organic-halogen compounds (excluding inert polymeric materials and other substances referred to in Directive 78/319/EEC or other Directives concerning the disposal of toxic and dangerous waste), selenium, tellurium, aromatic polycyclic compounds (with carcinogenic effects) and metal carbonyls.

b) When their concentration exceeds 5.000 mg/Kg: lead, phenols, isocyanates, chlorinated solvents, peroxides, chlorates, perchlorates and azides, asbestos (dust and fibres), soluble copper compounds.

c) When their concentration exceeds 50.000 mg/Kg: organic solvents, ethers.

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[1] **O.J. L 251, 19.9.1984, P. 1**

[2] **O.J. 196, 16.8.1967, P. 1**

Other substances or materials are not classified on the basis of their concentration or quantities but on the basis of the originating process: biocides and phyto-pharmaceutical substances and chemical laboratory materials, not identifiable and/or new, whose effects on the environment are not known.

A combination of some of the above criteria is used to classify tarry materials from refining and tar residues from distilling and acids and/or basic substances used in the surface treatment and finishing of metals.

In the **United Kingdom** this Article is implemented by the definition of special waste, which does not rely on quantities and concentration limits, but upon toxicity and other criteria, such as the flashpoint.

Article 4 and 5: **Main objectives**

Member States have to take appropriate steps to encourage, as a matter of priority, the prevention of toxic and dangerous waste, its processing and recycling, the extraction of raw materials and possibly of energy therefrom and any other process for the re-use of such waste.

In disposing of toxic and dangerous waste, Member States have to ensure that human health is not endangered and that the environment is not harmed.

Abandonment, uncontrolled discharge, tipping or carriage of such waste, as well as its consignment to installations, establishments or undertakings not holding a permit for such activities must be prohibited.

Greek legislation has taken over literally the wording of the Directive, and gives the responsibility of corresponding measures to be taken to the Ministry for the Environment.

In **Spain**, toxic and dangerous waste must be eliminated without endangering human health, natural resources and the environment. Public authorities must promote the recovery of material and of energy contained in toxic and dangerous waste, ensure their treatment to obtain non-toxic waste, develop new technologies and production processes generating less waste. The Commission does not have information on the implementation of these provisions.

Under **French** legislation, in case of abandonment of waste, uncontrolled tipping or treatment not carried out according to the criteria laid down in such legislation, police authorities may ensure the elimination of the concerned waste and charge the responsible producer or holder accordingly. In addition, for certain categories of waste, the delivery of such waste to non-authorized installations determines joint responsibility (of the deliverer and of the recipient) for the damage caused by the wastes.

Article 4 was not transposed by the **Irish** legislation. However, in practice, the prevention and recovery of toxic and dangerous waste in Ireland has assumed more importance over time. The Waste Bill 1995 (which *inter alia* addresses hazardous waste) contains a number of provisions aimed at stimulating prevention and recovery.

As regards Article 5(1), there is a prohibition on abandonment and uncontrolled discharge, tipping or carriage of toxic and dangerous waste.

Article 6: **Competent authorities**

Member States must designate or establish the competent authority or authorities to be responsible, in a given area, for planning, organisation, authorization and supervision of operations for the disposal of toxic and dangerous waste.

In **Belgium**, planning and organization is of competence of the three Regions. Authorization is of joint competence of the Regions and Provinces, whereas control is a task of the Regions and the Municipalities.

In **Denmark**, authorization and supervision is of joint competence of the 14 Counties (*Amt)* and the 275 Municipalities (*Kommune*). Planning and organisation fall under the competence of Municipalities.

In **Germany** planning and organization fall under the competence of the 16 Regions *(Länder)* or other authorities (32 *Regierungsbezirke* and 485 *Kreise* or *kreisfreie Städte*). Supervision falls under the competence of *Länder* and *Regierungsbezirke*. Changes of responsibilities may occur due to the federal structure of the Republic. Responsibilities do not always correspond clearly to statistic territorial units due to co-operation and mergers of territorial units obliged to carry out waste management operations, and to commissioning of duties to third parties.

In **Greece**, waste management planning falls under the responsibility of the Ministry for the Environment, which must receive an assent from the Ministries for national economy, internal affairs, agriculture, public health as well as from the Central Union of Municipalities. The Ministry for the Environment must also draw up a special programme for waste elimination.

In **Spain**, planning is carried out jointly at national and regional (*Comunidades autonomas - CC.AA.)* level. The 19 CC.AA. are responsible for organisation, authorization and supervision.

In **France**, the national level (Environment Ministry) is competent for organisation, while the other three tasks fall under the responsibilities of the 99 Departments (*Préfet du Département).*

For purposes of waste planning as well as local waste management, **Irish** local authorities are the competent authorities under the legislation. The Minister for the Environment has responsibility for waste policy. This situation will change for hazardous waste: it is envisaged that planning and management of this will become more centralized, with the Environmental Protection Agency playing a key role.

In **Italy**, planning procedure is decided at national level. Regions and Provinces must then elaborate the plans.

In **Luxembourg**, planning procedure is decided at national level.

In the **Netherlands**, planning, organization, authorization and supervision are of shared competence of the Government and the 12 Provinces (*Provincie)*. As regards supervision, the approximately 600 Municipalities (*Gemeenten)* also play a role.

In **Portugal**, plans are elaborated at national level in co-operation with the municipalities.

In the **United Kingdom**, the authorization and supervision of waste management operations is the responsibility of waste regulation authorities. In England, these responsibilities are generally carried out by County Councils in non-metropolitan areas, District Councils in metropolitan areas and three specially constituted authorities for London, Manchester and Merseyside.

In Scotland, Wales and Northern Ireland these responsibilities are carried out by District and Island Councils (approximately 120).

The responsibility for giving planning permission for waste disposal facilities usually lies with the planning departments of the larger local authorities (eg. the County Councils in non-metropolitan England or District Councils in Wales). These authorities are also responsible for the drawing up of waste local plans based on the relevant Waste Regulation authority's waste management plan for the area.

The collection of municipal waste is the responsibility of the Waste Disposal authorities which are usually part of the smaller local authorities (eg. the District Councils in non-metropolitan England). Disposal arrangements are the responsibility of local authority Waste Disposal companies, which are increasingly moving into the private sector.

Article 7: **Separation, labelling, records and identification**

Member States have to take appropriate measures as regards the separation of toxic and dangerous waste from other matter, the labelling of packaging of toxic and dangerous waste and the record and identification in respect to each site where waste is deposited.

In the **Walloon Region** there is, since April 1992, an obligation to separate toxic and dangerous waste when they are collected or transported, except if mixing the waste improves the security of collection and transport.

Greek legislation obliges the holder of toxic and dangerous waste to take appropriate measures, and gives to prefects the responsibility for controls. It is not known whether such measures have been taken.

Legislation in **Spain** requires producers of toxic and dangerous waste to appropriately separate toxic and dangerous waste, ensure that they are not mixed with other waste, in particular with other wastes or material which increase their hazardousness and make their handling more difficult. They must also care for the packaging, and labelling of packages containing toxic and dangerous waste, and keep a register concerning imported products.

French legislation requires that special industrial waste included in a list established by the *Conseil d'Etat* may not be stored in installations receiving also other categories of wastes.
Furthermore, producers and undertakings treating wastes, when delivering them to a third party, must produce a special form mentioning the origin of the wastes, their characteristics, their destination, the foreseen methods of collection, transport, storage, treatment and elimination, including data on the identity of other undertakings involved in these operations. Producers, collectors, transporters, importers and storers must all keep a register recording the different operations undergone by the wastes to be eliminated.

In **Ireland** a duty is imposed on any person collecting, transporting, storing or depositing toxic and dangerous waste to keep it separate from other matter and residues. It is also imposed a duty on any person consigning such waste to ensure that the packaging is appropriately labelled, indicating nature, composition and quantity of waste. There is a duty to keep records.

Article 8: **Stricter measures**

Member States may at any time take more stringent measures than those provided for in this Directive.

The Commission was not informed of any stricter measures taken under this provision by Member States.

Article 9: paragraph 2: **Specific information**

Establishments or undertakings which carry out the storage, treatment and/or deposit of toxic and dangerous waste must obtain a permit from the competent authorities. This permit, in addition to covering the aspects listed in Article 9, paragraph 2, may also lay down the specific information to be made available at the request of the competent authorities.

