



**DIRECTIVE 2008/105/EC OF THE EUROPEAN PARLIAMENT
AND OF THE COUNCIL**

of 16 December 2008

**on environmental quality standards in the field of water policy,
amending and subsequently repealing Council Directives
82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC
and amending Directive 2000/60/EC of the European Parliament
and of the Council**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE
EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and
in particular Article 175(1) thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Economic and Social
Committee ⁽¹⁾,

After consulting the Committee of the Regions,

Acting in accordance with the procedure laid down in Article 251 of the
Treaty ⁽²⁾,

Whereas:

- (1) Chemical pollution of surface water presents a threat to the aquatic environment with effects such as acute and chronic toxicity to aquatic organisms, accumulation in the ecosystem and losses of habitats and biodiversity, as well as a threat to human health. As a matter of priority, causes of pollution should be identified and emissions should be dealt with at source, in the most economically and environmentally effective manner.
- (2) As set out in second sentence of Article 174(2) of the Treaty, Community policy on the environment is to be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should, as a priority, be rectified at source and that the polluter should pay.
- (3) Pursuant to Article 174(3) of the Treaty, in preparing its policy on the environment, the Community is to take account of the available scientific and technical data, environmental conditions in the various regions of the Community, the economic and social development of the Community as a whole and the balanced development of its regions as well as the potential benefits and costs of action or lack of action.
- (4) Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme ⁽³⁾ states that environment and

⁽¹⁾ OJ C 97, 28.4.2007, p. 3.

⁽²⁾ Opinion of the European Parliament of 22 May 2007 (OJ C 102 E, 24.4.2008, p. 90), Council Common Position of 20 December 2007 (OJ C 71 E, 18.3.2008, p. 1) and Position of the European Parliament of 17 June 2008 (not yet published in the Official Journal). Council Decision of 20 October 2008.

⁽³⁾ OJ L 242, 10.9.2002, p. 1.

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health and quality of life are among the key environmental priorities of that Programme, highlighting in particular the need to establish more specific legislation in the field of water policy.

- (5) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy ⁽¹⁾ lays down a strategy against pollution of water and requires further specific measures for pollution control and environmental quality standards (EQS). This Directive lays down EQS in accordance with the provisions and objectives of Directive 2000/60/EC.
- (6) In accordance with Article 4 of Directive 2000/60/EC, and in particular paragraph 1(a), Member States should implement the necessary measures in accordance with Article 16(1) and (8) of that Directive, with the aim of progressively reducing pollution from priority substances and ceasing or phasing out emissions, discharges and losses of priority hazardous substances.
- (7) Numerous Community acts have been adopted since the year 2000 which constitute emission control measures in accordance with Article 16 of Directive 2000/60/EC for individual priority substances. Moreover, many environmental protection measures fall under the scope of other existing Community legislation. Therefore priority should be given to implementing and revising existing instruments rather than establishing new controls.
- (8) As regards emission controls of priority substances from point and diffuse sources, as referred to in Article 16 of Directive 2000/60/EC, it seems more cost-effective and proportionate for Member States to include, where necessary, in addition to the implementation of other existing Community legislation, appropriate control measures, pursuant to Article 10 of Directive 2000/60/EC, in the programme of measures to be developed for each river basin district in accordance with Article 11 of that Directive.
- (9) Member States should improve the knowledge and data available on sources of priority substances and ways in which pollution occurs in order to identify targeted and effective control options. Member States should, *inter alia*, monitor sediment and biota, as appropriate, at an adequate frequency to provide sufficient data for a reliable long-term trend analysis of those priority substances that tend to accumulate in sediment and/or biota. The results of the monitoring, including monitoring of sediment and biota, should, as far as required by Article 3 of Decision No 2455/2001/EC of the European Parliament and of the Council of 20 November 2001 establishing the list of priority substances in the field of water policy ⁽²⁾, be made available in order to inform future Commission proposals under Article 16(4) and (8) of Directive 2000/60/EC.

⁽¹⁾ OJ L 327, 22.12.2000, p. 1.

⁽²⁾ OJ L 331, 15.12.2001, p. 1.

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- (10) Decision No 2455/2001/EC sets out the first list of 33 substances or groups of substances that have been prioritised for action at Community level. Among those priority substances, certain substances have been identified as priority hazardous substances for which Member States should implement necessary measures with the aim of ceasing or phasing out emissions, discharges and losses. For substances occurring naturally or through natural processes, the cessation or phasing-out of emissions, discharges and losses from all potential sources is impossible. Some substances have been under review and should be classified. The Commission should continue to review the list of priority substances, prioritising substances for action on the basis of agreed criteria that demonstrate the risk to, or via, the aquatic environment, in accordance with the timetable provided for in Article 16 of Directive 2000/60/EC, and bring forward proposals as appropriate.
- (11) In the interests of the Community and for a more effective regulation of surface water protection, it is appropriate to set up EQS for pollutants classified as priority substances at Community level and to leave it to Member States to lay down, where necessary, rules for remaining pollutants at national level, subject to the application of relevant Community rules. None the less, eight pollutants which fall under the scope of Council Directive 86/280/EEC of 12 June 1986 on limit values and quality objectives for discharges of certain dangerous substances included in List I of the Annex to Directive 76/464/EEC ⁽¹⁾, and which form part of the group of substances for which Member States should implement measures with the aim of achieving good chemical status by 2015, subject to Articles 2 and 4 of Directive 2000/60/EC, were not included in the list of priority substances. However, the common standards established for those pollutants proved to be useful and it is therefore appropriate to maintain their regulation at Community level.
- (12) Consequently, the provisions concerning current environmental quality objectives laid down in Council Directive 82/176/EEC of 22 March 1982 on limit values and quality objectives for mercury discharges by the chlor-alkali electrolysis industry ⁽²⁾, Council Directive 83/513/EEC of 26 September 1983 on limit values and quality objectives for cadmium discharges ⁽³⁾, Council Directive 84/156/EEC of 8 March 1984 on limit values and quality objectives for mercury discharges by sectors other than the chlor-alkali electrolysis industry ⁽⁴⁾, Council Directive 84/491/EEC of 9 October 1984 on limit values and quality objectives for discharges of hexachlorocyclohexane ⁽⁵⁾ and Directive 86/280/EEC will become superfluous and should be deleted.

