

## **Manual of European Environmental Policy**

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# Dangerous substances in water

<b>Formal reference</b> <b>Framework Directive <a href="#">76/464/EEC</a></b> (OJ L129 18.5.76) Proposed 21.10.74 – COM(74)1706	Directive on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community
<a href="#">2006/11/EC</a> (OJ L64 04.03.2006)	Directive on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community
<b>Legal base</b>	Articles 115 TFEU (originally Article 100 TEC) and 352 TFEU (originally Article 235 TEC)
<b>Binding dates</b> Notification date	5 May 1976
As no dates are set in the Directive the Commission suggested the following deadlines in a letter dated 3 November 1976: System of authorizations Pollution reduction programmes for List II substances Programmes to be implemented	 15 September 1978 15 September 1981 15 September 1986

Note: In 2006 a consolidating Directive was adopted (2006/11/EC) which brought together the texts of Directive 76/464/EEC and parts of Directives [91/692/EEC](#) and [2000/60/EC](#) without altering their provisions.

## Purpose of the Directive

The Directive sets a framework for the elimination or reduction of pollution of inland, coastal and territorial waters by particularly dangerous substances. Subsequent daughter Directives set standards for particular substances. The Directive is also intended to ensure consistency in implementing various international Conventions and to reduce distortion to conditions of competition.

## Summary of the Directive

### *Directive 76/464/EEC*

An Annex has Lists I and II of families and groups of dangerous substances. List I – sometimes referred to as the ‘Black List’ – includes substances selected on the basis of their toxicity, persistence and bio-accumulation, such as organohalogen and organophosphorus compounds, carcinogenic substances, and mercury and cadmium compounds. List II – sometimes called the ‘Grey List’ – includes possibly less dangerous

substances such as zinc, copper and lead compounds, cyanide and ammonia. For the purposes of the Directive any List I substance is to be treated as a List II substance until a 'daughter' Directive sets limit values for it.

Member States are to take appropriate steps to eliminate pollution by List I substances and to reduce pollution by List II substances. 'Elimination' of pollution does not necessarily mean a zero-emission since pollution is defined not by reference to the presence of a substance but to its effects.

Discharges of both List I and List II substances are to be subject to prior authorization by a competent authority, but these authorizations are arrived at in different ways.

For controlling **List II** substances, Member States are to establish pollution reduction programmes with deadlines for implementation. All discharges liable to contain a List II substance require prior authorization with emission standards being laid down. These emission standards are to be based on quality objectives. These quality objectives must be laid down in accordance with any existing Directives. Summaries of the programmes and the results of implementation are to be communicated to the Commission which is to arrange for regular comparisons. The Commission may make proposals to ensure sufficient coordination of national programmes.

For controlling **List I** substances, Member States may choose between two alternative regimes. The preferred regime entails limit values by which emission standards set at national level are not to exceed. It is often said that the Directive requires 'uniform emission standards' to be laid down. This is incorrect and the words 'uniform emission standards' do not appear in the Directive. What the Directive requires is the laying down of *limit values* at Community level and the authorities in the Member States may impose emission standards more stringent than the limit values but not less stringent. These emission limits are to be fixed uniformly throughout the Community in daughter Directives. The alternative regime entails emission standards set by reference to quality objectives. The quality objectives are also to be laid down in daughter Directives. Use of the alternative regime is conditional on the Member State proving to the Commission that the quality objectives are being met in accordance with a monitoring procedure set up by the Council.

At the Council meeting of 4 May 1976 all Member States except Britain declared that they would adopt the preferred regime<sup>1</sup>.

The emission limits are to be laid down mainly on the basis of toxicity, persistence and bioaccumulation taking into account the best technical means available, though this latter point was qualified in a statement made at the Council meeting of 4 May 1976 to the effect that 'best technical means available' is to take into account the economic availability of those means.

Member States are to draw up inventories of all discharges, which may contain List I substances, and supply them to the Commission at its request. The Commission may also

ask for information about authorizations and the results of monitoring.

Two points need to be emphasized. First, programmes for the reduction of pollution are required for List II but not for List I substances. But, secondly, since all substances are to be treated in law as List II substances until a daughter Directive converts a substance into a List I substance, all substances, at least initially, should in theory be made the subject of pollution reduction programmes, based on quality objectives. By 1991 only 17 substances had been put into List I (see below) and none were added since. All other potential List I substances remain, in law, List II substances.

Directive 2006/11/EC is a consolidating Directive bringing together the original Directive (76/464/EEC) and the daughter Directives (see below) into a single text.