In the **Flemish Region of Belgium**, establishments or undertakings requesting permits for treatment or disposal of toxic waste must provide the authorities with information on all the operator of the plant; on the evaluation of environmental risks; on the nature and capacity of the equipment; on the nature and characteristics of all wastes (solid and liquid) and emissions, including noise pollution; on the measures foreseen and the equipment used to limit any impact thereof on the environment; on technical capacities of the operators; on the location of the plants, including data on the ground; on building permits; on environmental impact assessment and safety plans when necessary under the relevant regulation.

In **Denmark**, installations which store, deposit, treat, destroy and recover waste, and which therefore must receive a prior approval by the authorities, are requested to provide the authorities with information on the location (maps), setting-up, equipment, operation and technology used. They must also inform about the waste and the other forms of pollution created, and on the internal control related to these forms of pollution. Furthermore, details on assessment of safety in relation to the risk of major accidents must be provided.

In **Germany** the construction, the running, and the aftercare of a plant are subject to the approval of the responsible authorities, which is delivered against the presentation of specific information varying according to the kind of plant envisaged (for instance landfill, incineration plant).

The procedures for the approval ensures the participation of the public as well as the publication of the projects.

Under **Greek** legislation, prefects have the competence of giving authorization, after the delivery of an opinion by a committee composed by various representatives of public authorities and by the competent regional service of the Ministry of the Environment.

In **Spain**, operators must provide the competent authority (from which the authorization to the establishment derives) with all the additional information which may be requested.

There does not seem to be, therefore, a minimum requirement in respect of specific information to be made available.

In **France**, the information to be included in a request for an authorization presented by the establishment shall comprise, besides the elements mentioned by Article 9, paragraph 2 of the Directive, information on all the industrial processes taking place in the establishment, including evaluation of the related risks; on the building permits (when relevant); on technical and financial capacities of the operators; on the geographical origin of the wastes to be disposed of (including how the activity fits in the plans on waste elimination and recovery of materials); on financial guarantees (when applicable). Maps of the establishment and its surroundings must be included. These shall contain, for registered establishments (*installations classées*), supplementary information as regards the conditions of use, sewage and evacuation of all emanations, and the measures foreseen in case of accident. The request for an authorization must be accompanied by an environmental impact assessment.

Irish legislation follows closely the wording of the Directive, and allows for information to be made available. However certain municipal facilities benefit from an exemption from the need for a permit.

In the **Netherlands**, information has to be provided concerning the installation, including its design, the activities or the processes taking place in it, the capacities, the time of use of the installation, the impact on the environment of normal operations, the measures taken to measure and to prevent or limit such impact, including in any case prevention or minimization of waste generation, the re-use, storage, recovery and disposal of the waste generated.

In the **United Kingdom**, there are no minimum requirements in respect of specific information to be made available at the request of the competent authorities. The matter is left to the discretion of the individual competent authorities.

Article 11:**Levies**

Member States may charge levies on the monies used to cover the costs of disposing of toxic and dangerous waste. This shall be done in accordance with the "polluter pays" principle.

If such levies are charged, the yield thereof may also be used to finance control measures relating to toxic and dangerous waste, and research pertaining to the elimination of these wastes.

In the **Flemish Region of Belgium**, levies (*milieuheffingen)* varying between 400 and 3000 BEF/ton are charged on the disposal of toxic waste.

In **Germany**, fees *(Entgelt)* are charged by private owners and levies *(Gebühr)* by public owners of plants to the deliverer of waste who passes them on to the waste producer according to the polluter-pays principle. The levies normally cover costs for planning, construction and running of the plant as well as for the estimated cost of closing it down. In the case of private owners the fee contains also a percentage for risk and profit. Levies vary between less than 100 DM/t and more than 1000 DM/t according to the treatment procedures, the composition of the waste and the possible pre-treatment procedures.

In **France**, the yearly taxes applicable to registered establishments are used to finance part of the control expenses.

In the **United Kingdom**, the costs which competent authorities incur in regulating and supervising waste management activities are recovered by charges payable by the holders of waste management licences and authorizations, and by registered waste carriers.

A landfill levy has been recently proposed by the Government.

In **Denmark**, **Spain**, **Ireland** and the **Netherlands** no levies of this kind are currently charged.

Article 12: **Plans for the disposal of toxic and dangerous waste**

Competent authorities have to draw up and keep up-to-date plans for the disposal of toxic and dangerous waste (it is to be noted that "disposal", in the terminology of Directive 78/319/EEC, includes also recovery operations). They shall cover in particular: the type and quantity of waste to be disposed of; the methods of disposal; specialized treatment centres where necessary; suitable disposal sites.

Competent authorities may include other specific aspects, in particular the estimated costs of the disposal operations. They shall also make these plans public and forward them to the Commission, which arranges for regular comparisons of the plans in order to ensure that implementation of this Directive is sufficiently coordinated.

It is difficult, if not impossible for the Commission to provide precise information on the waste management plans specifically referring to toxic and dangerous plans submitted by the Member States, according to Article 12 of Directive 78/319/EEC.

First of all, the information received by the Commission until 1994 was very limited.

Secondly, in answering the questionnaire sent by the Commission in May 1995, most Member States referred to plans which had been drafted in accordance with the provision of the new Directive on hazardous waste (91/689/EEC), entered into force on 27 June 1995, which brought the new definition of hazardous waste into EU waste legislation.

Thirdly, in many cases the Commission has received plans including municipal, toxic and dangerous wastes and other kind of wastes (different Member States used different terminology), and it is difficult to classify them as falling precisely under the category of toxic and dangerous waste (for instance: plans for the management of car wrecks, or of healthcare waste).

Fourthly, plans have generally a limited validity period (which in some cases has not been mentioned), therefore it is impossible to give precise figures on the plans which were valid between 1990 and 1994.

The Commission has therefore preferred to include in this report the information available to it until the end of 1995, which is of relevance for "toxic and dangerous waste" or for "hazardous waste". For a complete picture of the plans sent by the Member States to the Commission, the reader is invited to refer to the implementation report of Directive 75/442/EEC.

The Commission has received the following plans from the three Regions of **Belgium**: a Plan on waste prevention and management for the Brussels Region, adopted in 1992 (validity period not indicated); a waste plan for the years 1991-1995 for the Flemish Region and a waste plan for the years 1991-1995 for the Wallonia Region. All three plans concern both municipal and special or industrial wastes.

Denmark has forwarded a management plan, adopted in June 1992, for waste and recycling (including special waste) for the years 1993-1997.

In March 1989 **Germany** notified to the Commission a number of Plans drafted in accordance with article 12 of Directive 78/319/EEC. A total of 13 plans have been notified until 1994. In October 1995, several valid plans were sent to the Commission, 19 of them referring to hazardous waste.

Spain has forwarded to the Commission a National Plan for industrial wastes (1989-1992) and a National Plan for hazardous wastes (1995-2000).

Between 1988 and 1991 **Ireland** forwarded "special waste plans" issued by 19 County Councils or Corporations and a "toxic and dangerous waste plan" issued by Offaly County Council.

A partial waste management plan (*Part I: Programme Directeur*) for the years 1991-1995 has been forwarded by **Luxembourg** to the Commission in early 1991.

In August 1992 the **Netherlands** sent a ten-year waste programme (1993-2002) and in September 1993 a "multi-year" plan for the disposal of hazardous wastes (1993-2002).

In 1990, the **UK** forwarded the disposal plans issued by 70 different competent authorities. In September 1995, the UK authorities provided the Commission with the list of still-valid plans.

France, **Greece**, **Italy**, and **Portugal** have not forwarded any plans for the management of toxic and dangerous waste.

Article 13: **Temporary derogations**

In cases of emergency or grave danger, Member States shall take all necessary steps, including, where appropriate, temporary derogations from this Directive, to ensure that toxic and dangerous waste is so dealt with as not to constitute a threat to the population or the environment. The Commission shall be informed thereof.

According to the information made available at the Commission, in none of the Member States this provision has been used.

Article 14: **Record keeping**

This Article lays down a number of items of which the installation, the establishment or the undertaking which produces, holds and/or disposes of toxic and dangerous waste must keep a record. This information is to be made available to the competent authorities upon request.

Operators dealing with toxic and dangerous waste in the **Walloon Region of Belgium** must, since April 1992, use a specific register, which must be kept for at least 5 years and made available to the authorities upon request.

In the **Flemish Region of Belgium** records must be kept on the operations of the plants, on storage and processing of waste. Data on origin, receipt and delivery of all waste must be kept in a register for at least five years, after which the register must be sent to the competent authorities.