⁽¹⁾ OJ L 181, 4.7.1986, p. 16.

⁽²⁾ OJ L 81, 27.3.1982, p. 29.

⁽³⁾ OJ L 291, 24.10.1983, p. 1.

⁽⁴⁾ OJ L 74, 17.3.1984, p. 49.

⁽⁵⁾ OJ L 274, 17.10.1984, p. 11.

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- (13) The aquatic environment can be affected by chemical pollution both in the short- and long- term, and therefore both acute and chronic effects data should be used as the basis for establishing the EQS. In order to ensure that the aquatic environment and human health are adequately protected, EQS expressed as an annual average value should be established at a level providing protection against long-term exposure, and maximum allowable concentrations should be established to protect against short-term exposure.
- (14) In accordance with the rules set out in section 1.3.4 of Annex V to Directive 2000/60/EC, when monitoring compliance with the EQS, including those expressed as maximum allowable concentrations, Member States may introduce statistical methods, such as a percentile calculation, to deal with outliers, that is extreme deviations from the mean, and false readings in order to ensure an acceptable level of confidence and precision. To ensure the comparability of monitoring between Member States, it is appropriate to provide for the establishment of detailed rules for such statistical methods through a committee procedure.
- (15) For the majority of substances the establishment of EQS values at Community level should, at this stage, be limited to surface water only. However, as regards hexachlorobenzene, hexachlorobutadiene and mercury, it is not possible to ensure protection against indirect effects and secondary poisoning at Community level by EQS for surface water alone. It is therefore appropriate to establish EQS for biota at Community level for those three substances. In order to allow Member States flexibility depending on their monitoring strategy, Member States should be able either to monitor and apply those EQS for biota, or to establish stricter EQS for surface water providing the same level of protection.
- (16) Furthermore, Member States should be able to establish EQS for sediment and/or biota at national level and apply those EQS instead of the EQS for water set out in this Directive. Such EQS should be established through a transparent procedure involving notifications to the Commission and other Member States so as to ensure a level of protection equivalent to the EQS for water set up at Community level. The Commission should summarise these notifications in its reports on the implementation of Directive 2000/60/EC. Moreover, sediment and biota remain important matrices for the monitoring of certain substances with significant accumulation potential. In order to assess long-term impacts of anthropogenic activity and trends, Member States should take measures, subject to Article 4 of Directive 2000/60/EC, with the aim of ensuring that existing levels of contamination in biota and sediments will not significantly increase.
- (17) In accordance with Article 13 of, and Annex VII(A)(5) to, Directive 2000/60/EC, any exemptions to the application of the EQS for priority substances applied to water bodies in accordance with Article 4(4), (5) and (6) of that Directive, taking into account Article 4(8) and (9) thereof, should be reported in the river basin management plans. Provided that the requirements of

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Article 4 of Directive 2000/60/EC including conditions for exemptions are met, activities, including dredging and shipping, leading to discharges, emissions and losses of priority substances can take place.

- (18) Member States have to comply with Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption⁽¹⁾ and manage the surface water bodies used for abstraction of drinking water in accordance with Article 7 of Directive 2000/60/EC. This Directive should therefore be implemented without prejudice to those requirements which may require more stringent standards.
- (19) In the vicinity of discharges from point sources, concentrations of pollutants are usually higher than the ambient concentrations in water. Therefore, Member States should be able to make use of mixing zones, so long as they do not affect the compliance of the rest of the body of surface water with the relevant EQS. The extent of mixing zones should be restricted to the proximity of the point of discharge and should be proportionate. In accordance with Article 3(4) of Directive 2000/60/EC, Member States should ensure, as appropriate, that the requirements for the achievement of the environmental objectives set out in Article 4 of that Directive are coordinated for the whole of the river basin district, including the designation of mixing zones in trans-boundary water bodies.
- (20) It is necessary to check compliance with the objectives for cessation or phase-out, and reduction, as specified in Article 4(1)(a) of Directive 2000/60/EC, and to make the assessment of compliance with these obligations transparent, in particular as regards the consideration of significant emissions, discharges and losses as a result of human activities. Further, a timetable for cessation or phase-out, and reduction, can only be related to an inventory. It should also be possible to assess the application of Article 4(4) to (7) of Directive 2000/60/EC. An appropriate tool is likewise needed for the quantification of losses of substances occurring naturally, or resulting from natural processes, in which case complete cessation or phase-out from all potential sources is impossible. In order to meet those needs, each Member State should establish an inventory of emissions, discharges and losses for each river basin district or part of a river basin district in its territory.
- (21) In order to avoid duplication of work by establishing those inventories and to ensure the coherence of those inventories with other existing tools in the area of surface water protection, Member States should use information collected under Directive 2000/60/EC and under Regulation (EC) No 166/2006 of the European Parliament and Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register⁽²⁾.