### *The 'daughter' Directives*

By the end of 1990 seven daughter Directives had been agreed, relating to some seventeen substances (see Table 1). In addition, the Commission had proposed further 16 substances, which were to be given legislative priority (see Table 2). Together they include heavy metals and a large number of substances used as agricultural herbicides and pesticides. The first four Directives, relating to mercury, cadmium, and HCH, were agreed separately, while the remaining three were developed in the framework of the 'big sister' Directive [86/280/EEC](#). They all share the following common features.

#### *1. The 'parallel' approach*

In accordance with the compromise enshrined in Directive 76/464/EEC, Member States are to authorize all discharges of dangerous substances following either of the two regimes described in that Directive; that is, authorizations are generally to conform either with limit values, or to quality objectives. This requirement applies generally to any level of discharge, except where specific exemptions are given for insignificant discharges, as in the case of chloroform, EDC, TRI and PER.

#### *2. Limit values*

For each substance, limit values are specified for different types of processes or industrial sectors, and are to be met generally in two stages, normally three years apart. The limit values are expressed in two ways – in terms of concentration and in terms of quantity in relation to installed production capacity. The limit values in terms of quantity *must* be observed, while those given in terms of concentration should *in principle* not be exceeded. Limit values are to be reviewed every four years in the light of changes in scientific knowledge or improvements in pollution control technology.

**Table 1. ‘Daughter’ Directives adopted under the Dangerous Substances Directive 76/464/EEC**

<b>Formal reference</b>	<b>Title of Directive</b>	<b>Substances addressed</b>	<b>Binding dates</b>
<a href="#">82/176/EEC</a> , L81, 27.03.82	Directive on limit values and quality objectives for mercury discharges by the chloralkali electrolysis industry	Mercury	Proposed: 14.06.79 – COM(79)296 Notification: 25.03.82 Formal compliance: 12.03.86 Standards to be met: 01.07.86 and 01.07.8
<a href="#">84/156/EEC</a> , L74, 17.03.84	Directive on limit values and quality objectives for mercury by sectors other than the chloralkali industry	Mercury	Proposed: 15.12.82 – COM(82)838 Notification: 18.03.84 Formal compliance: 12.03.86 Standards to be met: 01.07.86 and 01.07.89
<a href="#">83/513/EEC</a> , L291, 24.10.83	Directive on limit values and quality objectives for cadmium discharges	Cadmium	Proposed: 17.02.81 – COM(81)56 Notification: 28.09.83 Formal compliance: 28.09.85 Standards to be met: 01.01.86 and 01.01.89
<a href="#">84/491/EEC</a> , L274, 17.10.84	Directive on limit values and quality objectives for discharges of hexachlorocyclohexane	Hexachlorocyclohexane	Proposed: 07.07.83 – COM(83)422 Notification: 11.10.84 Formal compliance: 01.04.86 Standards to be met: 01.04.86 and 01.10.88
86/280/EEC, L181, 04.07.86	Directive on limit values and quality objectives for discharges of certain dangerous substances included in List I of the annex to Directive 76/464/EEC (‘general application Directive’)	DDT, carbon tetrachloride, pentachlorophenol	Proposed: 28.01.85 – COM(84)772 Notification: 16.06.86 Formal compliance: 01.01.88 Standards to be met: 01.01.88 and 01.01.91
<a href="#">88/347/EEC</a> , L158, 25.06.88	Directive amending Annex II to and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC	Aldrin, dieldrin, endrin, isodrin, hexachlorobenzene, hexachlorobutadiene and chloroform	Proposed: ‘drins’ – 14.05.75 – COM(79)243, COM(84)772, COM(86)534 Notification: 16.06.88 Formal compliance & standards to be met: 01.01.89
<a href="#">90/415/EEC</a> , L219,	Directive amending Annex II to	1,2-dichloroethane,	Proposed: COM(88)432

14.08.90	and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC	trichloroethane, perchloroethane, trichlorobenzene	Notification: 31.07.90 Formal compliance: 01.01.92 Standards to be met: 01.01.93 and 01.01.95
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**Table 2. List of priority substances proposed to be the subject of further ‘daughter’ Directives ([COM\(90\)9](#)).**

Numbers within parentheses refer to position in the original list of Black List substances. Atrazine was not mentioned in the original Black List because its use was estimated to be low in Member States at that time. However, in the last few years it became obvious that atrazine is extensively used as a herbicide. It is similar to simazine, which is included in the list.