In **Denmark** there is neither a standard form under which records are to be kept, nor a minimum time period to keep the documentary evidence.

In **Germany**, installations, establishments or undertakings which produce, hold and/or dispose of toxic and dangerous waste are required to keep detailed records on the type, the amount, the composition and the origin of waste as well as on treatment or disposal operations to which waste are subject. Records are kept in the form of treatment proofs and standard accompanying forms filed in proof books.

These files have to be kept at least three years after the last entry and must be presented to the authorities on request. In the case of installations closing down, proof books must be kept for at least ten years. For landfills they must be kept at least until the end of the aftercare phase.

The wording of the Directive is taken over literally by **Greek** legislation, but the Commission is not aware of the details of the application of this provision.

In **Spain**, the legislation obliges producers of hazardous waste to present a yearly declaration in a standard form and to keep a register on origin of the waste; quantity, nature and identification code of the waste; waste consigned; pre-treatment processes; temporary storage; custom information in case of imported waste; treatment processes and elimination *in situ*.

Moreover, those managing hazardous waste must present a yearly report in a standard form and keep a register containing information on origin of the waste; quantity, nature, composition, identification codes of the waste; acceptation, receipt and storage; treatment and elimination operations and processes, including information on the destination of the waste after treatment.

Documentary evidence must be kept for a minimum time of five years.

In **France**, establishments which produce, import, export, dispose of, transport or trade certain categories of waste (including many of those containing the substances listed in the Annex to Directive 78/319/EEC) are obliged to keep a register and to submit to the authorities periodical declarations. Moreover, a register must be kept by storage installations of toxic and dangerous waste and by storage installations of certain special final and stabilized industrial waste (*déchets industriels spéciaux ultimes et stabilisés*).

Producers, collectors, transporters, importers and operators of storage, regroupment and pretreatment installations of certain categories of waste must keep records in a standard form, and make them available to the authorities upon request.

There is no standard minimum time of documentary evidence conservation. It falls under the competence of *Préfet du Département* to set it out case by case.

The **Irish** legislation provides for the maintenance of a register by permit holders and any person producing, holding or disposing of toxic and dangerous waste. This must cover the matters set out in Article 14(1) of the Directive. There is no time-limit on how long a register must be retained, but there is provision for the handing over of records to the competent local authority in certain circumstances. The transportation of toxic and dangerous waste is subject to a system of consignment notes. These must be retained for 2 years.

In the **Netherlands**, records have to be kept in a standard form. Installations normally have to notify to designated authorities all receipts or deposits of hazardous waste. Information must be provided on date of deposit, waste consignee, identification and quantity of the waste, nature, characteristics and composition of the waste, location of the installation and treatment processes used. There is a possibility of derogation from the notification obligation, in which case the concerned installation is required to keep a register containing the same information.

Documentary evidence must be kept for a minimum time of three years.

In the **United Kingdom**, producers, carriers and dispensers of special waste are all required to keep a register containing copies of consignment notes which provide the details referred to by the Directive. In addition, disposal sites must keep a record of the location of each deposit of special waste on the site, which must also be linked to the register of consignment notes.

Each of these consignment notes must be kept on the register for not less than two years, in the case of producers and carriers. Disposers must keep copies of the notes and the site record showing the location of deposits, until the waste management licence is surrendered or revoked, when the register must be passed on to the competent authorities.

Article 15: **Inspections**

Any installation, establishment or undertaking producing, holding or disposing of toxic and dangerous waste shall be subject to inspection and supervision by the competent authorities to ensure that the provisions adopted in application of the Directive and the terms of any authorization are fulfilled. To this end, representatives of the competent authorities must be afforded the necessary assistance to carry out any examinations, inspections or investigations concerning the waste, to take samples and to gather any information necessary for the fulfilment of their duties.

Establishment and undertakings dealing with toxic waste in **Flanders** must make information available every month. Waste producers must annually provide the authorities with a specific communication. Inspections may be carried out at any time but there is no minimum frequency.

In **Germany**, authorities responsible according to regional legislation supervise installations which produce, hold or dispose of toxic and dangerous waste. In principle, minimum frequencies of inspections do not exist.

In **France**, there is no fixed minimum inspection and supervision frequency at the national level. Such frequency is set out case by case at the level of the Department, under the authority of *Préfets*.

In **Ireland**, there are powers of inspection for authorized persons. However, the competent authorities have no explicit duty to inspect. The Commission took legal action against Ireland on this point.

There is a minimum frequency of inspection in the **Netherlands**, which, depending on the size and the kind of the installation, varies between twice a year and once every two years.

In the **United Kingdom**, in the case of persons holding a waste management licence, competent authorities are advised in statutory guidance to carry out inspections every 4 months (for in-house storage), 8 times per month (for landfill sites), 4 times per month (for treatment facilities).
The frequency of other inspections is determined by individual authorities.

No fixed minimum frequency exists in **Denmark** and **Spain**.

III. CONCLUSIONS

In consideration of the very limited information provided by the member States to the Commission, both in general and as regards specific requests addressed to them, the content of this report is rather restricted.

Given the strong implications of waste management measures on the internal market, a sound monitoring from the Commission on how waste Directives are implemented is an essential condition for the functioning of an internal market based on a high level of environmental protection. Moreover, the drafting of situation reports, which the Commission then circulates to the other Member States, is a powerful means of exchanging important information and of making the elaboration of future measures in the waste sector more effective.

Based on the information made available to the Commission, the following conclusions may be drawn:

Despite the fact that this Directive was based on Articles 100 and 235 of the Treaty, and the specifically mentioned need to prevent unequal conditions of competition which would affect the functioning of the internal market, the analyses carried out shows a very low level of harmonization of the national legislations on toxic and hazardous waste. This is partly due to the general content of some of the provisions of the Directive (in many cases, simply establishing minimum requirements) and partly to the fact that Member States have, in many cases, not followed the provisions of the Directive aimed at harmonizing the management of toxic and dangerous waste.

The definition of toxic and dangerous waste to be used at national level was to be partly based on elements (quantity or concentration of the substances or material listed in the annex) whose determination was left to the Member States and partly on harmonized elements (the materials or substances listed in the annex). This did not lead to any sort of harmonization of the definitions used by the different Member States.

As regards the main objectives of the Directive (waste prevention, re-use and recycling, obligation to ensure that human health and the environment are not endangered, prohibition of uncontrolled discharge and transport), as well as specific objectives (separation labelling, record keeping, inspections) the Commission does not dispose of enough information to provide qualitative conclusions. It seems that in some cases the wording of the Directive has been taken over by the legislation of the Member States, although the Commission does not dispose of information on how such provisions have been implemented.

Concerning competencies for waste management, there is a clear tendency to define planning procedures and general framework at the national level (though with some exceptions), whereas regions and other local authorities are often responsible for the elaboration of the plans. Authorization, organization and supervision is generally the competence of the regional or local authorities, although there are relevant differences among the Member States due to their different constitutional structures.

Directive 78/319/EEC contained a specific provision allowing Member States to take stricter measures than those contained in the Directive. There was no obligation to submit these stricter measures to the Commission for approval, although under Article 21 (2) they had to be communicated to the Commission. The Commission has not received any communication in this sense. However, this does not mean that stricter measures than those contained in the Directive have not been applied. As an

example, the different approaches followed by Member States in defining toxic and dangerous waste and in implementing other provisions of the Directive may certainly have caused substantial differences in the application of the Directive in the various Countries.

Article 12 (3) of the Directive requires the Commission to arrange for regular comparisons of the plans in order to ensure that implementation of this Directive is sufficiently coordinated. With the very limited number of plans submitted by Member States until very recently, the Commission could not arrange for any such comparison. The coordination of the implementation of this Directive, in particular as regards the waste management plans, has therefore been insufficient. Indeed, there has not been any co-ordinated monitoring of its application. A large number of plans concerning toxic and dangerous waste have not been drafted or have not been communicated to the Commission in time. Their updates have often not been communicated to the Commission as well. This situation was certainly detrimental to an effective and integrated management of toxic and dangerous waste at Community level.

As a conclusion of this implementation report, the Commission considers that Directive 78/319/EEC clearly shows the necessity for the Community to harmonize national measures for waste management, not limiting itself to the production of minimum provisions. Directive 78/319/EEC was probably drafted in too general terms to ensure a high degree of integration of environmental protection in the frame of a functioning internal market. However, even as regards provision of the Directive aimed at harmonizing the management of toxic and hazardous waste, Member States have in most cases preferred to follow national approaches.