⁽¹⁾ OJ L 330, 5.12.1998, p. 32.

⁽²⁾ OJ L 33, 4.2.2006, p. 1.

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- (22) In order to ensure consistent protection of surface water, Member States sharing bodies of surface water should coordinate their monitoring activities and, as appropriate, the compilation of inventories.
- (23) In order better to reflect their needs, Member States should be able to choose an appropriate one-year reference period for measuring the basic entries of the inventory. However, account should be taken of the fact that the losses from the application of pesticides may vary considerably from one year to another because of different application rates, for instance as a result of different climatic conditions. Therefore, Member States should be able to opt for a three-year reference period for certain substances covered by Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market ⁽¹⁾.
- (24) In order to optimise the use of the inventory, it is appropriate to fix a deadline for the Commission to verify that emissions, discharges and losses are making progress towards compliance with the objectives set out in Article 4(1)(a) of Directive 2000/60/EC, subject to Article 4(4) and (5) of that Directive.
- (25) Technical guidelines should be developed to contribute to the harmonisation of methodologies used by Member States to establish the inventories of emissions, discharges and losses, including losses from pollution accumulated in sediments.
- (26) Several Member States are affected by pollution the source of which lies outside their national jurisdiction. It is therefore appropriate to make clear that a Member State would not be in breach of its obligations under this Directive as a result of the exceeding of an EQS due to such transboundary pollution, provided that certain conditions were met and that it had taken advantage, as appropriate, of the relevant provisions of Directive 2000/60/EC.
- (27) On the basis of reports from Member States, in accordance with Article 15 of Directive 2000/60/EC, the Commission should review the need to amend existing acts and the need for additional specific Community-wide measures, such as emission controls, and, if appropriate, make relevant proposals. The Commission should report the conclusions of this review to the European Parliament and to the Council in the context of the report under Article 18(1) of Directive 2000/60/EC. In making any proposals for emission control measures, having regard to Article 10 of Directive 2000/60/EC, the Commission should take into account existing emission control requirements, such as those under Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control ⁽²⁾, and the latest developments on pollution abatement technology.

⁽¹⁾ OJ L 230, 19.8.1991, p. 1.

⁽²⁾ OJ L 24, 29.1.2008, p. 8.

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- (28) The criteria for identifying substances that are persistent, bioaccumulative and toxic, as well as substances of other equivalent concern, notably very persistent and very bioaccumulative, as referred to in Directive 2000/60/EC, are established in the Technical Guidance Document for Risk Assessment in support of Commission Directive 93/67/EEC of 20 July 1993 laying down the principles for assessment of risks to man and the environment of substances notified in accordance with Council Directive 67/548/EEC ⁽¹⁾, Directive 98/8/EC of the European Parliament and of the Council of 16 February 1998 concerning the placing of biocidal products on the market ⁽²⁾ and Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and establishing a European Chemicals Agency ⁽³⁾. In order to ensure consistency of Community legislation, only those criteria should be applied to the substances under review according to Decision No 2455/2001/EC, and Annex X to Directive 2000/60/EC should be replaced accordingly.
- (29) The obligations laid down in the Directives listed in Annex IX to Directive 2000/60/EC are already incorporated in Directive 2008/1/EC and in Directive 2000/60/EC and, at least, the same level of protection is guaranteed if the EQS are maintained or reviewed. In order to ensure a consistent approach to chemical pollution of surface waters and to simplify and clarify the existing Community legislation in that area, it is appropriate to repeal, pursuant to Directive 2000/60/EC, with effect from 22 December 2012, Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC.
- (30) The recommendations referred to in Directive 2000/60/EC, in particular those of the Scientific Committee on Toxicity, Ecotoxicity and the Environment, have been considered.
- (31) In accordance with paragraph 34 of the Interinstitutional Agreement on better law-making ⁽⁴⁾, Member States are encouraged to draw up, for themselves and in the interests of the Community, their own tables illustrating, as far as possible, the correlation between this Directive and the transposition measures, and to make them public.
- (32) Since the objective of this Directive, namely that of achieving of good surface water chemical status by laying down EQS for priority substances and certain other pollutants, cannot be sufficiently achieved by the Member States and can therefore, by reason of maintaining the same level of protection of surface water throughout the Community, be better achieved at Community level, the Community may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective.

⁽¹⁾ OJ L 227, 8.9.1993, p. 9.

⁽²⁾ OJ L 123, 24.4.1998, p. 1.

⁽³⁾ OJ L 396, 30.12.2006, p. 1; corrected by OJ L 136, 29.5.2007, p. 3.

⁽⁴⁾ OJ C 321, 31.12.2003, p. 1.

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- (33) The measures necessary for the implementation of this Directive should be adopted in accordance with Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission ⁽¹⁾.
- (34) In particular, the Commission should be empowered to amend point 3 of part B of Annex I to this Directive. Since that measure is of general scope and is designed to amend non-essential elements of this Directive, or to supplement it by the addition of new non-essential elements, it must be adopted in accordance with the regulatory procedure with scrutiny provided for in Article 5a of Decision 1999/468/EC,

HAVE ADOPTED THIS DIRECTIVE:

*Article 1***Subject matter**

This Directive lays down environmental quality standards (EQS) for priority substances and certain other pollutants as provided for in Article 16 of Directive 2000/60/EC, with the aim of achieving good surface water chemical status and in accordance with the provisions and objectives of Article 4 of that Directive.