Trifluralin (124) Endosulfan (76) Simazine (106) Triorganotin comp – Tributyltin oxide (115) – Triphenyltin acetate (125) – Triphenyltin chloride (126) – Triphenyltin hydroxide (127) Atrazine (131) Organophosphorous substances: – Azinphos-ethyl (5) – Azinphos-methyl (6) – Fenitrothion (80) – Fenthion (81) – Malathion (89) – Parathion and Parathion-methyl (100) – Dichlorvos (70)
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### 3. *Quality objectives*

Quality objectives are given for various bodies of water (which may include inland surface waters, estuaries, coastal and territorial and water abstracted for drinking), and sometimes fish flesh. It is for the competent authority in the Member State to determine the area affected by discharges in each case and to select from among the various quality objectives those that are most appropriate, bearing in mind that the purpose of the Directive is to eliminate pollution. Emission standards are then to be set by the Member State so that the appropriate quality objective(s) is or are complied with in the area affected. A 'standstill' provision applies requiring that the concentration of the substance in sediment, fish and shellfish should not increase significantly over time.

### 4. *New plant*

An important departure from the limit value/quality objective 'parallel' approach occurs in the case of new plant. Authorizations should generally require the use of the best technical means available for minimizing pollution (which is nowhere defined in the daughter Directives), even in the case of a Member State following the quality objective path. Authorization for plants using less than the best technical means has to be justified to the Commission, which must report its opinion within three months. A dispute over this issue arose during discussion of Directive 82/176/EEC on mercury from the chloralkali industry. The competition aspect was particularly important to the French and Italians and they argued that if a country applying quality objectives did not have to apply the limit values that would otherwise apply in the case of a new plant there would be distortion of competition. To the United Kingdom it was important to uphold the principle underlying the use of quality objectives: the emission standard to be applied to any plant new or otherwise should be related to the quality to be met in the receiving waters. The deadlock reached in the Council of Ministers was finally resolved by a complicated wording supported by statements in the Council minutes. Authorizations for new plants must contain a reference to best technical means, the standards corresponding to them and, where the measures do not conform to these standards, the reasons must be supplied to the Commission. The Commission is required to report to Member States with its opinion. The wording actually avoids requiring best technical means to be used so satisfying the British point of principle but in effect creating a climate in which it would be very difficult not to use them. Implicit in the agreement, though unstated, is the understanding that it would be unrealistic to build a new plant which did not make use of processes based on the best technical means available. The publication of a Council minute to accompany a Directive set a precedent.

### 5. *Diffuse sources*

In recognition that the use of emission standards is only effective where discharges arise from a limited number of identifiable point sources, Member States are required, within a specified timescale, to draw up programmes for reducing pollution from diffuse sources and those for which no specific discharge limits are laid down. This was made a standard requirement by the 'general application' Directive 86/280/EEC. A similar provision had been included in Directive 84/156/EEC on controlling mercury emissions, but not in the case of cadmium or HCH.

## 6. *Monitoring and analysis*

General principles concerning reference methods of monitoring and analysis applicable to all substances are contained in Directive 86/280/EEC, and these are amplified in the daughter Directives by specific provisions applicable to individual substances.

## 7. *Comparative assessments*

Member States must supply the Commission at its request with details of authorizations and the results of monitoring to determine the presence of individual substances. The Commission is to prepare a comparative assessment of the Directive and forward it to the Council, generally every five years. A comparative assessment of administrative structures and implementation of the Directive was published by the Commission in 1996<sup>2</sup>.

# Development of Directive 76/464/EEC

The day before the Council was due to consider the proposal for this Directive on 16 October 1975 a leading article in *The Times* under the headline 'The Rhine and the Thames' explained the differences between the British government and the Commission concerning this Directive in terms highly critical of the Commission. The Directive was the focus of much attention in Britain. As well as being contentious, it was also potentially one of the most important and certainly implied a large programme of work for the future. It also had a number of other distinctive features: unlike all other water Directives, no date is set for compliance; the proposal submitted by the Commission to the Council was a proposal for a Decision and not a Directive; and there was no foundation for that part of the Directive dealing with limit values in the first action programme.

The preamble to the Directive explains its origins by referring to the need to coordinate the implementation of several international conventions concerned with river pollution that were under discussion when the Directive was proposed in October 1974:

- The Paris Convention for the prevention of marine pollution from land-based sources – adopted 4 June 1974.
- The Convention for the Protection of the Rhine against chemical pollution – adopted 3 December 1976.
- The draft Strasbourg Convention for the protection of international watercourses against pollution.

The three [Conventions](#) affected different Member States to different extents. The Paris Convention was concerned only with discharges, including those from rivers, into the North Sea and North-East Atlantic. The parties to the Rhine Convention are its riparian States plus the European Community. The Strasbourg Convention, being negotiated under the auspices of the Council of Europe, would deal only with rivers crossing national frontiers and so would not affect, for example, the Seine or the Thames. All three Conventions had two lists inspired by the generally similar lists in the Oslo and London Conventions concerned with dumping at sea.