The experience related to this Directive also shows clearly the lack of necessary follow-up on the Member States' side, in terms of informing the Commission of the measures taken in application of the Directive, of the problems encountered in doing so, of providing the corresponding waste management plans, and so on.

The Commission hopes that the situation will substantially improve as regards the application of Directive 91/689/EEC which has repealed Directive 78/319/EEC as from 27 June 1995. In this respect, it is important that the new Directive provides for a higher level of harmonization, starting with a common definition of hazardous waste (hazardous waste list)[1].
In this respect, the Commission reminds of the importance of taking over literally, in national legislation, community terminology concerning definitions and lists, since this is the only means of ensuring a high level of environmental protection as well as the correct functioning of the internal market and of competition.

Finally, Directive 91/689/EEC being based on Article 130 S, the Commission is confident that any deviation from it decided by Member States in order to ensure an even higher level of environmental protection than the one on which this Directive is based, will follow the rules and the procedures established under Article 130 T of the EC Treaty.

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1 **COUNCIL DECISION 94/904/EC OF 22.12.1994, O.J. L 356 OF 31.12.1994, P. 14.**

DIRECTIVE 75/439/EEC ON THE DISPOSAL OF WASTE OILS

I Introduction

Directive 75/439/EEC on the disposal of waste oils was a first attempt to tackle the problems of sound management of waste oils on a Community scale. All the Member States, except for Belgium, had transposed the Community Directive in their national legislations. In Belgium, some of the provisions of the Directive had been included in national legislation on environmental protection and in legislation on waste disposal adopted by the Flemish Region of the country.

The differences in transposition and implementation of the Directive in the Member States were numerous. Moreover, these differences, which resulted in divergences in the management of waste oils at European level, created internal market problems.

Thus, a need was felt for the harmonization of national laws at Community level. But the real reason for a new Directive was without any doubt the problem of the contamination of oils by PCBs/PCTs, especially in Germany.

It was to solve these problems and to adapt it to new knowledge and technical progress that the Directive on the disposal of waste oils was amended in December 1986. The important points and the innovations of this new text are as follows:

1. The scope is defined more clearly. There is a new definition of waste oils which excludes synthetic oils and, consequently, PCBs and PCTs.
   Then there is the introduction of a limit on PCBs and PCTs contained by accident in waste oils. Thus, waste oils which are intended for combustion or for regeneration cannot contain more than 50 ppm PCBs. Oils containing more are regarded as hazardous waste, must be treated as such and no longer fall within this Directive.

2. Clear priority is given to regeneration over combustion of waste oils. Generally speaking, it is felt that the regeneration of oils is the most ecological and rational method, given the significant reduction of pollutants discharged into the atmosphere and the savings in energy and non-renewable raw materials it allows. The Directive also allows for combustion where it already exists on a national scale.

3. Special attention is paid to the collection and storage of oils. Any company which collects oils is subject to registration, control and a system of authorization.

   In addition, to make for more effective collection, public awareness-raising programmes have to be provided for by the Member States on storage and collection.

4. Finally, the new Directive establishes limit values for the emissions of pollutants on combustion of waste oil in installation with a thermal capacity of 3 MW or more.

II STAGE OF TRANSPOSITION - NATIONAL IMPLEMENTATION MEASURES

All the Member States have communicated to the Commission the laws, regulations and administrative provisions implemented to comply with the Directive as amended by Directive 87/101/EEC of 22 December 1986.

Nevertheless, infringement procedures are currently initiated against Germany, Italy and Portugal where the measures taken transpose the Directive only in part.

III STAGE OF IMPLEMENTATION - REPORT / RESULTS OF THE ANSWERS FROM THE MEMBER STATES TO THE QUESTIONNAIRE SET OUT IN COMMISSION DECISION 94/474/EEC AS REQUESTED BY THE COMMISSION DEPARTMENTS ON 26.06.95

The Commission asked the Member States for information on the implementation of the Directive 87/101/EEC for the years preceding 1995 and, in particular, 1990 to 1994.

The Member States which complied with this request are: Germany, Spain, France, Italy, Luxembourg, the Netherlands, Portugal and the United Kingdom. Among these answers Portugal's refers unfortunately only to the transposition of the Directive and does not contain the information needed to evaluate the situation regarding the implementation of the Directive in that country. Replies from Germany are also difficult to process in that they refer to a previous questionnaire and response and provide data only for 1991.

Denmark is something of a special case in that it sent a promise to reply, but so far the Commission has not received anything.

Of the Member States which did react to the Commission's request, the Commission has previous contributions from Belgium and Greece, but unfortunately they contain data only up to 1989 and consequently fall outside the period covered in this survey.

Where Ireland is, the Commission has no information regarding implementation of the Directive.

Finally, with regard to the new Member States, Austria, Finland and Sweden, this report covers a period dating from before their integration into the European Union.

The following report summarizes the answers of the Member States to the various questions in the questionnaire referred to above. To make for easier reading, the headings show the numbers of the various points on the questionnaire. The articles referred to are those in Directive 87/101/EEC.

3. a, b, c) **More stringent measures than those provided for by the Directive taken by the Member States (inter alia, ban on burning waste oils - Article 16)**

Spain has not taken more stringent measures than those provided for by the Directive. The ban on burning oils could not apply in Spain since it accepted that it was not to be able to check such a measure.

In **France** the circular of 5 December 1989 authorizing the collection of waste oils and banning any burning of waste oils or unauthorized collection transposes this provision.

Italy has not taken more stringent measures than those provided for by the Directive except in the case of certain limits for the pollutants Cd and Cl. Limit for the PCB: 25 ppm and possibility of burning oils only in installations between 3 and 6 ppm. These measures have not been communicated to the Commission.

In **Luxembourg** the law of 17 June 1994 on the prevention and management of waste gives priority to the regeneration of materials in general and, by deduction, of waste oils. The use of waste as a source of energy is conceivable only for the waste which is not suitable for reuse other than heating. These measures have been communicated to the Commission.

In the **Netherlands** more stringent measures are taken. Requirements have been established regarding the halogen content in PCBs as part of the definition of waste oils. Requirements also exist regarding the halogen content in PCBs when they are used as a fuel or to make fuels. These requirements apply to all fuels. These measures have been communicated to the Commission.

The **United Kingdom** has not felt the need to take more stringent measures.

From the information communicated it does not appear that **Portugal** has taken more stringent measures.

II. 1.a, b, c) **Measures needed to ensure that waste oils are collected and eliminated without causing damage to man and the environment as per Article 2**

All the Member States which answered have adopted measures.

In **Germany** quantities are known only for 1991 when the volume of oils produced was 1 228 000 tonnes: waste oils 616 000 tonnes, collected oils 616 000 tonnes, regenerated oils 402 000 tonnes and oils used as a fuel 214 000 tonnes.

In **Spain** almost all waste oils are used as fuel, while the quantity regenerated has dropped over the last three years to the point of being negligible.

In **France** collection and disposal are organized by specific approval and control procedures. The quantity of oils produced in 1994 was 260 000 tonnes. The collected quantity has increased since 1992 and rose to 197 401 tonnes in 1994. The quantity regenerated fell slightly, to 79 337 tonnes in 1994. The quantity used as fuel, on the other hand, has almost doubled since 1992, reaching 118 064 tonnes in 1994.

In **Italy** the quantity of the oils placed on the market decreased from 692 000 tonnes in 1990 to 616 000 tonnes in 1994. The quantity collected of 169 568 tonnes in 1994 has hardly changed since 1990 whereas the quantity regenerated had increased to 143 529 tonnes in 1994. The quantity used as fuel dropped by half to 22 656 tonnes in 1994 while a very small quantity was disposed of: 1 420 tonnes.

For a collector is approved in **Luxembourg**, he must be authorized in accordance with Article 6 of the Grand-Ducal Regulation of 30 November 1989 on waste oils and in accordance with Article 10 of the law of 17 June 1994 on the prevention and management of waste.
The quantities produced have slightly increased since 1992, reaching 4 554 tonnes in 1994.
This is all collected, but only half of it is regenerated. Use as fuel has dropped considerably since 1992 to 1 997 tonnes in 1994. Only a tiny quantity (11 tonnes) is disposed of.

In the **Netherlands** the quantity of oils placed on the market did not change between 1991 and 1993 when the figure was 179 000 tonnes, producing in turn some 90 000 tonnes of waste oils, two thirds of which is collected . There is no regeneration. Some 47 000 tonnes are used as fuel and 31 000 tonnes are disposed of.

