# **Annex I.** ANNEX 1 to the Council Directive on pollution caused by discharges of certain dangerous substances (76/464/EEC)

## List I of families and groups of substances

List I contains certain individual substances which belong to the following families and groups of substances, selected mainly on the basis of their toxicity, persistence and bioaccumulation, with the exception of those which are biologically harmless or which are rapidly converted into substances which are biologically harmless:

- organohalogen compounds and substances which may form such compounds in the aquatic environment,
- 2. organophosphorus compounds,
- 3. organotin compounds,
- 4. substances in respect of which it has been proved that they possess
- 5. carcinogenic properties in or via the aquatic environment <sup>1</sup>
- 6. mercury and its compounds,
- 7. cadmium and its compounds,
- 8. persistent mineral oils and hydrocarbons of petroleum origin,

and for the purposes of implementing Articles 2, 8, 9 and 14 of this Directive:

9. persistent synthetic substances which may float, remain in suspension or sink and which may interfere with any use of the waters.

# List II of families and groups of substances

#### List II contains:

• substances belonging to the families and groups of substances in List I for which the limit values referred to in Article 6 of the Directive have not been determined,

 certain individual substances and categories of substances belonging to the families and groups of substances listed below, and which have a deleterious effect on the aquatic environment, which can, however, be confined to a given area and which depend on the characteristics and location of the water into which they are discharged.

# Families and groups of substances referred to in the second indent

1. The following metalloids and metals and their compounds:

1.zinc 11.tin 2.copper 12.barium 3.nickel 13.beryllium 14.boron 4.chromium 5.lead 15.uranium 6.selenium 16.vanadium 7.arsenic 17.cobalt 8.antimony 18.thalium 9.molybdenum 19.tellurium 10.titanium 20.silver

- 2. Biocides and their derivatives not appearing in List I.
- 3. Substances which have a deleterious effect on the taste and/or smell of the products for human consumption derived from the aquatic environment, and compounds liable to give rise to such substances in water.
- 4. Toxic or persistent organic compounds of silicon, and substances which may give rise to such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances.
- 5. Inorganic compounds of phosphorus and elemental phosphorus.
- 6. Non persistent mineral oils and hydrocarbons of petroleum origin.
- 7. Cyanides, fluorides.

8. Substances which have an adverse effect on the oxygen balance, particularly: ammonia, nitrites.

<sup>1)</sup> Where certain substances in List II are carcinogenic, they are included in category 4 of this list.

### Annex II. ANNEX VIII to Water Framework Directive

#### INDICATIVE LIST OF THE MAIN POLLUTANTS

- 1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
- 2. Organophosphorous compounds.
- Organotin compounds.
   Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment.
- 5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances.
- 6. Cyanides.7. Metals and their compounds.
- 8. Arsenic and its compounds.
- 9. Biocides and plant protection products.
- 10. Materials in suspension.
- 11. Substances which contribute to eutrophication (in particular, nitrates and phosphates).
- 12. Substances which have an unfavourable influence on the oxygen balance (and can be measured using parameters such as BOD, COD, etc.).

# **Annex III.** Extract of the Water Framework Directive (2000/60/EC) - Article 16 Strategies against pollution of water