The **Paris Convention** had two lists which were similar but not identical to the lists in the Directive. Unlike the Directive, pollution reduction programmes with time limits were to be implemented for both lists but for neither list, again unlike the Directive, did emission limits have to be laid down.

The **Rhine Convention** similarly had two lists. An International Commission was to lay down emission limits. Discharges of List I substances were not to exceed the emission limits, but discharges of List II substances were to be subject to emission standards set by national authorities by reference to quality objectives and national programmes. The Rhine Convention was therefore rather similar to the preferred regime of the Directive.

The draft of the **Strasbourg Convention** was not publicly available at the time, but the Commission's explanatory memorandum accompanying the proposal for the Directive (or Decision as it then was) (COM(74)1706) suggested that the Convention would include quite stringent standards for the international rivers that would be covered by it.

The Belgian government is given the credit for initiating the Directive by the report of the Environment Committee of the European Parliament. The Belgian government appears to have believed that Antwerp, lying on the Scheldt, and hence subject to the possibly stringent standards of the Strasbourg Convention, would be at a disadvantage in comparison with, say, London or Le Havre, which do not lie on international rivers. The Belgian government appears to have persuaded the Commission that there was a need to ensure that all Member States should be subject to similar provisions. Seen thus, the origin of the Directive was economic, and the economic self-interest of Britain, where many discharges are made to estuaries or short fast rivers, lay in resisting centrally fixed emission limits. The discussions that followed were clearly coloured by this as emerges from the deliberations in Parliament.

The Directive/Decision as proposed involved emission limits for both List I and List II substances set by a qualified majority vote in the Council. However, two months later when the UK Minister and officials gave evidence before the House of Commons' Scrutiny Committee, the proposal had already been modified. An official explained that 'there is general agreement among the delegations that the right approach for dealing with the substances in List II would be to set environmental quality objectives'. The Rhine Convention, to which Britain is not a party, also showed that the use of variable emission standards set nationally according to quality objectives was a concept accepted by other countries even for dangerous substances.

In the event, the British government finally decided to resist centrally fixed emission limits for List I substances and no agreement was reached at the Council meeting of 16 October 1975. A compromise allowing two regimes for List I was then agreed in principle at the Council meeting in December.

Replies by UK officials to the Commons' Scrutiny Committee never-the-less show that there was the possibility of Britain agreeing to centrally fixed limit values for List I

substances, a possibility known to Commission officials. The confusion that finally culminated in the failure of the October 1975 Council meeting and the subsequent recriminations was exacerbated by the difficulty that British officials had in obtaining a Decision from Ministers at a time when a referendum was being held in Britain on the question of Britain's continuing membership of the Community. British industry was strongly opposed to centrally fixed emission limits for reasons of self-interest and this view finally prevailed in the government.

The fullest statement of the British government's position was the 3700 word speech made by the Minister, Denis Howell, at the October Council Meeting. He emphasized the environmental, administrative and economic soundness of the British government's traditionally decentralized approach, and while accepting that other reasons applied in other countries, ignored the counterarguments that had been rehearsed even in the British context. The Commission and the other Member States for their part emphasized the competition argument and the administrative convenience of fixed emission limits while overlooking the lack of logic inherent in holding such a position for List I but not List II substances. Whatever arguments about competition and administrative convenience apply to List I must also apply to List II, and everyone had agreed that List II substances should not be subject to emission limits. The protagonists thus found themselves in curious positions: the British who so frequently like to describe themselves as being pragmatic found themselves wedded to a doctrine, and other countries who pride themselves on being logical found themselves advocating a Directive with a fundamental illogicality, which can only be justified on grounds of expediency. The British insistence on the doctrine of environmental quality objectives was all the more curious given that it was not a doctrine that had been practised in Britain in the explicit way required by the Directive.

In addition to the major changes concerning Lists I and II, the proposal was also changed in a way which renders the inventory of much less value. Whereas the proposal required an inventory for discharges of both List I and List II substances, the Directive only requires an inventory of List I substances. Since all substances are to be treated in law as List II until effectively put into List I by a daughter Directive and since by 1991 daughter Directives relating to only 17 substances had been agreed, the inventory is of limited value.

## **The development of 'daughter' Directives**

### *Identification of List I ('Black List') substances*

In June 1982 the Commission submitted a Communication to the Council (OJ C176 14.7.82) concerning List I substances. This explained that studies had identified 1,500 substances used for technical purposes belonging to the families and groups of List I and that of these 1000 were produced or used in quantities of less than 100 t/yr, 186 more than 1,000 t/yr, 44 more than 10,000 t/yr and only 25 in excess of 100,000 t/yr.