In the **United Kingdom** the quantities placed on the market have fallen slightly since 1990 to at 804 000 tonnes in 1993. The quantity of waste oils also fell slightly to 402 000 tonnes in 1993. The quantity of waste oils collected has increased by about a third since 1990 to 383 000 tonnes in 1993. Almost all of it is burned, the quantity regenerated being minute: 25 000 tonnes in 1993.

2. a, b) **Constraints of a technical, economic and organizational nature within the meaning of Article 3 (1) preventing the Member States from giving priority to the treatment of waste oils by regeneration.**

In **Germany** there have been major constraints due to the very low price of new oils.

There have been no constraints in **Spain** preventing priority for regeneration.

A number of economic realities in **France** make combustion a more profitable method for industry than regeneration.

For **Italy** such constraints exist.

Luxembourg has constraints due to the fact that there are no regeneration plants. This is done abroad. Regeneration is made possible by law of 17 June 1994.

In the **Netherlands** there have been constraints. In the 1980s the government's policy to regenerate waste oils in a central treatment plant (CBE). This never happened because of economic constraints. The present aim is to construct a CBE together with oil producers for waste oils to produce higher fuels (diesel, gas oil for the navy). A company was authorized to this end but has not yet made use of this authorization owing to an appeal procedure which is still before the Council of State.
Collectors have recently made a proposal for regeneration. An analysis took place and the outcome was negative. The difference between the investment needed for an installation designed to produce basic oil and one for fuel production is enormous. The risk that this difference could not be made up within a reasonable time on the basis of the financial surplus of the product after regeneration is considered too great. Thus, it is considered less desirable, for the disposal of waste oils, to entrust the organization of the treatment of waste oils to an association of collectors. At present waste oils are centrifuged. The centrifuged product is sold as a fuel or as a mixture product for fuel production. Incineration of untreated waste oils is practically non-existent. Waste oils are also found in filter rags, etc. This waste is treated as hazardous waste and not as waste oils and is thus often eliminated in an incinerator.

In the **United Kingdom** the recycling of oils ceased in 1986, the reasons being economic and technical: growing competition between oil companies brought the price of virgin oil down as compared with recycled oil. On top of which the processes used for recycling created residues which were difficult and expensive to eliminate.

2. c, d) **Constraints of a technical, economic and organizational nature within the meaning of Article 3 (2) affecting the feasibility of combustion operations**

In **France**, failing regeneration, oils can be eliminated by burning only in facilities approved under environmental protection and containing a heat recovery mechanism.

For **Italy** these constraints exist.

Nor does **Luxembourg** have an oil combustion plant.

The **United Kingdom** has so far had no constraints on the combustion of waste oils.

2.e **If owing to the above-mentioned constraints regeneration or combustion of waste oils has not been possible, have measures been taken for oils to be destroyed, stored or dumped under control and without danger (Article 3(3))**

France and the **Netherlands** did not answer this question.

In **Italy** these measures have not been taken because eliminated oils complied with the emission limits laid down for regeneration and combustion.

In the **United Kingdom** regulations in 1994 authorizing waste management granted an exemption from the requirements permitting the storage of oils in containers not exceeding three cubic metres. This encourages collection among household consumers for recycling.
Therefore, a new method was introduced at the end of 1994. It produces pure oil at an attractive price. This is also addressed to the household consumer.

3.a , b) **Promotion and public information campaigns designed to ensure acceptable storage and maximum collection of waste oils (Article 5(1))**

In **Germany** seminars and conferences are regularly organized for companies and the public with the participation of government and local authorities. Provision is made for the distribution of pamphlets.

In **Spain** information campaigns addressed to the public have been carried out through the media by the environmental authorities of the autonomous regions (Valencia, Catalonia, Andalusia, Basque Country, Galicia and Madrid).

In **France** an information campaign was run in 1986. It consisted of television spots broadcast during the football world cup and a poster campaign. A "green" number was also made available to the public. This number has been kept. Moreover, a Minitel service managed by the ADEME gives the public the addresses of collectors and of collection points. Various information campaigns targeting particular groups have also run at local level.

In **Italy** has also run campaigns. The law 92/95 assigns consortia the task of public awareness-raising (Article 10 a) by way of communications on the disposal of oils. These communications were made through dailies, periodicals and advertising spots. Since 1990 a "green" telephone number gives information free of charge to anyone wondering what to do with waste oils.

In **Luxembourg** various operations have been set in motion as part of the Superdreckskäscht campaign initiated by the Ministry of the Environment: publicity spots and campaigns on the radio, in newspapers and the cinema along with participation in trade fairs.

The same kind of crusade has taken place in the **Netherlands**, in particular, information campaigns for "klein chemisch afval" (KCA: small chemical waste) with media participation. Waste oils had been included in the KCA. These information campaigns were carried out by the government, the national administration and the municipalities. The participating media were television, radio, newspapers and magazines. Posters and advertising in buses (in town) were also used. A booklet on the management of waste oils has been published.

The report gives the impression that waste oils are eliminated legally, partly thanks to information.

In the **United Kingdom** the National Rivers Authority (NRA) launched the Oil Care Campaign in January 1995 with the cooperation and financial support of the oil industry. The most important aspects are: a code of oil care addressed itself to the commercial and household sectors which warns of the dangers of incorrect elimination, and support of the industry in connection with consumers geared to the disposal of oils.

4. **Number of the companies collecting waste oils, alone or with other waste, and number of authorities (Article 5(4))**

In **Germany** there is a dense network of 200 disposal companies collect of waste oils.

In **Spain**, in addition to the authority at national level, each autonomous Community has an environmental authority. The authorization system is regulated by an administrative resolution. In all, 68 authorizations have been granted to companies which collect oils.

In **France** the collection companies are approved by the prefect of the department and thus receive authorization to collect in a given area. Each department has from 1 to 5 collectors and there are 233 in all. They are approved for the collection of waste oils, pursuant to the procedure provided for in the decree 79-981 of 21 November 1979.

In **Italy** the supervisory authority is regional and composed of 20 authorities. There is an authorization system and the total number of companies having obtained authorization is 74. These are companies which also collect other waste and work under contract to the consortia.

In **Luxembourg** there are currently 17 companies collect waste oils, including 7 approved exclusively for oils.

In the **Netherlands** there is one authority at national level and twelve at provincial level. At national level there are three companies permitted solely to treat waste oils and three to treat oils combined with other waste. At provincial level, three companies are authorized to treat oils with other waste. Authorization systems have been established at both levels. Authorization from the Minister is required to collect waste oils. Persons who have the authorization are controlled by the government. Half of them also have a licence for the collection of oil/water/sludge mixtures produced when oil generators are emptied in garages. These authorizations are issued and controlled by the provinces.

In the **United Kingdom** there is no one body which could collate these data. It is the individual regulatory authorities on waste which have them.

5. a, b, c) **Decisions to allocate waste oils to the various types set out in Article 3 and to institute appropriate checks (Article 5(3))**

In **Germany** waste oils are currently re-refined to make basic and processed oils to produce fuels. New techniques like hydration have been developed but are not yet put to sufficient use.

In **Spain** this type of decision does not exist, but aid and subsidies to collect oils intended for regeneration and, to a lesser degree, combustion can be granted by way of various ministerial orders. Despite open market competition, it is the demand of the sector which determines ultimate processing or the final destination of oils. In each case, authorities have control mechanisms regarding the origin and destination of oils.

In **France** the types of processing are as in Article 3 of the Directive, that is, regeneration, combustion and storage. Checks are provided for in the regulations and these are made by the inspector of classified facilities in the area concerned. Where this inspector reports on failure to comply with the regulations provided for in the specifications of the holder of approval, the Minister for the Environment can withdraw this approval by ministerial decree through a procedure provided for in decree No 79-981, Article 9.

In **Italy** this type of decision has not yet emerged. Oils are regenerated or burned, but checks have been instituted for regeneration and combustion.

In **Luxembourg** , the amended Grand-Ducal Regulation of 23 December 1987 relating to the oil- or gas-fired combustion plants prohibits any waste oil combustion in facilities of a capacity lower than 3 MW. For the facilities higher than 3 MW, a prior authorization should be requested from the Ministry of the Environment.

In the **Netherlands** waste oils are used as a fuel after being processed (centrifugation). Five people are authorized to centrifuge waste oils. Authorizations are granted after fulfilment of the conditions concerning health and environmental protection. Checks are made by the province in which the installation is located.