▼M1*Article 2***Definitions**

For the purposes of this Directive, the definitions laid down in Article 2 of Directive 2000/60/EC and in Article 2 of Commission Directive 2009/90/EC of 31 July 2009 laying down, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, technical specifications for chemical analysis and monitoring of water status ⁽²⁾ shall apply.

In addition, the following definitions shall apply:

- (1) ‘matrix’ means a compartment of the aquatic environment, namely water, sediment or biota;
- (2) ‘biota taxon’ means a particular aquatic taxon within the taxonomic rank ‘sub-phylum’, ‘class’ or their equivalent.

*Article 3***Environmental quality standards**

1. Without prejudice to paragraph 1a, Member States shall apply the EQS laid down in Part A of Annex I for bodies of surface water, and shall apply those EQS in accordance with the requirements laid down in Part B of Annex I.

⁽¹⁾ OJ L 184, 17.7.1999, p. 23.

⁽²⁾ OJ L 201, 1.8.2009, p. 36;

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1a. Without prejudice to the obligations arising under this Directive in the version in force on 13 January 2009 and in particular the achievement of good surface water chemical status in relation to the substances and the EQS listed therein, Member States shall implement the EQS laid down in Part A of Annex I as regards:

- (i) the substances numbered 2, 5, 15, 20, 22, 23, 28 in Part A of Annex I, for which revised EQS are set, with effect from 22 December 2015, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2021 by means of programmes of measures included in the 2015 river basin management plans produced in accordance with Article 13(7) of Directive 2000/60/EC; and
- (ii) the newly identified substances numbered 34 to 45 in Part A of Annex I, with effect from 22 December 2018, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2027 and preventing deterioration in the chemical status of surface water bodies in relation to those substances. For this purpose, Member States shall, by 22 December 2018, establish and submit to the Commission a supplementary monitoring programme and a preliminary programme of measures covering those substances. A final programme of measures in accordance with Article 11 of Directive 2000/60/EC shall be established by 22 December 2021 and shall be implemented and made fully operational as soon as possible after that date and not later than 22 December 2024.

Article 4(4) to (9) of Directive 2000/60/EC shall apply *mutatis mutandis* to the substances listed in points (i) and (ii) of the first subparagraph.

2. For the substances numbered 5, 15, 16, 17, 21, 28, 34, 35, 37, 43 and 44 in Part A of Annex I, Member States shall apply the biota EQS laid down in Part A of Annex I.

For substances other than those referred to in the first subparagraph, Member States shall apply the water EQS laid down in Part A of Annex I.

3. Member States may opt, in relation to one or more categories of surface water, to apply an EQS for a matrix other than that specified in paragraph 2, or, where relevant, for a biota taxon other than those specified in Part A of Annex I.

Member States that make use of the option referred to in the first subparagraph shall apply the relevant EQS laid down in Part A of Annex I or, if none is included for the matrix or biota taxon, establish an EQS that offers at least the same level of protection as the EQS laid down in Part A of Annex I.

Member States may use the option referred to in the first subparagraph only where the method of analysis used for the chosen matrix or biota taxon fulfils the minimum performance criteria laid down in Article 4 of Directive 2009/90/EC. Where those criteria are not met for any matrix, Member States shall ensure that monitoring is carried out using best available techniques not entailing excessive costs and that the method of analysis performs at least as well as that available for the matrix specified in paragraph 2 of this Article for the relevant substance.

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3a. Where a potential risk to, or via, the aquatic environment from acute exposure has been identified as a result of measured or estimated environmental concentrations or emissions and where a biota or sediment EQS is being applied, Member States shall ensure that monitoring in surface water is also carried out and shall apply the MAC-EQS laid down in Part A of Annex I to this Directive where such EQS have been established.

3b. Where, pursuant to Article 5 of Directive 2009/90/EC, the calculated mean value of a measurement, when carried out using the best available technique not entailing excessive costs, is referred to as 'less than limit of quantification', and the limit of quantification of that technique is above the EQS, the result for the substance being measured shall not be considered for the purposes of assessing the overall chemical status of that water body.

4. For substances for which an EQS for sediment and/or biota is applied, Member States shall monitor the substance in the relevant matrix at least once every year, unless technical knowledge and expert judgment justify another interval.

5. Member States shall include the following information in the updated river basin management plans produced in accordance with Article 13(7) of Directive 2000/60/EC:

- (a) a table presenting the limits of quantification of the methods of analysis applied, and information on the performance of those methods in relation to the minimum performance criteria laid down in Article 4 of Directive 2009/90/EC;
- (b) for the substances for which the option in paragraph 3 of this Article is used:
 - (i) the reasons and basis for using that option;
 - (ii) where relevant, the alternative EQS established, evidence that those EQS would offer at least the same level of protection as the EQS laid down in Part A of Annex I, including the data and methodology used to derive the EQS, and the categories of surface water to which they would apply;
 - (iii) for comparison with the information referred to in point (a) of this paragraph, the limits of quantification of the methods of analysis for the matrices specified in Part A of Annex I to this Directive, including information on the performance of those methods in relation to the minimum performance criteria laid down in Article 4 of Directive 2009/90/EC;
- (c) justification for the frequency of monitoring applied in accordance with paragraph 4, if monitoring intervals are longer than one year.