Five hundred of the substances had been examined to evaluate risks to water and pared

down to a priority list of 108 substances for further study. Fifteen were selected to be studied first. In addition to these 108 substances, 21 substances had already been studied, making a total of 129 substances. They were listed in the Communication with the caveat that the list was not final (and, indeed, it was later extended to 131).

In February 1983, the Council adopted a Resolution (OJ C46 17.2.83) noting the Commission's Communication and stating that the list of 129 substances would serve as a basis for further work. The list included 17 substances that by early 1991 had been made the subject of daughter Directives (see below).

The criteria for prioritizing Black List substances were the cause of some dispute. The United Kingdom in particular had argued that the Commission's selection criteria had not been properly scientific, expressing serious reservations about the inclusion of such substances as carbon tetrachloride and chloroform in daughter Directives on the grounds that these were not among the most dangerous substances. In the case of the former, the United Kingdom dropped its opposition only after securing agreement to a Council minute instructing the Commission to 'give priority to substances which are *likely* to be present in Community waters at levels which cause particularly important environmental problems'<sup>3</sup>. The United Kingdom announced its own priority 'Red List' of 23 of the most dangerous pollutants at the second North Sea Conference in November 1987. These were selected from the EC's list of 129 substances on the basis of criteria which included, but went beyond, those employed by the Commission (see below). One of the UK's intentions in developing the Red List was to give more focus to the development of future daughter Directives, and indeed, following an informal meeting of EC Environment ministers in Frankfurt in June 1988, a new EC priority list was agreed in principle based on the UK Red List<sup>4</sup>. In February 1990, the Commission formally proposed that 16 of these substances should be given priority in the development of future daughter Directives, beyond the 17 that were already the subject of agreed or proposed Directives ([COM\(90\)9](#)).

#### *Agreement of daughter Directives*

The pace at which the Commission made proposals for daughter Directives and the speed of their subsequent agreement in the Council were both very slow. The parent Directive was agreed in 1975 (adoption was not until May 1976 because of lengthy discussions on the finer points of the text): the first proposal (on 'drins') took over three years to produce and dealt with discharges from only one plant in the Community. It was not agreed until 1988. The second proposal (mercury from chloralkali plants) appeared a month later and was finally adopted in March 1982 – over six years from agreement of the parent Directive.

Essentially, the discussion of the daughter Directives was a re-run of all the old problems which had so beset the parent Directive and the differences of view about the limit value and the quality objective approaches. Significantly it showed the suspicions held by the continental countries and a determined attempt by the Commission to make the quality objective approach one which would result in very much more stringent standards for

emissions. Other points of difficulty concerned whether new plant should adopt the best available technology for limiting emissions, even when the quality objective approach was being followed, and whether daughter Directives should also require the control of emissions to air.

Such slow progress prompted a Council Resolution of 7 February 1983 calling for simplified procedures to speed up implementation of the framework Directive. The result was Directive 86/280/EEC, a 'general application' Directive containing provisions applicable to all Black List substances that were to be made the subject of future daughter Directives. This 'big sister' Directive henceforth made it possible to restrict discussions to the technical essentials specific to individual substances, which could be added to Annexes in the Directive by subsequent amending daughter Directives. The effect was significant: whereas in the ten years preceding 86/280/EEC, agreement could be reached on only three substances, afterwards fourteen substances were made the subject of daughter Directives in just four years.

The pace was insufficient, however, for the European Parliament's Environment Committee and the majority of Member States. At the informal seminar in Frankfurt in June 1988 on future Community water policy, most environment ministers urged that while the identification of priority Black List substances should continue to be made on the basis of unanimity, emission standards and quality objectives in future daughter Directives should be set by qualified majority vote under the new Article 130S agreed two years before in the Single European Act. Formal proposals to this effect made by the Commission in February 1990 ([COM\(90\)9](#)) were opposed by the United Kingdom, on the grounds that unacceptably stringent quality standards could be forced upon it by other Member States which themselves had no intention of using them<sup>5</sup>. The proposal was officially withdrawn by the Commission in 1993.

#### *The alternative limit value/quality objective approach*

Questions about the effectiveness of adopting either emission standards or quality objectives as exclusive paths to pollution control were raised by the UK Parliament on the 'general application' Directive 86/280/EEC. Of particular relevance to this issue was the problem of diffuse sources, especially when the number of point sources was limited. A submission by the Institute for European Environmental Policy, which would make limit values additional to quality objectives rather than alternatives, was the stimulus for this wider discussion (see below). The UK House of Lords supported the basic concept of an approach which would apply to all Member States without a choice.