The **United Kingdom** sees no advantage whatsoever in this provision.

6. a, b) **Number of companies permitted to regenerate, use as fuel or eliminate waste oils alone or with other waste, number of authorities and measures taken to guarantee that all the protection measures have been taken (Article 6 (1) and (2))**

In **Germany** the 200 disposal companies are subject to a system of authorization and sanctions.

With regard to the processing of oils alone, two permits have been issued in **Spain** for regeneration, 15 for combustion and 51 for disposal. These permits are only awarded where companies keep records of oils, check the emissions and effluents and submit themselves to checks by the authorities.

In **France**, 54 permits have been granted to companies, of which 27 for the regeneration and 27 for the burning of oils. They are distributed throughout the national territory. The approval procedure is on two levels: regional and national. Approval is granted by ministerial decree of the Minister for the Environment. Checks conformity of the facilities are carried out at regional level.

In **Italy** six permits have been granted for regeneration and two for final elimination. A supervisory authority exists at national level: the Ministry of the Environment.

In **Luxembourg** there are no undertakings which dispose of waste oils.

Permits granted in the **Netherlands** are only for companies which also dispose of other waste. There are 12 provincial authorities and five permits have been granted to disposal companies.

In the **United Kingdom** permits have been issued by a double national authority, Her Majesty's Pollution Inspectorate and the Industrial Pollution Inspectorate: 15 to companies which regenerate and 15 to companies which burn waste oils.
On the other hand, 2 240 permits have been granted by the 456 local authorities, the District Councils, to companies which burn oils. No permits have been issued to companies which process oils with other waste.

7. Measures taken under Article 7 concerning regenerated oils

Spain has taken measures in accordance with Article 7 but has not communicated them to the Commission or given a reason for not doing so.

In **France** Article 7 of the Directive is transposed by circular No 11-86 of 11 March 1986 concerning control of the waste oil recovery sector.

Italy has taken measures but has not communicated them yet to the Commission since the respective departments are still examining the technical standards laid down in national legislation which implement the provisions of Article 7 of the Directive.

In **Luxembourg** the provisions of Article 7 are laid down in the Grand-Ducal Regulation of 30 November 1989 relating to waste oils, in particular Article 8. Waste oil regeneration installations are also subject to the provisions of the law of 17 June 1994 concerning the prevention and management of waste under which operating permits are required. Specific operating conditions are laid down in these permits.

There are no waste oil regeneration plants in Luxembourg. These measures have been communicated to the Commission.

In the **Netherlands** the provisions of Article 7 have not been transposed because waste oils are not regenerated (assuming that basic oils also means basic lubricants).

In the **United Kingdom** the measures taken under Article 7 are as follows:

- Article 7 (a): Parts I and II of the Environmental Protection Act (EPA 1990)
- 1991 Regulations on Environmental protection (Procedures and substances) SI No. 472 amended by the 1994 Regulations on permits for waste management (Regulation 14).

7.a Limit values for pollutants listed in the annex to the Directive (Article 8 (1)(a))

In **Spain** and in **France** facilities with a thermal combustion capacity of more than 3 MW meet the emission limits stipulated by the Directive.

In **Italy** limits for some pollutants are more stringent: Cd 0.2 mg/Nm3, Cl 30 mg/Nm3, Cr, Cu, V, Pb < 5 mg/Nm3.

In **Luxembourg** the Grand-Ducal Regulation lays down the same limit values as the Directive and stipulates that the PCB content in waste oils intended to be burned cannot exceed the 50 ppm. National thresholds recommended for air pollutants which are stricter for the substances listed in the annex to the Directive and for other parameters and substances, however, have been implemented since 1994 within the framework of the respective authorization procedures.

In the **Netherlands** waste oils having undergone processing (in accordance with certain specifications) are not regarded as waste oils. Their use as fuel is subject in this case to the same national conditions as normal fuels. Where waste oil is burned in a garage, this generally involves facilities > 3 MW.

In the **United Kingdom** facilities with a thermal combustion capacity of more than 3 MW meet the same limit values as those laid down by the Directive.

7.b **Limit values for pollutants listed in the annex to the Directive in the event of combustion in facilities with a thermal input of less than 3 MW and precise details of applicable controls (Article 8(1)(b))**

In **Spain** facilities with a thermal combustion capacity of less than 3 MW are not permitted for the combustion of oils.

In **France** facilities with a thermal combustion capacity of less than 3 MW are not involved in disposal of waste oils.

In **Italy** the combustion of oils is not permitted in facilities with a thermal combustion capacity of less than 3 MW.

n the **Netherlands** requirements focus on gas emissions which are laid down in environmental authorizations.

In the **United Kingdom** the only limit values which exist for this type of installation are 5 mg/m3 for Pb and 100 mg/m3 for dust although the lower capacity can be 0.4 MW.

7.c **Number of supervisory authorities relating to the combustion of waste oils (Article 8 (3))**

In **Spain** facilities permitted for the combustion of oils all have a thermal combustion capacity of more than 3 MW. There are six of them and there are 17 authorities in the autonomous Communities.

France did not reply to this question.

In **Italy** there are no authorized installations lower than 3 MW.

In the **Netherlands** the supervisory authority is at municipal level. There are some 600 authorities for facilities with 3 MW or less.

The **United Kingdom** has 456 local supervisory authorities and one national authority for facilities > 3 MW and 456 local authorities for facilities < 3 MW.

8. **Minimum quantities of waste oils specified by the Member States which oblige companies producing, collecting and disposing of them to keep a record and to notify the data to the authorities (Article 11)**

In **Spain** this quantity is 500 litres both for production, collection and disposal.

In **France** an obligation exists for any collector to assemble batches higher than 200 litres. There is no minimum as regards disposal; indeed, the disposal of any consignment of waste oil, whatever the volume, is prohibited out without approval. Likewise, there is no lower limit for production: any holder of waste oils must either to pass on the oil to an approved collector or dispose of it himself if he is authorized to do so.

In **Italy** and in **Luxembourg** the law does not require quantities to be specified.

In the **Netherlands** there is no minimum quantity at national level. Collectors are required to keep a record, to keep it for 10 years and to submit it to the control of the competent authority on request. For each authorized product this must contain: the date of authorization and arrival, the holder, the nature of the goods - waste codes, the quantity by weight, the kind of authorization of goods, reference of the analysis report, and the sum paid.

In the **United Kingdom** this information is not centralized, but efforts are being made in this direction with a view to gathering this information for the first report on the Directive.

9. a, b) **Indemnities granted to undertakings which collect waste oils, average amounts, basis for calculation and financing method (Article 14)**

In **Spain** collection subsidies for an average amount of 500 million pesetas established by two methods of calculation, one for oils intended for regeneration and one for those intended for combustion, were granted by ministerial order for the years 1989, 90, 91, 92 and 94.

In **France** the decree of 31 August 1989 introduced a parafiscal tax on basic oil, managed by the national agency for the disposal and recovery of waste, and levied by the customs administration. Collection undertakings receive compensation per tonne collected.

In **Italy** indemnities are granted to collection companies.

In **Luxembourg** and the **United Kingdom** allowances are not granted to the companies which collect waste oils.

In the **Netherlands** a maximum tariff is fixed monthly, this being established on the basis of the costs and income after treatment. The real tariff is +/ - 10-15 cents per litre, for collection and treatment. Separation of tariffs between these two items is made impossible by the fact that collectors also perform the treatment. (This also answers point 10.a, b).

10. a, b) **Indemnities granted to undertakings which dispose of waste oils, average amounts, basis for calculation and financing method (Article 14)**

In **Germany** no compensation is granted to companies which dispose of waste oils.

Since 1989, **Spain** has given subsidies to the companies which dispose of waste oils. The average is Ptas 6 per kilo. This amount is designed to cover management, collection, transport and disposal costs.

In **France** the parafiscal tax is also allocated to aid for disposal companies as regards investment projects.

In **Italy** allowances are granted to disposal companies.

In **Luxembourg** no compensation is granted to companies which dispose of waste oils.

In the **United Kingdom** no remuneration is planned for companies which dispose of oils.

11. **Measures taken by the Member States to give priority to the treatment of waste oils by regeneration** (this heading did not form part of the questionnaire)

In **Germany** no priority is given to regeneration, but the Regulation on waste oils prohibits mixing with other oils such oils as can be re-refined.

Spain has not provided for this type of measure, but it has indirectly, by certain ministerial orders, favoured regeneration by way of aid for the collection for the oils intended for regeneration.