5a. Member States shall take the necessary measures to ensure that the updated river basin management plans, produced in accordance with Article 13(7) of Directive 2000/60/EC, containing the results and impact of the measures taken to prevent chemical pollution of surface water, and the interim report describing progress in the implementation of the planned programme of measures in accordance with Article 15(3) of Directive 2000/60/EC, are provided through a central portal which is

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accessible to the public electronically in accordance with Article 7(1) of Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information ⁽¹⁾.

6. Member States shall arrange for the long-term trend analysis of concentrations of those priority substances listed in Part A of Annex I that tend to accumulate in sediment and/or biota, giving particular consideration to the substances numbered 2, 5, 6, 7, 12, 15, 16, 17, 18, 20, 21, 26, 28, 30, 34, 35, 36, 37, 43 and 44 listed in Part A of Annex I, on the basis of the monitoring of surface water status carried out in accordance with Article 8 of Directive 2000/60/EC. Member States shall take measures aimed at ensuring, subject to Article 4 of Directive 2000/60/EC, that such concentrations do not significantly increase in sediment and/or relevant biota.

Member States shall determine the frequency of monitoring in sediment and/or biota so as to provide sufficient data for a reliable long-term trend analysis. As a guideline, monitoring should take place every three years, unless technical knowledge and expert judgment justify another interval.

7. The Commission shall examine technical and scientific progress, including the conclusions of risk assessments as referred to in points (a) and (b) of Article 16(2) of Directive 2000/60/EC and information from the registration of substances made publicly available in accordance with Article 119 of Regulation (EC) No 1907/2006, and, if necessary, propose that the EQS laid down in Part A of Annex I to this Directive be revised in accordance with the procedure laid down in Article 294 TFEU in line with the timetable provided for in Article 16(4) of Directive 2000/60/EC.

8. The Commission shall be empowered to adopt delegated acts in accordance with Article 10, where necessary in order to adapt point 3 of Part B of Annex I to this Directive to scientific or technical developments.

8a. In order to facilitate the implementation of this Article, technical guidelines on monitoring strategies and analytical methods for substances, including sampling and monitoring of biota, shall be developed, to the extent possible, by 22 December 2014, as part of the existing implementation process of Directive 2000/60/EC.

In particular, the guidelines shall cover:

- (a) the monitoring of substances in biota as provided for in paragraphs 2 and 3 of this Article;
- (b) in the case of newly identified substances (numbered 34 to 45 in Part A of Annex I) and substances for which stricter EQS are established (numbered 2, 5, 15, 20, 22, 23 and 28 in Part A of Annex I), analytical methods compliant with the minimum performance criteria laid down in Article 4 of Directive 2009/90/EC.

⁽¹⁾ OJ L 41, 14.2.2003, p. 26;

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8b. In the case of substances for which technical guidelines have not been adopted by 22 December 2014, the deadline of 22 December 2015 referred to in point (i) of paragraph (1a) shall be extended to 22 December 2018, and the deadline of 22 December 2021 referred to in that point shall be extended to 22 December 2027.

▼ B*Article 4***Mixing zones**

1. Member States may designate mixing zones adjacent to points of discharge. Concentrations of one or more substances listed in Part A of Annex I may exceed the relevant EQS within such mixing zones if they do not affect the compliance of the rest of the body of surface water with those standards.

2. Member States that designate mixing zones shall include in river basin management plans produced in accordance with Article 13 of Directive 2000/60/EC a description of:

- (a) the approaches and methodologies applied to define such zones; and
- (b) measures taken with a view to reducing the extent of the mixing zones in the future, such as those pursuant to Article 11(3)(k) of Directive 2000/60/EC or by reviewing permits referred to in Directive 2008/1/EC or prior regulations referred to in Article 11(3)(g) of Directive 2000/60/EC.

3. Member States that designate mixing zones shall ensure that the extent of any such zone is:

- (a) restricted to the proximity of the point of discharge;
- (b) proportionate, having regard to the concentrations of pollutants at the point of discharge and to the conditions on emissions of pollutants contained in the prior regulations, such as authorisations and/or permits, referred to in Article 11(3)(g) of Directive 2000/60/EC and any other relevant Community law, in accordance with the application of best available techniques and Article 10 of Directive 2000/60/EC, in particular after those prior regulations are reviewed.

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▼ B*Article 5***Inventory of emissions, discharges and losses**

1. On the basis of the information collected in accordance with Articles 5 and 8 of Directive 2000/60/EC, under Regulation (EC) No 166/2006 and other available data, Member States shall establish an inventory, including maps, if available, of emissions, discharges and losses of all priority substances and pollutants listed in Part A of Annex I to this Directive for each river basin district or part of a river basin district lying within their territory including their concentrations in sediment and biota, as appropriate.

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2. The reference period for the estimation of pollutant values to be entered in the inventories referred to in paragraph 1 shall be one year between 2008 and 2010.

However, for priority substances or pollutants covered by Directive 91/414/EEC, the entries may be calculated as the average of the years 2008, 2009 and 2010.

3. Member States shall communicate the inventories established pursuant to paragraph 1 of this Article, including the respective reference periods, to the Commission in accordance with the reporting requirements under Article 15(1) of Directive 2000/60/EC.