The Economic and Social Committee echoed somewhat similar reservations about the need to achieve a balanced combination of the use of both limit values and quality objectives and also about the selection of substances. The Resolution from the European Parliament made the same point in describing the two systems as complementary.

The final version of Directive 86/280/EEC differed in a number of significant points from the original proposal: monitoring was to be applied to waters affected by other sources of

discharge besides those from industrial establishments; programmes to avoid or eliminate pollution from sources other than sources covered by Community or national standards were extended to cover diffuse sources; specific provisions concerning no significant increase in concentrations in DDT and PCP in sediments and animal life (standstill) were made generally applicable, and not just to the quality objective approach.

## Implementation of the Directives

Steps towards meeting the requirement in the Directive to eliminate pollution by List I substances were taken in 1987 by the Second North Sea Conference, which pledged to reduce inputs via rivers and estuaries by 50 per cent over the period of 1985–1995. This commitment was reinforced at the Third North Sea Conference in the Hague in March 1990, when ministers declared that ‘discharges of these substances should be reduced to levels that are not harmful to man or nature before the year 2000’. The Hague Conference also set more stringent reduction targets for emissions of the most dangerous substances, including dioxins, mercury, cadmium and lead. Total inputs of these substances to the marine environment via all pathways are to be cut by at least 70 per cent over the period 1985–1995 ‘provided that the use of Best Available Technology or other low waste technology measures enable such reductions’.

The Commission called a meeting of experts from Member States as early as 1981 (see European parliamentary question C305 22.11.82) at which priorities were set for comparing national programmes for List II substances. Six substances were selected for priority attention: chromium, lead, zinc, copper, nickel and arsenic and Member States were asked about their programmes for chromium. As a result of information supplied by some Member States, the Commission proposed a Directive on quality standards for chromium (COM(85)733 OJ C351 31.12.85). This was later revised (COM(88)29) to reflect the Opinion of the European Parliament that Member States should apply *both* limit values and quality objectives. However, this was never adopted and no further action has taken place.

In 2000 the Commission issued guidance on pollution reduction programmes<sup>6</sup>. Also since 1996 the Commission has published reports on the implementation and effectiveness of Directive 76/464/EEC and its daughter Directives<sup>7</sup>. The 2003 report on pollution reduction programmes found that the implementation of Article 7 in the Member States varied considerably, with some Member States having only recently developed such programmes. Indeed, still one had not started preparing a programme. Some of the programmes were based on regions or river basins (not covering the whole of a Member State). In some cases the substances covered were very limited (although some included all of the 139 ‘tentative List II’ substances), and in some Member States a sectoral approach was taken, rather than establishing substance-specific programme. Substances selected were based on water monitoring information or emission registers. Eleven Member States had established legally enforceable environmental quality standards for List II substances and four had non-binding standards. These were generally at a national level, except in Belgium and Italy where they were set at regional level. Legislation had been passed in all Member States requiring the authorization of discharges containing

List II substances to surface waters and to sewers, although this did not necessarily cover all List II substances selected as relevant. Four Member States had established industry-specific uniform emission standards, while others base limits on Best Available Techniques or similar. Eight Member States had provided information on marketing and use restrictions for selected List II substances, mostly driven by other EU legislation. Other measures adopted included Codes of Practice and advanced wastewater treatment. The number of substances monitored varied significantly between Member States, as did the frequency of monitoring.

The 2003 report on the achievements and obstacles on implementation of Directive 76/464/EEC concluded that despite much slow progress in implementing the Directive, there had been significant successes in reducing discharges and emissions of dangerous substances, demonstrated by the progressive reductions of loads of some of these substances to the North-East Atlantic and the Baltic Sea and some major river catchments, leading to some improvements in water quality.

## **Enforcement and court cases**

A large number of cases have been decided by the European Court of Justice regarding Directive 76/464/EEC, its daughter Directives and consolidating Directive 2006/11/EC. The following cases concern the failure by Member States to transpose the Directives adequately:

- [C-213/97](#) 28/05/1998. This was a judgement against Portugal for failure to transpose Directive 86/280/EEC (amended by Directive 88/347/EEC) within the required deadlines.
- [C-206/96](#) 11/06/1998. This was a judgement against Luxembourg for failure to implement pollution reduction programmes, in particular the absence of Regulation concerning List II substances. Luxembourg argued that it did not have the activities that produce the substances. However, the Court ruled that Regulation should be in place to implement Directive 76/464/EEC.
- [C-208/97](#) 18/06/1998. This was a judgement against Portugal for failure to transpose Directive 84/156/EEC within the required deadlines.