In **France** the decree of 21 November 1979 states in Article 2 that waste oils should preferably be disposed of by regeneration or recycling in approved facilities.

Italy, the **United Kingdom** and the **Netherlands** have not taken any measures to give priority to regeneration.

In **Luxembourg** the law of 17 June 1994 concerning the prevention and management of waste generally gives priority to regeneration.

IV. CONCLUSIONS

As described in the "General" section, most of the report can cover only communications from six Member States: Spain, Italy, the United Kingdom, France, Luxembourg and the Netherlands, which have given sufficient data for the period 1990-1994.

All these countries have taken the requisite measures to ensure that waste oils are collected and are disposed of without causing harm to man or the environment.

Nevertheless, only France and Luxembourg have given, via laws, clear priority to regeneration, while Spain has encouraged it by certain acts. In practice, it can be seen that over this period the quantity regenerated has increased only in Italy.

In Germany, in 1991 (last set of data), two thirds of the quantity collected were regenerated and the remaining third processed into fuel. Half the quantity of oils from Luxembourg was regenerated.

Over this period in France, the quantities regenerated decreased appreciably while the quantities processed into fuel doubled. In Spain the entire quantity was processed into fuel.

In the United Kingdom, everything has been burned since 1986. Finally, in the Netherlands half of the waste oils collected is processed into fuel and the other half disposed of . To explain this rather disappointing situation, Italy, the United Kingdom, France, Luxembourg, the Netherlands and Germany use the argument of economic constraints in the case of regeneration.

Looking at the other provisions of the Directive, it emerges that dynamic measures exist only up to the stage of collection of the oils. No Member State has shown a firm will for there to be effective priority for regeneration.

All the countries mentioned above have developed and implemented public information campaigns with the aim of ensuring suitable storage and maximum collection of waste oils.

On the other hand, only Italy and Luxembourg have imposed more emission stringent limit values than those in the Directive, and only Italy, Spain and France have imposed minimum quantities for the recording of oils by the companies which collect, process or dispose of them.

As regards indemnities, finally, only the United Kingdom has not granted any for collection, being joined by Luxembourg and Germany in not granting any for disposal.

In conclusion it can be said that:

1) the Directive has only been very partially implemented, and

2) Member States have refrained from giving effective priority to regeneration over the burning of waste oils.

DIRECTIVE 86/278/EEC ON THE PROTECTION OF THE ENVIRONMENT, AND IN PARTICULAR OF THE SOIL, WHEN SEWAGE SLUDGE IS USED IN AGRICULTURE

I. INTRODUCTION

Article 17 of Directive 86/278/EEC adopted by the Council on 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture stipulates that Member States draw up every four years, and for the first time five years after notification of the Directive, a consolidated report on the use of sludge in agriculture.

The Directive having been notified on 17 June 1986, Member States had to draw up their first report, covering the years 1987-1990, by 17 June 1991.

Six Member States, namely, Belgium, Denmark, Germany, Spain, France and the United Kingdom, submitted their reports in 1991/1992. The Commission did not consider it worthwhile publishing such incomplete and highly disparate information with no uniform format.

A second report pursuant to Article 17 of the Directive 86/278/EEC, covering the years 1991-1994, should have been submitted by 17 June 1995. Despite reminders sent on 18 May and 25 July 1995, only Belgium, Spain, France, Portugal and the United Kingdom submitted reports.

As set out in the general introduction, this consolidated report covers the period 1991-1994 and therefore applies only to the 5 aforementioned Member States.

II. TRANSPOSITION OF THE DIRECTIVE IN NATIONAL LAW

Some Member States have still not adopted all the national measures needed to transpose this Directive. Belgium was found guilty by the Court of Justice (judgement of 3 May 1994, case C-260/93) of non-transposition of the Directive. This was rectified in January 1992 for the Flemish Region, in January 1995 for the Walloon Region, and in August 1995 for the Region of Brussels.

At the end of the period covered by this report, the Commission has not yet received an implementing decree to complete Portuguese transposition, while measures to incorporate the Directive into French law, in particular Articles 2 (a), 6(a and b), 9, 10(1) and 16, are the subject of correspondence between the Commission and France.

For Ireland, the situation is as follows: while Annex IA to the Directive refers to soils with a pH of 6 to 7, the equivalent Irish table (part I of the schedule to SI 183 of 1991) refers soils with a pH of 5 to 7. Following a request from the Commission for information concerning this difference in Irish legislation, the Irish authorities provided assurance that this would not cause environmental risks.

III. IMPLEMENTATION OF THE DIRECTIVE: REPORT/RESULTS OF THE ANSWERS BY THE MEMBERS STATES TO THE QUESTIONNAIRE RESULTING FROM COMMISSION DECISION 94/474/EEC .

Following the adoption of Directive 91/692/EEC[1] standardizing and rationalizing reports on the implementation of certain Directives relating to the environment, the Commission adopted a standard questionnaire for the drawing-up of reports on the implementation of Directive 86/278/EEC.
This questionnaire has to be formally used for the first time for the period 1995-97.
The Commission has asked the Member States, however, to use it as far as possible for the 1991-94 report .

For this period, **Belgium, Spain, France, Portugal** and the **United Kingdom** have submitted reports.

The Belgian report does not cover the Region of Brussels which does not yet have a sewage treatment plant. The report from the Walloon Region does not formally follow the questionnaire, since transposition of the Directive was late.

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1 **OJ L377, 31.12.91, P. 48**

The French report does not answer certain questions, while the Portuguese report consists simply of the presentation of a "Portaria" draft.

Of the Member States which did have not reacted to the Commission's request, The Commission has a number of previous contributions for Denmark and Germany. Unfortunately, these contain data only up to 1989 and thus do not come within the period involved in this survey.

The following report presents a summary of the answers from the Member States to the various questions in the abovementioned questionnaire. To make for easier reading, headings have the same numbers as the various points on the questionnaire.

III. 1 Specific conditions where sludge from septic tanks and other similar installations are used (Article 3 (2))

In **Belgium**, a Royal Decree of October 1977 on the use of fertilizers and soil improvers (which is what sludge is) stipulates that they have to be free of any harmful or toxic substances, of insects and toxic nematodes, of microbiological agents or any other phytopathological germs likely to harm flora and human and animal health.

In **Spain**, the conditions for use are the same as for sludge from sewage treatment plants.

In **France**, spreading has to be done by suitable mechanisms and the sludge ploughed in deeply the following day.

Portugal has not given any information

In the **United Kingdom**, the same rules as for sewage treatment plant sludge apply to septic tank sludge; once spread treated and non-injected sludge has to be ploughed in as soon as is reasonably possible.

III.2 (A) Limit values for concentrations of heavy metals in soil and sludge, and maximum quantities applicable

The tables below show the data provided for by Annexes IA, B and C to the Directive.

N° 1. LIMIT VALUES IN SOIL (Mg/Kg) (Annex IA to the Directive)

Parameter	Directive 86/278/EEC	Belgium			Spain		France	Portugal			United Kingdom			
		Flanders		Wallonia										
		Sandy soil	Clay		pH <7	pH > 7		pH <5.5	pH 5.5 <7	pH > 7.0	pH 5.0-5.5	pH 5.5-6.0	pH 6-7	pH > 7
Cadmium	1-3	1	3	1	1	3	2	1	3	4	3	3	3	3
Copper	50-140	50	140	50	50	210	100	50	100	200	80	100	135	200
Nickel	30-75	30	75	50	30	112	50	30	75	110	50	60	75	100
Lead	50-300	50	300	100	50	300	100	50	300	450	300	300	300	300
Zinc	150-300	150	300	200	150	450	300	150	300	450	200	250	300	450
Mercury	1-1 .5	1	1.5	1	1	1.5	1	1	1.5	2.0	1	1	1	1
Chromium	-	100	150	100	100	150	150	50	200	300	400	400	400	400

N° 2. LIMIT VALUES IN SLUDGE (MG/KG) (ANNEX I B)

Parameter	Directive 86/278/EEC	Belgium		Spain		France		Portugal	United Kingdom
		Flanders	Wallonia	pH <7	pH > 7	Reference	Lim		
Cadmium	20-40	12	10	20	40	20	40	20	-
Copper	1 000-1 750	750	600	1 000	1 250	1 000	2 000	1 000	-
Nickel	300-400	100	100	300	400	200	400	300	-
Lead	750-1 200	600	500	750	1 200	800	1 600	750	1 000
Zinc	2 500-4 000	2 500	2 000	2 500	4 000	3000	6 000	2 500	-
Mercury	16-25	10	10	16	25	10	20	16	-
Chromium	-	500	500	1 000	1 500	1000	2000	1000	-