4. Member States shall update their inventories as part of the reviews of the analyses specified in Article 5(2) of Directive 2000/60/EC.

The reference period for the establishment of values in the updated inventories shall be the year before that analysis is to be completed. For priority substances or pollutants covered by Directive 91/414/EEC, the entries may be calculated as the average of the three years before the completion of that analysis.

Member States shall publish the updated inventories in their updated river basin management plans as laid down in Article 13(7) of Directive 2000/60/EC.

5. The Commission shall, by 2018, verify that emissions, discharges and losses as reflected in the inventory are making progress towards compliance with the reduction or cessation objectives laid down in Article 4(1)(a)(iv) of Directive 2000/60/EC, subject to Article 4(4) and (5) of that Directive.

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▼B*Article 6***Transboundary pollution**

1. A Member State shall not be in breach of its obligations under this Directive as a result of the exceedance of an EQS if it can demonstrate that:

- (a) the exceedance was due to a source of pollution outside its national jurisdiction;
- (b) it was unable as a result of such transboundary pollution to take effective measures to comply with the relevant EQS; and
- (c) it had applied the coordination mechanisms set out in Article 3 of Directive 2000/60/EC and, as appropriate, taken advantage of the provisions of Article 4(4), (5) and (6) of that Directive for those water bodies affected by transboundary pollution.

2. Member States shall use the mechanism laid down in Article 12 of Directive 2000/60/EC to provide the Commission with necessary information in the circumstances set out in paragraph 1 of this Article and with a summary of the measures taken in relation to transboundary pollution in the relevant river basin management plan in accordance with the reporting requirements under Article 15(1) of Directive 2000/60/EC.

▼B*Article 7***Reporting and review**

1. On the basis of reports from Member States, including reports in accordance with Article 12 of Directive 2000/60/EC and in particular those on transboundary pollution, the Commission shall review the need to amend existing acts and the need for additional specific Community-wide measures, such as emission controls.

2. The Commission shall report to the European Parliament and to the Council in the context of the report prepared in accordance with Article 18(1) of Directive 2000/60/EC, on:

- (a) the conclusions of the review referred to in paragraph 1 of this Article;
- (b) measures taken to reduce the extent of mixing zones designated in accordance with Article 4(1) of this Directive;
- (c) the outcome of the verification referred to in Article 5(5) of this Directive;
- (d) the situation regarding pollution originating outside the territory of the Community.

The Commission shall, if appropriate, accompany the report with relevant proposals.

▼M1*Article 7a***Coordination**

1. For priority substances that fall within the scope of Regulations (EC) No 1907/2006, (EC) No 1107/2009 ⁽¹⁾, (EU) No 528/2012 ⁽²⁾ or Directive 2010/75/EU ⁽³⁾, the Commission shall, as part of the regular review of Annex X to Directive 2000/60/EC pursuant to Article 16(4) of that Directive, assess whether the measures in place at Union and Member State level are sufficient to achieve the EQS for priority substances and the cessation or phasing-out objective for discharges, emissions and losses of priority hazardous substances in accordance with point (a) of Article 4(1) and Article 16(6) of Directive 2000/60/EC.

2. The Commission shall report to the European Parliament and to the Council on the outcome of the assessment referred to in paragraph 1 of this Article in accordance with the timetable laid down in Article 16(4) of Directive 2000/60/EC and shall accompany its report with any appropriate proposals including for control measures.

⁽¹⁾ Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market (OJ L 309, 24.11.2009, p. 1).

⁽²⁾ Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products (OJ L 167, 27.6.2012, p. 1).

⁽³⁾ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17);

▼ M1

3. Where the results of the report show that additional measures at Union or Member State level may be necessary in order to facilitate compliance with Directive 2000/60/EC in relation to a particular substance approved pursuant to Regulation (EC) No 1107/2009 or Regulation (EU) No 528/2012, Member States or the Commission shall apply Articles 21 or 44 of Regulation (EC) No 1107/2009 or Articles 15 or 48 of Regulation (EU) No 528/2012, as appropriate, to that substance, or products containing that substance.

In the case of substances falling within the scope of Regulation (EC) No 1907/2006, the Commission shall initiate, where appropriate, the procedure referred to in Articles 59, 61 or 69 of that Regulation.

In applying the provisions of the Regulations referred to in the first and second subparagraphs, Member States and the Commission shall take into account any risk evaluations and socio-economic or cost-benefit analyses required under those Regulations, including as regards the availability of alternatives.

*Article 8***Review of Annex X to Directive 2000/60/EC**

The Commission shall report to the European Parliament and to the Council on the outcome of the regular review of Annex X to Directive 2000/60/EC provided for in Article 16(4) of that Directive. It shall accompany the report, where appropriate, with legislative proposals to amend Annex X including, in particular, proposals to identify new priority substances or priority hazardous substances or to identify certain priority substances as priority hazardous substances and to set corresponding EQS for surface water, sediment or biota, as appropriate.