The following case concerned the ability of a regional authority to act to implement Directive 76/464/EEC in the absence of adequate national transposition:

- [C-168/95](#) 26.09.1996. Pretura Circondariale di Vicenza (Italy) v Luciano Arcaro. This was a Case brought to address questions referred to it by the Pretura Circondariale di Vicenza, that is, if there is a failure to transpose Directives 76/464/EEC and 83/513/EEC in national law with regard to discharges of Cadmium, could a public authority rely on the provisions of the Directives themselves to impose obligations on individuals. The Court ruled that it could not – ‘there is no method of procedure in Community law allowing the national court to eliminate national provisions contrary to a provision of a Directive which has

- not been transposed where that provision may not be relied upon before the national court’.
- [C-282/02](#) 02.06.2005. The Court found that Ireland was in breach of Directive 76/464/EEC for having failed to transpose it correctly into national law. The Court ruled that even though the Directive did not set any time limit, without such timetables in national law, transposition would be meaningless. Also the Court ruled that Ireland had failed to establish adequate pollution reduction programmes for List II substances.

The following cases concern the failure by Member States to adopt pollution reduction programmes adequately:

- [C-232/95 C-233/95](#) 11.06.1998. This was a judgement against Greece for failing to establish programmes including quality objectives and setting deadlines to reduce the pollution of the waters of Lake Vegorritis, the Soulos River and the Gulf of Pagasaí, by List II substances of Directive 76/464/EEC.
- [C-285/96](#) 01.10.1998. This was a judgement against Italy for failure to implement pollution reduction programmes.
- [C-214/96](#) 25.11.1998. This was a judgement against Spain for failure to adopt pollution reduction programmes under Directive 76/464/EEC. Spain had argued that it had only recently joined the European Community and that the amount of work was a significant strain on the administration. This argument was not accepted by the Court.
- [C-207/97](#) 21.01.1999. This was a judgement against Belgium for failure to adopt pollution reduction programmes according to Article 7 of Directive 76/464/EEC. Belgium argued that the list of substances in the Directive was indicative and not legally binding. The Court stated that Member States are under a legal obligation to reduce pollution even though emission limit values have not been determined at Community level. It further stated that a pollution reduction programme ‘must embody a comprehensive and coherent approach, covering the entire national territory of each Member State and providing practical and coordinated arrangements for the reduction of pollution caused by any of the substances in List II which is relevant in the particular context of the Member State concerned, in accordance with the quality objectives fixed by those programmes for the waters affected’.
- [C-184/97](#) 11.11.1999. This was a judgement against Germany for failure to adopt adequate pollution reduction programmes required by Article 7 of Directive 76/464/EEC. Germany argued that it was seeking to reach the same results by establishing stricter water standards, but the Court ruled that while this might have been the case, it did not remove the obligation on Germany to meet its obligations under the Directive.
- [C-384/97](#) 25.05.2000. This was a judgement against Greece for failure to adopt adequate pollution reduction programmes required by Article 7 of Directive 76/464/EEC as its programmes did not establish quality plans and timetables and the measures proposed were ad hoc and inadequate.

- [C-261/98](#) 13.07.2000. This was a judgement against Portugal for failure to adopt adequate pollution reduction programmes required by Article 7 of Directive 76/464/EEC as those submitted were too broad and general to qualify and gave no indication either as to the quality objectives pursued for List II substances or the deadlines for implementing those plans.
- [C-152/98](#) 10.05.2001. This was a judgement against the Netherlands for failure to implement Articles 7 of Directive 76/464/EEC by not setting quality objectives for the Scheldt basin.
- [C-130/01](#) 12.06.2003. This was a judgement against France for failure to adopt adequate pollution reduction programmes required by Article 7 of Directive 76/464/EEC. France had adopted a procedure through aggregated water quality classification, but the Court considered that the individual List II pollutants should be specifically addressed.

The following cases concern the failure by Member States to ensure that activities that discharge dangerous substances have adequate prior authorization as required by Directive 76/464/EEC:

- [C-230/00](#) 14.06.2001. This was a judgement against Belgium for failure fully to implement, amongst others, Directive 76/464/EEC through reliance on tacit authorization of discharges, whereas the Court ruled that each discharge should be subject to an individual examination for authorization.
- [C-381/07](#) 06/11/2008. Association nationale pour la protection des eaux et rivières – TOS v Ministère de l'Écologie, du Développement et de l'Aménagement durables. The Case was brought to answer the question of whether, for activities with low levels of pollution, a declaratory system (whereby the operator gives prior information on the operation with the public authority having a right to object) could be used rather than one of prior authorization by a public authority. The Court ruled that such a scheme cannot be regarded as equivalent to the scheme of prior authorization provided for in Article 6 of Directive 2006/11/EC.