N° 3. LIMIT VALUES FOR AMOUNTS OF HEAVY METALS WHICH MAY BE ADDED ANNUALLY TO AGRICULTURAL LAND (KG/HA / YEAR)(ANNEX I C)

	Directive 86/278/EEC	Belgium			Spain	France	Portugal	United Kingdom
		Flanders		Wallonia				
		Grassland	Crops					
Cd	0.15	0.012	0.024	-	0.15	0.06	0.15	0.15
Cu	12	0.75	1.5	-	12	3	12	7.5
Ni	3	0.1	0.2	-	3	0.6	3	3
Pb	15	0.6	1.2	-	15	2.4	15	15
Zn	30	2.5	5	-	30	9	30	15
Hg	0.1	0.01	0.02	-	0.1	0.03	0.1	0.1
Cr	-	0.5	1	-	3	3	4.5	

III. 2. (b) **Maximum quantities of sludge applicable to soil in tonnes of dry matter/ha/year (Article 5(2)(a))**

In **Flemish Region** 1 tonne of dry matter/ha/year is permitted on grassland and 2 on crops. These amounts can be applied only once every 3 years.

The **United Kingdom** has opted for the approach described in Article 5(2) (b) (fixing of limit values of metals introduced by ha/year) and has not therefore set a maximum quantity of authorized sludge per ha/year.

The other reports (Walloon Region, E, F, P) did not answer this question.

III. 2.(c) **Less stringent limit values for concentrations of heavy metals permitted on land for growing crops intended exclusively for animal consumption (annex IA, note 1)**

Less stringent values are not permitted in the **Flemish Region** or **Spain**.

The reports from the **Walloon Region**, **France** and **Portugal** give no information on this subject.

In the **United Kingdom**, less stringent values are permitted on 11 sites next to sewage treatment plants and otherwise used as sewage fields, covering a total of 2 540 ha. The values permitted, however, are not shown in the report.

III.2. (d) **Less stringent limit values for concentrations of heavy metals permitted in soil with a pH higher than 7 (annex IA, note 2)**

In **the Flemish Region** values of 75, 45 and 225 Mg/Kg are permitted respectively for copper, nickel and zinc in the soil with a pH consistently higher than 7.

The Walloon and French reports did not answer the question.

The limit values permitted in **Spain** and the **United Kingdom** and those proposed in **Portugal** appear in Table No 1 above.

III. 2. (e) **Less stringent limit values for the annual quantities of heavy metals introduced into soils intended for fodder crops (annex IC, note 1)**

Neither the **Flemish Region** nor **Spain** permit less stringent values.

In the **United Kingdom**, the sites already referred to in point II 2 (c) can take advantage of this derogation, but the values permitted are not given.

The Walloon, French and Portuguese reports do not tackle the question.

III.3. (a) **Description of the techniques used for sludge treatment (Article 6)**

In **Flanders**, the technologies permitted consist of long biological, chemical or thermal treatment. Stabilization is carried out by cold treatment for 65% of sludge, hot for 5% and aerobic for the other 30%.

In **Wallonia**, sludge is only "conditioned", without further explanation.

In **Spain**, sludge is filtered, treated physically or chemically, and then dewatered.

In **France**, chemical stabilization is practised by anaerobic or aerobic fermentation, or chemically. The sludge is then thickened by dewatering.

The Portuguese report does not speak about treatment.

In the **United Kingdom**, sludge is pasteurized before being digesting by anaerobic, mesophilic or thermophilic means. It is then composted or stabilized with lime before dewatering.

III.3(b and c) **Frequencies of sludge analysis (annex.II A §1)**

The Walloon and French reports do not speak about analysis frequency.

In **Flanders, Spain** and the **United Kingdom,** frequencies are identical to those in the Directive.

In **Portugal,** under the "Portaria" the frequency of analysis is similar to in the Directive (twice a year), but it can be reduced to once if the results obtained over two consecutive years do not differ significantly. In addition, analyses have to be made when the quality of the waste water treated varies significantly or if there are changes in treatment. Finally, it is not obligatory to analyse Cu, Zn, or Cr if these elements are never present, or only in small quantities, in the waste water being treated.

III.3 (d and c) **Specific measures for the injection and working-in of untreated sludge (Article 6 (a))**

In the **Flemish Region** and **Spain**, only treated sludge can be used.

In **Walloon Region,** it has to be "conditioned".

No specific measures have been taken in the **United Kingdom** .

The French and Portuguese reports do not cover the question.

III.4. **Periods of prohibition of spreading before grazing or harvesting (Article 7)**

In the **Flemish Region**, a six-week period is laid down, without reference to type of crop.

In **Spain**, the periods of prohibition are similar to those in the Directive.

The **Walloon Region**, **France** and **Portugal** give no information on this subject.

The report from the **United Kingdom** simply lays down a 3-week period without distinction between the various types of crop.

III.5 (a and b) **Limit values or other measures for soils with a pH below 6 (Article 8)**

In the **Flemish Region**, it is purely and simply prohibited to spread sludge on soils with a pH below 6.

In **Spain**, (see table relating to annex IA above) the pH limit is 7. For all soils with a lower pH the lower value in annex IA applies.

The same table contains the limit values determined by the **United Kingdom** with a differentiated pH range for Zn, Cu and Ni.

The Walloon, French and Portuguese reports do not tackle the question.

III.6 (a) **Soil analysis for other parameters than pH and heavy metals (annex IIB.1)**

In the **Flemish Region**, the concentration in phosphates is also analysed.

No other parameter is measured in the **Walloon Region**, **Spain** or the **United Kingdom** .

France and Portugal did not provide any information on this subject.

III. 6. (b) **Minimum frequency of soil analysis (annex IIB.2)**

In addition to the provisions of the Directive, an additional analysis of soil is imposed in the **Flemish Region** after every 20 tonnes of sludge.

In **Spain** the frequency of analysis is decided by the autonomous Communities.

The reports of the Walloon Region, France and of Portugal give no information on this subject.

At the **United Kingdom**, soils are analysed a first time when sludge is first used and then 20 years after. At the request of the owner of the soil or the Secretary of State, however, they can also be analysed 5 years after the last analysis.

III. 7. **Quantities of sludge produced by sewage treatment plants, sludge used in agriculture, surface covered, and average concentration of heavy metals in the sludge (from the registers mentioned in Article 10)**

The requisite data are produced in the tables below in the form of average values for the period covered by this report.

N° 4. QUANTITIES OF PRODUCED AND USED SLUDGE

	Sludge produced (T.D.M. / year)	Sludge used in agriculture (T.D.M. / year)	Surface covered (optional)
Flemish region	838 731	212 228	-
Walloon region	13 267	10 044	-
Spain	404 299	204 197	-
France	758 500	496 500	-
Portugal	-	-	-
United Kingdom	1 030 000	500 000	-

N° 5. AVERAGE CONCENTRATION OF HEAVY METALS IN SLUDGE (MG/KG D.M.)

	Directive 86/278/EEC	Belgium		Spain	France	Portugal	United Kingdom
		Flanders	Wallonia				
Cd	20-40	3.6	3.3	6	5.3	-	3.2
Cu	1 000-1 750	312	179	294	334	-	473
Ni	300-400	46	50	49	39	-	37
Pb	750-1 200	229	182	406	133	-	217
Zn	2 500-4 000	1 350	925	1 157	921	-	889
Hg	16-25	1.7	1.5	11	2.7	-	3.2
Cr	-	73	76	363	80	-	86

In addition to the values in heavy metals, the report from the **Flemish Region** presents the results of total nitrogen (26 Mg/Kg D.M.) and total phosphorus analysis (2.2mg/kg D.M.)

III. 8. Exemptions granted the small sewage treatment plants (Article 11)

No exemption is granted in the **Region Flemish** or in the **United Kingdom** .

The other reports do not answer the question.

IV. CONCLUSIONS

It is not possible to draw conclusions at European Union level on the basis of five national reports, of which only 2 1/2 (Spain, United Kingdom and Flemish Region) are complete, except to stress the reticence of the Member States to provide these reports.

On this very restricted basis, however, the Directive can be considered to be fairly well implemented in its major point, the permitted concentrations of heavy metals in sludge used in agriculture. In general these concentrations are much lower than the limit values laid down in Annex IB to the Directive.

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