*Article 8a***Specific provisions for certain substances**

1. In the river basin management plans produced in accordance with Article 13 of Directive 2000/60/EC, without prejudice to the requirements of Section 1.4.3 of Annex V thereof regarding the presentation of the overall chemical status and the objectives and obligations laid down in point (a) of Article 4(1), in point (k) of Article 11(3) and in Article 16(6) of that Directive, Member States may provide additional maps that present the chemical status information for one or more of the following substances separately from the information for the rest of the substances identified in Part A of Annex I to this Directive:

- (a) substances numbered 5, 21, 28, 30, 35, 37, 43 and 44 (substances behaving like ubiquitous PBTs);
- (b) substances numbered 34 to 45 (newly identified substances);
- (c) substances numbered 2, 5, 15, 20, 22, 23 and 28 (substances for which revised, stricter EQS are established).

▼ **M1**

Member States may also present the extent of any deviation from the EQS value for the substances referred to in points (a) to (c) of the first subparagraph in the river basin management plans. Member States providing such additional maps shall seek to ensure their inter-comparability at river basin and Union level.

2. Member States may monitor the substances numbered 5, 21, 28, 30, 35, 37, 43 and 44 in Part A of Annex I less intensively than is required for priority substances in accordance with Article 3(4) of this Directive and Annex V to Directive 2000/60/EC, provided that the monitoring is representative and a statistically robust baseline is available regarding the presence of those substances in the aquatic environment. As a guideline, in accordance with the second subparagraph of Article 3(6) of this Directive, monitoring should take place every three years, unless technical knowledge and expert judgment justify another interval.

*Article 8b***Watch list**

1. The Commission shall establish a watch list of substances for which Union-wide monitoring data are to be gathered for the purpose of supporting future prioritisation exercises in accordance with Article 16(2) of Directive 2000/60/EC, to complement data from, inter alia, analyses and reviews under Article 5 and monitoring programmes under Article 8 of that Directive.

The first watch list shall contain a maximum of 10 substances or groups of substances and shall indicate the monitoring matrices and the possible methods of analysis not entailing excessive costs for each substance. Subject to the availability of methods of analysis not entailing excessive costs, the maximum number of substances or groups of substances that the Commission is allowed to include in the list shall increase by one at each update of the list in accordance with paragraph 2 of this Article, up to a maximum number of 14. The substances to be included in the watch list shall be selected from amongst those for which the information available indicates that they may pose a significant risk at Union level to, or via, the aquatic environment and for which monitoring data are insufficient.

Diclofenac (CAS 15307-79-6), 17-beta-estradiol (E2) (CAS 50-28-2) and 17-alpha-ethinylestradiol (EE2) (CAS 57-63-6) shall be included in the first watch list, in order to gather monitoring data for the purpose of facilitating the determination of appropriate measures to address the risk posed by those substances.

In selecting the substances for the watch list, the Commission shall take into account all available information including:

- (a) the results of the most recent regular review of Annex X to Directive 2000/60/EC provided for in Article 16(4) of that Directive;
- (b) research projects;

▼ M1

- (c) recommendations from the stakeholders referred to in Article 16(5) of Directive 2000/60/EC;
- (d) Member States' characterisation of river basin districts and the results of monitoring programmes, under Articles 5 and 8 of Directive 2000/60/EC respectively;
- (e) on production volumes, use patterns, intrinsic properties (including, where relevant, particle size), concentrations in the environment and effects, including information gathered in accordance with Directives 98/8/EC, 2001/82/EC ⁽¹⁾ and 2001/83/EC ⁽²⁾, and with Regulations (EC) No 1907/2006 and (EC) No 1107/2009.

2. The Commission shall establish the first watch list as referred to in paragraph 1 by 14 September 2014 and shall update it every 24 months thereafter. When updating the watch list, the Commission shall remove any substance for which a risk-based assessment as referred to in Article 16(2) of Directive 2000/60/EC can be concluded without additional monitoring data. The duration of a continuous watch list monitoring period for any individual substance shall not exceed four years.

3. Member States shall monitor each substance in the watch list at selected representative monitoring stations over at least a 12-month period. For the first watch list, the monitoring period shall commence by 14 September 2015 or within six months of the establishment of the watch list, whichever is the later. For each substance included in subsequent lists, Member States shall commence monitoring within six months of its inclusion in the list.

Each Member State shall select at least one monitoring station, plus one station if it has more than one million inhabitants, plus the number of stations equal to its geographical area in km² divided by 60 000 (rounded to the nearest integer), plus the number of stations equal to its population divided by five million (rounded to the nearest integer).

In selecting the representative monitoring stations, the monitoring frequency and timing for each substance, Member States shall take into account the use patterns and possible occurrence of the substance. The frequency of monitoring shall be no less than once per year.

Where a Member State provides sufficient, comparable, representative and recent monitoring data for a particular substance from existing monitoring programmes or studies, it may decide not to undertake additional monitoring under the watch list mechanism for that substance, provided also that the substance was monitored using a methodology that satisfies the requirements of the technical guidelines developed by the Commission in accordance with Article 8b(5).

⁽¹⁾ Directive 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal products (OJ L 311, 28.11.2001, p. 1).

⁽²⁾ Directive 2001/83/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to medicinal products for human use (OJ L 311, 28.11.2001, p. 67).

▼ M1

4. Member States shall report to the Commission the results of the monitoring carried out pursuant to paragraph 3. For the first watch list, the monitoring results shall be reported within 15 months of 14 September 2015 or within 21 months of the establishment of the watch list, whichever is the later, and every 12 months thereafter while the substance is kept on the list. For each substance included in subsequent lists, Member States shall report the results of the monitoring to the Commission within 21 months of the inclusion of the substance in the watch list, and every 12 months thereafter while the substance is kept on the list. The report shall include information on the representativeness of the monitoring stations and monitoring strategy.