| 16 (1) | The European Parliament and the Council shall adopt specific measures against pollution of water by individual pollutants or groups of pollutants presenting a significant risk to or via the aquatic environment, including such risks to waters used for the abstraction of drinking water. For those pollutants measures shall be aimed at the progressive reduction and, for priority hazardous substances, as defined in Article 2(30), at the cessation or phasing-out of discharges, emissions and losses. Such measures shall be adopted acting on the proposals presented by the Commission in accordance with the procedures laid down in the Treaty. |  |
|--------|---|--|
| 16 (2) | The Commission shall submit a proposal setting out a list of priority substances selected amongst those which present a significant risk to or via the aquatic environment. Substances shall be prioritised for action on the basis of risk to or via the aquatic environment, identified by:   |  |
|        | (a) risk assessment carried out under Council Regulation (EEC) No 793/93 <sup>[1]</sup> , Council Directive 91/414/EEC <sup>[2]</sup> , and Directive 98/8/EC of the European Parliament and of the Council <sup>[3]</sup> , or   |  |
|        | (b) targeted risk-based assessment (following the methodology of Regulation (EEC) No 793/93) focusing solely on aquatic ecotoxicity and on human toxicity via the aquatic environment.  |  |
|        | When necessary in order to meet the timetable laid down in paragraph 4, substances shall be prioritised for action on the basis of risk to, or via the aquatic environment, identified by a simplified risk-based assessment procedure based on scientific principles taking particular account of:   |  |
|        | evidence regarding the intrinsic hazard of the substance concerned, and in particular its aquatic ecotoxicity and human toxicity via aquatic exposure routes, and   |  |
|        | evidence from monitoring of widespread environmental contamination, and   |  |
|        | other proven factors which may indicate the possibility of widespread environmental contamination, such as production or use volume of the substance concerned, and use patterns.   |  |
| 16 (3) | The Commission's proposal shall also identify the priority hazardous substances. In doing so, the Commission shall take into account the selection of substances of concern undertaken in the relevant Community legislation regarding hazardous substances or relevant international agreements.   |  |
| 16 (4) | The Commission shall review the adopted list of priority substances at the latest four years after the date of entry into force of this Directive and at least every four years thereafter, and come forward with proposals as appropriate.   |  |
| 16 (5) | In preparing its proposal, the Commission shall take account of recommendations from the Scientific Committee on Toxicity, Ecotoxicity and the Environment, Member States, the European Parliament, the European Environment Agency, Community research programmes, international organisations to which the Community is a party, European business organisations including those representing small and medium-sized enterprises, European environmental organisations, and of other relevant information which comes to its attention.   |  |
| 16 (6) | For the priority substances, the Commission shall submit proposals of controls for:   |  |
|        | the progressive reduction of discharges, emissions and losses of the substances concerned, and, in particular   |  |
|        | <ul> <li>the cessation or phasing-out of discharges, emissions and losses of the substances as<br/>identified in accordance with paragraph 3, including an appropriate timetable for doing<br/>so. The timetable shall not exceed 20 years after the adoption of these proposals by<br/>the European Parliament and the Council in accordance with the provisions of this<br/>Article.</li> </ul>   |  |

|         | In doing so it shall identify the appropriate cost-effective and proportionate level and combination of product and process controls for both point and diffuse sources and take account of Community-wide uniform emission limit values for process controls. Where appropriate, action at Community level for process controls may be established on a sector-by-sector basis. Where product controls include a review of the relevant authorisations issued under Directive 91/414/EEC and Directive 98/8/EC, such reviews shall be carried out in accordance with the provisions of those Directives. Each proposal for controls shall specify arrangements for their review, updating and for assessment of their effectiveness.  |  |
|---------|--|--|
| 16 (7)  | The Commission shall submit proposals for quality standards applicable to the concentratio of the priority substances in surface water, sediments or biota.  |  |
| 16 (8)  | The Commission shall submit proposals, in accordance with paragraphs 6 and 7, and at least for emission controls for point sources and environmental quality standards within two years of the inclusion of the substance concerned on the list of priority substances. For substances included in the first list of priority substances, in the absence of agreement at Community level six years after the date of entry into force of this Directive, Member States shall establish environmental quality standards for these substances for all surface waters affected by discharges of those substances, and controls on the principal sources of such discharges, based, <i>inter alia</i> , on consideration of all technical reduction options. For substances subsequently included in the list of priority substances, in the absence of agreement at Community level, Member States shall take such action five years after the date of inclusion in the list. |  |
| 16 (9)  | The Commission may prepare strategies against pollution of water by any other pollutants or groups of pollutants, including any pollution which occurs as a result of accidents.   |  |
| 16 (10) | In preparing its proposals under paragraphs 6 and 7, the Commission shall also review all the Directives listed in Annex IX. It shall propose, by the deadline in paragraph 8, a revision of the controls in Annex IX for all those substances which are included in the list of priority substances and shall propose the appropriate measures including the possible repeal of the controls under Annex IX for all other substances.   |  |
|         | All the controls in Annex IX for which revisions are proposed shall be repealed by the date of entry into force of those revisions.  |  |
| 16 (11) | The list of priority substances of substances mentioned in paragraphs 2 and 3 proposed Commission shall, on its adoption by the European Parliament and the Council, become X to this Directive. Its revision mentioned in paragraph 4 shall follow the same procedure   |  |

