COUNCIL DIRECTIVE of 21 May 1991 concerning urban waste water treatment (91/271/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular 130s thereof,

Having regard to the proposal from the Commission [1],

Having regard to the opinion of the European Parliament [2],

Having regard to the opinion of the Economic and Social Committee [3],

Whereas the Council Resolution of 28 June 1988 on the protection of the North Sea and of other waters in the Community [4] invited the Commission to submit proposals for measures required at Community level for the treatment of urban waste water;

Whereas pollution due to insufficient treatment of waste water in one Member State often influences other Member States' waters; whereas in accordance with Article 130r, action at Community level is necessary;

Whereas to prevent the environment from being adversely affected by the disposal of insufficiently-treated urban waste water, there is a general need for secondary treatment of urban waste water;

Whereas it is necessary in sensitive areas to require more stringent treatment; whereas in some less sensitive areas a primary treatment could be considered appropriate;

Whereas industrial waste water entering collecting systems as well as the discharge of waste water and disposal of sludge from urban waste water treatment plants should be subject to general rules or regulations and/or specific authorizations;

Whereas discharges from certain industrial sectors of biodegradable industrial waste water not entering urban waste water treatment plants before discharge to receiving waters should be subject to appropriate requirements;

Whereas the recycling of sludge arising from waste water treatment should be encouraged; whereas the disposal of sludge to surface waters should be phased out;

Whereas it is necessary to monitor treatment plants, receiving waters and the disposal of sludge to ensure that the environment is protected from the adverse effects of the discharge of waste waters;

Whereas it is important to ensure that information on the disposal of waste water and sludge is made available to the public in the form of periodic reports;

Whereas Member States should establish and present to the Commission national programmes for the implementation of this Directive;

Whereas a Committee should be established to assist the Commission on matters relating to the implementation of this Directive and to its adaptation to technical progress,

HAS ADOPTED THIS DIRECTIVE:

Article 1

This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.

The objective of the Directive is to protect the environment from the adverse effects of the abovementioned waste water discharges.
Article 2

For the purpose of this Directive:

1. "urban waste water" means domestic waste water or the mixture of domestic waste water with industrial waste water and/or run-off rain water;
2. "domestic waste water" means waste water from residential settlements and services which originates predominantly from the human metabolism and from household activities;
3. "industrial waste water" means any waste water which is discharged from premises used for carrying on any trade or industry, other than domestic waste water and run-off rain water;
4. "agglomeration" means an area where the population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to an urban waste water treatment plant or to a final discharge point;
5. "collecting system" means a system of conduits which collects and conducts urban waste water;
6. "1 p.e. (population equivalent)" means the organic biodegradable load having a five-day biochemical oxygen demand (BOD$_5$) of 60 g of oxygen per day;
7. "primary treatment" means treatment of urban waste water by a physical and/or chemical process involving settlement of suspended solids, or other processes in which the BOD$_5$ of the incoming waste water is reduced by at least 20 % before discharge and the total suspended solids of the incoming waste water are reduced by at least 50 %;
8. "secondary treatment" means treatment of urban waste water by a process generally involving biological treatment with a secondary settlement or other process in which the requirements established in Table 1 of Annex I are respected;
9. "appropriate treatment" means treatment of urban waste water by any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and the relevant provisions of this and other Community Directives;
10. "Sludge" means residual sludge, whether treated or untreated, from urban waste water treatment plants;
11. "eutrophication" means the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorus, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned;
12. "estuary" means the transitional area at the mouth of a river between fresh-water and coastal waters. Member States shall establish the outer (seaward) limits of estuaries for the purposes of this Directive as part of the programme for implementation in accordance with the provisions of Article 17 (1) and (2);
13. "coastal waters" means the waters outside the low-water line or the outer limit of an estuary.