The following cases concern the failure by Member States to meet the reporting requirements of the Directives:

- [C-435/99](#) 12.12.2000. This was a judgement against Portugal for failure to provide implementation reports required under Directive 91/692/EEC regarding Directives 76/464/EEC, 82/172/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC.
- [C-406/02](#) 12.02.2004. This was a judgement against Belgium for failure to provide reporting information required under Directive 91/692/EEC regarding Directive 76/464/EEC for the Brussels Region.

The following two cases arising from the Netherlands concern the interpretation of 'discharge' within Directive 76/464/EEC:

- [C-231/97](#) 29.09.1999. A.M.L. van Rooij v Dagelijks bestuur van het waterschap de Dommel. This Case concerned the interpretation of the term ‘discharge’ in Directive 76/464/EEC. This case concerned a business that treated wood by a method of steam fixation of a preservative solution called ‘superwolman’. It held an authorization granted to it under the national Environment Management Law. During the wood impregnation process, steam was released which was then precipitated directly or indirectly onto nearby surface water. A local resident claimed that the steam contained substances of Annex II of the Directive 76/464/EEC, and that it was polluting the nearby surface water. The question was whether the term discharge was to be understood as steam and if the distance of the nearby surface water was to be taken into account in the interpretation of whether it was a discharge. The Court decided that polluted steam emissions were to be understood as falling under the scope of the Directive, the distance being useful only in the determination of the predictability of the pollution and in establishing the liability of the producer.
- [C-232/97](#) 29.09.1999. L. Nederhoff & Zn v Dijkgraaf en hoogheemraden van het Hoogheemraadschap Rijnland. This Case concerned the interpretation of the term ‘discharge’ in Directive 76/464/EEC. The Case arose due to the placing of wooden posts treated with creosote in water and whether these constituted a discharge. The Court ruled that they did not and that the term ‘discharge’ in Article 1(2)(d) of Directive 76/464/EEC must be interpreted as not including the pollution from significant sources, including multiple and diffuse sources, referred to in Article 5(1) of Directive 86/280/EEC.

## Further developments

The Water Framework Directive 2000/60/EC and Directive [2008/105/EC](#) on quality standards in water progressively repeal Directive 2006/11/EC. Article 6 of Directive 76/464/EEC was repealed with the entry into force of the Directive 2000/60/EC. From 13 January 2009 onward, Annex X of the Directive 2000/60/EC was replaced by the Annex II of the Directive 2008/105/EC (Article 10 of Directive 2008/105/EC). The new Annex X replaced the first list of priority substances (Decision [2455/2001/EC](#) – see section on Water Framework Directive). From 13 January 2009, environmental quality standards prescribed by Directive 2006/11/EC and listed in Annex IX of Directive 2000/60/EC are repealed by those specified in Part A of Annex I Directive 2008/105/EC. The remaining parts of Directive 2006/11/EC will be repealed from 22 December 2012, according to Article 12(1) of the Directive 2008/105/EC. Environmental quality standards established under the first River Basin Management Plans shall be at least as stringent as those required to implement Directive 2006/11/EC (Article 22(6) Directive 2000/60/EC). Before 22 December 2012 the monitoring and reporting obligations may be carried out according to Articles 5, 8 and 15 of Directive 2000/60/EC (Article 12(2) of the Directive 2008/105/EC)<sup>8</sup>. See *related legislation* for information on these Directives.

## Related legislation

The adoption of Directive 76/464/EEC was one of the earliest approaches to water protection in the Community and, therefore, the general approach of the Directive has affected or resonated in other Community law since then. The setting of emission limits values for individual types of industry is also seen in the Directives relating to the [titanium dioxide industry](#) and has ultimately found expression in the Integrated Pollution Prevention and Control (IPPC) Directive [2008/1/EC](#), although this does not establish specific emission limit values in itself.

As explained above the Water Framework Directive [2000/60/EC](#) and Directive [2008/105/EC](#) on quality standards in water repeal Directive 2006/11/EC and its daughter Directives by seeking to address dangerous substances in a more comprehensive way.

The debate over the adoption of Directive 76/464/EEC and its daughter Directives was, in part, a debate on whether law should be based on an emission limit objective or an environmental quality objective. Bringing these concepts together is known as the ‘combined approach’ and this approach is stressed as underpinning Directives 2008/1/EC and 2000/60/EC. The most direct successor to Directive 2006/11/EC and its daughter Directives is Directive 2008/105/EC, which only sets environmental quality objectives.

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