Annex IV. Annex X of Directive 2000/60/EC - List of priority substances in the field of water policy

| Number | CAS number | Name of priority substance             | Identified as priority hazardous substance |
|--------|------------|--|--|
| (1)    | 15972-60-8 | Alachlor                               |  |
| (2)    | 120-12-7   | Anthracene                             | X  |
| (3)    | 1912-24-9  | Atrazine                               |  |
| (4)    | 71-43-2    | Benzene                                |  |
| (5)    | n.a.       | Brominated diphenylethers (**)         | X(***)                                     |
| (6)    | 7440-43-9  | Cadmium and its compounds              | X  |
| (7)    | 85535-84-8 | C <sub>10</sub> -13-chloroalkanes (**) | X  |
| (8)    | 470-90-6   | Chlorfenvinphos                        |  |
| (9)    | 2921-88-2  | Chlorpyrifos                           |  |
| (10)   | 107-06-2   | 1,2-Dichloroethane                     |  |
| (11)   | 75-09-2    | Dichloromethane                        |  |
| (12)   | 117-81-7   | Di(2-ethylhexyl)phthalate (DEHP)       |  |
| (13)   | 330-54-1   | Diuron                                 |  |
| (14)   | 115-29-7   | Endosulfan                             | X  |
|        | 959-98-8   | (alpha-Endosulfan)                     |  |
| (15)   | 206-44-0   | Fluoranthene (****)                    |  |
| (16)   | 118-74-1   | Hexachlorobenzene                      | X  |
| (17)   | 87-68-3    | Hexachlorobutadiene                    | X  |
| (18)   | 608-73-1   | Hexachlorocyclohexane                  | X  |
| ()     | 58-89-9    | (gamma-isomer, Lindane)                |  |
| (19)   | 34123-59-6 | Isoproturon                            |  |
| (20)   | 7439-92-1  | Lead and its compounds                 |  |
| (21)   | 7439-97-6  | Mercury and its compounds              | X  |
| (22)   | 91-20-3    | Naphthalene                            |  |
| (23)   | 7440-02-0  | Nickel and its compounds               |  |
| (24)   | 25154-52-3 | Nonylphenol                            | X  |
| (= .)  | 104-40-5   | (4-(para)-nonylphenol)                 |  |
| (25)   | 1806-26-4  | Octylphenol                            |  |
| (20)   | 140-66-9   | (Para-tert-octylphenol)                |  |
| (26)   | 608-93-5   | Pentachlorobenzene                     | X  |
| (27)   | 87-86-5    | Pentachlorophenol                      | 1  |
| (28)   | n.a.       | Polyaromatic hydrocarbons              | X  |
|        | 50-32-8    | (Benzo(a)pyrene),                      |  |
|        | 205-99-2   | (Benzo(b)fluoranthene),                |  |
|        | 191-24-2   | (Benzo(g,h,i)perylene),                |  |
|        | 207-08-9   | (Benzo(k)fluoranthene),                |  |
|        | 193-39-5   | (Indeno(1,2,3-cd)pyrene)               | <u> </u>                                   |
| (29)   | 122-34-9   | Simazine                               |  |
| (30)   | 688-73-3   | Tributyltin compounds                  | X  |
|        | 36643-28-4 | (Tributyltin-cation)                   |  |
| (31)   | 12002-48-1 | Trichlorobenzenes                      |  |
| (32)   | 120-82-1   | (1,2,4-Trichlorobenzene)               |  |
|        | 67-66-3    | Trichloromethane (Chloroform)          |  |
| (33)   | 1582-09-8  | Trifluralin                            |  |

<sup>\*</sup> Where groups of substances have been selected, typical individual representatives are listed as indicative parameters (in brackets and without number).

<sup>\*\*</sup> These groups of substances normally include a considerable number of individual compounds. At present, appropriate indicative parameters cannot be given.

<sup>\*\*\*</sup> Only Pentabromobiphenylether (CAS number 32534-81-9)

<sup>\*\*\*\*</sup> Fluoranthene is on the list as an indicator of other, more dangerous Polyaromatic Hydrocarbons