Article 3

1. Member States shall ensure that all agglomerations are provided with collecting systems for urban waste water,
   - at the latest by 31 December 2000 for those with a population equivalent (p.e.) of more than 15000, and
   - at the latest by 31 December 2005 for those with a p.e. of between 2000 and 15000.

For urban waste water discharging into receiving waters which are considered "sensitive areas" as defined under Article 5, Member States shall ensure that collection systems are provided at the latest by 31 December 1998 for agglomerations of more than 10000 p.e.
Where the establishment of a collecting system is not justified either because it would produce no environmental benefit or because it would involve excessive cost, individual systems or other appropriate systems which achieve the same level of environmental protection shall be used.

2. Collecting systems described in paragraph 1 shall satisfy the requirements of Annex I (A). These requirements may be amended in accordance with the procedure laid down in Article 18.

Article 4

1. Member States shall ensure that urban waste water entering collecting systems shall before discharge be subject to secondary treatment or an equivalent treatment as follows:
   - at the latest by 31 December 2000 for all discharges from agglomerations of more than 15000 p.e.,
   - at the latest by 31 December 2005 for all discharges from agglomerations of between 10000 and 15000 p.e.,
   - at the latest by 31 December 2005 for discharges to fresh-water and estuaries from agglomerations of between 2000 and 10000 p.e.

2. Urban waste water discharges to waters situated in high mountain regions (over 1500 m above sea level) where it is difficult to apply an effective biological treatment due to low temperatures may be subjected to treatment less stringent than that prescribed in paragraph 1, provided that detailed studies indicate that such discharges do not adversely affect the environment.

3. Discharges from urban waste water treatment plants described in paragraphs 1 and 2 shall satisfy the relevant requirements of Annex I.B. These requirements may be amended in accordance with the procedure laid down in Article 18.

4. The load expressed in p.e. shall be calculated on the basis of the maximum average weekly load entering the treatment plant during the year, excluding unusual situations such as those due to heavy rain.

Article 5

1. For the purposes of paragraph 2, Member States shall by 31 December 1993 identify sensitive areas according to the criteria laid down in Annex II.

2. Member States shall ensure that urban waste water entering collecting systems shall before discharge into sensitive areas be subject to more stringent treatment than that described in Article 4, by 31 December 1998 at the latest for all discharges from agglomerations of more than 10000 p.e.

3. Discharges from urban waste water treatment plants described in paragraph 2 shall satisfy the relevant requirements of Annex I.B. These requirements may be amended in accordance with the procedure laid down in Article 18.

4. Alternatively, requirements for individual plants set out in paragraphs 2 and 3 above need not apply in sensitive areas where it can be shown that the minimum percentage of reduction of the overall load entering all urban waste water treatment plants in that area is at least 75% for total phosphorus and at least 75% for total nitrogen.

5. Discharges from urban waste water treatment plants which are situated in the relevant catchment areas of sensitive areas and which contribute to the pollution of these areas shall be subject to paragraphs 2, 3 and 4.

In cases where the above catchment areas are situated wholly or partly in another Member State Article 9 shall apply.

6. Member States shall ensure that the identification of sensitive areas is reviewed at intervals of no more than four years.
7. Member States shall ensure that areas identified as sensitive following review under paragraph 6 shall within seven years meet the above requirements.

8. A Member State does not have to identify sensitive areas for the purpose of this Directive if it implements the treatment established under paragraphs 2, 3 and 4 over all its territory.

Article 6

1. For the purposes of paragraph 2, Member States may by 31 December 1993 identify less sensitive areas according to the criteria laid down in Annex II.

2. Urban waste water discharges from agglomerations of between 10000 and 150000 p.e. to coastal waters and those from agglomerations of between 2000 and 10000 p.e. to estuaries situated in areas described in paragraph 1 may be subjected to treatment less stringent than that prescribed in Article 4 providing that:
   - such discharges receive at least primary treatment as defined in Article 2 (7) in conformity with the control procedures laid down in Annex I D,
   - comprehensive studies indicate that such discharges will not adversely affect the environment.

   Member States shall provide the Commission with all relevant information concerning the abovementioned studies.

3. If the Commission considers that the conditions set out in paragraph 2 are not met, it shall submit to the Council an appropriate proposal.

4. Member States shall ensure that the identification of less sensitive areas is reviewed at intervals of not more than four years.

5. Member States shall ensure that areas no longer identified as less sensitive shall within seven years meet the requirements of Articles 4 and 5 as appropriate.

Article 7

Member States shall ensure that, by 31 December 2005, urban waste water entering collecting systems shall before discharge be subject to appropriate treatment as defined in Article 2 (9) in the following cases:
   - for discharges to fresh-water and estuaries from agglomerations of less than 2000 p.e.,
   - for discharges to coastal waters from agglomerations of less than 10000 p.e.

Article 8

1. Member States may, in exceptional cases due to technical problems and for geographically defined population groups, submit a special request to the Commission for a longer period for complying with Article 4.

2. This request, for which grounds must be duly put forward, shall set out the technical difficulties experienced and must propose an action programme with an appropriate timetable to be undertaken to implement the objective of this Directive. This timetable shall be included in the programme for implementation referred to in Article 17.

3. Only technical reasons can be accepted and the longer period referred to in paragraph 1 may not extend beyond 31 December 2005.

4. The Commission shall examine this request and take appropriate measures in accordance with the procedure laid down in Article 18.

5. In exceptional circumstances, when it can be demonstrated that more advanced treatment will not produce any environmental benefits, discharges into less sensitive areas of waste waters from agglomerations of more than 150000 p.e. may be subject to the treatment provided for in Article 6 for waste water from agglomerations of between 10000 and 150000 p.e.
In such circumstances, Member States shall submit beforehand the relevant documentation to the Commission. The Commission will examine the case and take appropriate measures in accordance with the procedure laid down in Article 18.

Article 9
Where waters within the area of jurisdiction of a Member State are adversely affected by discharges of urban waste water from another Member State, the Member State whose waters are affected may notify the other Member State and the Commission of the relevant facts.

The Member States concerned shall organize, where appropriate with the Commission, the concertation necessary to identify the discharges in question and the measures to be taken at source to protect the waters that are affected in order to ensure conformity with the provisions of this Directive.

Article 10
Member States shall ensure that the urban waste water treatment plants built to comply with the requirements of Articles 4, 5, 6 and 7 are designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions. When designing the plants, seasonal variations of the load shall be taken into account.

Article 11
1. Member States shall ensure that, before 31 December 1993, the discharge of industrial waste water into collecting systems and urban waste water treatment plants is subject to prior regulations and/or specific authorizations by the competent authority or appropriate body.
2. Regulations and/or specific authorization shall satisfy the requirements of Annex I C. These requirements may be amended in accordance with the procedure laid down in Article 18.
3. Regulations and specific authorization shall be reviewed and if necessary adapted at regular intervals.

Article 12
1. Treated waste water shall be reused whenever appropriate. Disposal routes shall minimize the adverse effects on the environment.
2. Competent authorities or appropriate bodies shall ensure that the disposal of waste water from urban waste water treatment plants is subject to prior regulations and/or specific authorization.
3. Prior regulations and/or specific authorization of discharges from urban waste water treatment plants made pursuant to paragraph 2 within agglomerations of 2000 to 10000 p.e. in the case of discharges to fresh waters and estuaries, and of 10000p.e. or more in respect of all discharges, shall contain conditions to satisfy the relevant requirements of Annex I B. These requirements may be amended in accordance with the procedure laid down in Article 18.
4. Regulations and/or authorization shall be reviewed and if necessary adapted at regular intervals.

Article 13
1. Member States shall ensure that by 31 December 2000 biodegradable industrial waste water from plants belonging to the industrial sectors listed in Annex III which does not enter urban waste water treatment plants before discharge to receiving waters shall before discharge respect conditions established in prior regulations and/or specific authorization by the competent authority or appropriate body, in respect of all discharges from plants representing 4000 p.e. or more.
2. By 31 December 1993 the competent authority or appropriate body in each Member State shall set requirements appropriate to the nature of the industry concerned for the discharge of such waste water.

3. The Commission shall carry out a comparison of the Member States' requirements by 31 December 1994. It shall publish the results in a report and if necessary make an appropriate proposal.

Article 14

1. Sludge arising from waste water treatment shall be re-used whenever appropriate. Disposal routes shall minimize the adverse effects on the environment.

2. Competent authorities or appropriate bodies shall ensure that before 31 December 1998 the disposal of sludge from urban waste water treatment plants is subject to general rules or registration or authorization.

3. Member States shall ensure that by 31 December 1998 the disposal of sludge to surface waters by dumping from ships, by discharge from pipelines or by other means is phased out.

4. Until the elimination of the forms of disposal mentioned in paragraph 3, Member States shall ensure that the total amount of toxic, persistent or bioaccumulable materials in sludge disposed of to surface waters is licensed for disposal and progressively reduced.

Article 15

1. Competent authorities or appropriate bodies shall monitor:
   - discharges from urban waste water treatment plants to verify compliance with the requirements of Annex I.B in accordance with the control procedures laid down in Annex I.D,
   - amounts and composition of sludges disposed of to surface waters.

2. Competent authorities or appropriate bodies shall monitor waters subject to discharges from urban waste water treatment plants and direct discharges as described in Article 13 in cases where it can be expected that the receiving environment will be significantly affected.

3. In the case of a discharge subject to the provisions of Article 6 and in the case of disposal of sludge to surface waters, Member States shall monitor and carry out any other relevant studies to verify that the discharge or disposal does not adversely affect the environment.

4. Information collected by competent authorities or appropriate bodies in complying with paragraphs 1, 2 and 3 shall be retained in the Member State and made available to the Commission within six months of receipt of a request.

5. Guidelines on the monitoring referred to in paragraphs 1, 2 and 3 may be formulated in accordance with the procedure laid down in Article 18.

Article 16

Without prejudice to the implementation of the provisions of Council Directive 90/313/EEC of 7 June 1990 on the freedom of access to information on the environment [5], Member States shall ensure that every two years the relevant authorities or bodies publish situation reports on the disposal of urban waste water and sludge in their areas. These reports shall be transmitted to the Commission by the Member States as soon as they are published.

Article 17

1. Member States shall by 31 December 1993 establish a programme for the implementation of this Directive.

2. Member States shall by 30 June 1994 provide the Commission with information on the programme.
3. Member States shall, if necessary, provide the Commission by 30 June every two years with an update of the information described in paragraph 2.

4. The methods and formats to be adopted for reporting on the national programmes shall be determined in accordance with the procedure laid down in Article 18. Any amendments to these methods and formats shall be adopted in accordance with the same procedure.

5. The Commission shall every two years review and assess the information received pursuant to paragraphs 2 and 3 above and publish a report thereon.

**Article 18**

1. The Commission shall be assisted by a Committee composed of the representatives of the Member States and chaired by the representative of the Commission.

2. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

3. (a) The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

(b) If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of a period of three months from the date of referral to the Council, the Council has not acted, the proposed measures shall be adopted by the Commission, save where the Council has decided against the said measures by a simple majority.

**Article 19**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 30 June 1993. They shall forthwith inform the Commission thereof.

2. When Member States adopt the measures referred to in paragraph 1, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

3. Member States shall communicate to the Commission the texts of the main provisions of national law which they adopt in the field governed by this Directive.

**Article 20**

This Directive is addressed to the Member States.

Done at Brussels, 21 May 1991.

For the Council
The President
R. STEICHEN