5. The Commission shall adopt implementing acts establishing and updating the watch list as referred to in paragraphs 1 and 2. It may also adopt technical formats for reporting the monitoring results and related information to the Commission. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 9(2).

The Commission shall develop guidelines, including technical specifications, with a view to facilitating the monitoring of the substances in the watch list and is invited to promote coordination of such monitoring.

*Article 8c***Specific provisions for pharmaceutical substances**

Pursuant to Article 16(9) of Directive 2000/60/EC, and where appropriate on the basis of the outcome of its 2013 study on the risks posed by medicinal products in the environment and of other relevant studies and reports, the Commission shall, as far as possible within two years from 13 September 2013 develop a strategic approach to pollution of water by pharmaceutical substances. That strategic approach shall, where appropriate, include proposals enabling, to the extent necessary, the environmental impacts of medicines to be taken into account more effectively in the procedure for placing medicinal products on the market. In the framework of that strategic approach, the Commission shall, where appropriate, by 14 September 2017 propose measures to be taken at Union and/or Member State level, as appropriate, to address the possible environmental impacts of pharmaceutical substances, particularly those referred to in Article 8b(1), with a view to reducing discharges, emissions and losses of such substances into the aquatic environment, taking into account public health needs and the cost-effectiveness of the measures proposed.

*Article 9***Committee procedure**

1. The Commission shall be assisted by the Committee established under Article 21(1) of Directive 2000/60/EC. That Committee is a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers⁽¹⁾.

⁽¹⁾ OJ L 55, 28.2.2011, p. 13;

▼M1

2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

Where the Committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

*Article 9a***Exercise of the delegation**

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts referred to in Article 3(8) shall be conferred on the Commission for a period of six years from 13 September 2013. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the six-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.

3. The delegation of power referred to in Article 3(8) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

5. A delegated act adopted pursuant to Article 3(8) shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

▼B*Article 10***Amendment of Directive 2000/60/EC**

Annex X to Directive 2000/60/EC shall be replaced by the text set out in Annex II to this Directive.

*Article 11***Amendment of Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC**

1. Annex II to Directives 82/176/EEC, 83/513/EEC, 84/156/EEC and 84/491/EEC respectively shall be deleted.

▼B

2. Headings B in Sections I to XI of Annex II to Directive 86/280/EEC shall be deleted.

*Article 12***Repeal of Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC**

1. Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC shall be repealed with effect from 22 December 2012.

2. Before 22 December 2012, Member States may carry out monitoring and reporting in accordance with Articles 5, 8 and 15 of Directive 2000/60/EC instead of carrying them out in accordance with the Directives referred to in paragraph 1 of this Article.

*Article 13***Transposition**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 13 July 2010.

When Member States adopt those measures, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

*Article 14***Entry into force**

This Directive shall enter into force on the 20th day following its publication in the *Official Journal of the European Union*.

*Article 15***Addressees**

This Directive is addressed to the Member States.

▼ **M1**

ANNEX I

**ENVIRONMENTAL QUALITY STANDARDS FOR PRIORITY
SUBSTANCES AND CERTAIN OTHER POLLUTANTS**

PART A: ENVIRONMENTAL QUALITY STANDARDS (EQS)

AA: annual average.

MAC: maximum allowable concentration.

Unit: [$\mu\text{g}/\text{l}$] for columns (4) to (7)[$\mu\text{g}/\text{kg}$ wet weight] for column (8)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number ⁽¹⁾	AA-EQS ⁽²⁾ Inland surface waters ⁽³⁾	AA-EQS ⁽²⁾ Other surface waters	MAC-EQS ⁽⁴⁾ Inland surface waters ⁽³⁾	MAC-EQS ⁽⁴⁾ Other surface waters	EQS Biota ⁽¹²⁾
(1)	Alachlor	15972-60-8	0,3	0,3	0,7	0,7	
(2)	Anthracene	120-12-7	0,1	0,1	0,1	0,1	
(3)	Atrazine	1912-24-9	0,6	0,6	2,0	2,0	
(4)	Benzene	71-43-2	10	8	50	50	
(5)	Brominated diphenylethers ⁽⁵⁾	32534-81-9			0,14	0,014	0,0085
(6)	Cadmium and its compounds (depending on water hardness classes) ⁽⁶⁾	7440-43-9	$\leq 0,08$ (Class 1) 0,08 (Class 2) 0,09 (Class 3) 0,15 (Class 4) 0,25 (Class 5)	0,2	$\leq 0,45$ (Class 1) 0,45 (Class 2) 0,6 (Class 3) 0,9 (Class 4) 1,5 (Class 5)	$\leq 0,45$ (Class 1) 0,45 (Class 2) 0,6 (Class 3) 0,9 (Class 4) 1,5 (Class 5)	
(6a)	Carbon-tetrachloride ⁽⁷⁾	56-23-5	12	12	not applicable	not applicable	
(7)	C10-13 Chloroalkanes ⁽⁸⁾	85535-84-8	0,4	0,4	1,4	1,4	
(8)	Chlorfenvinphos	470-90-6	0,1	0,1	0,3	0,3	
(9)	Chlorpyrifos (Chlorpyrifos-ethyl)	2921-88-2	0,03	0,03	0,1	0,1	

▼ **M1**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number ⁽¹⁾	AA-EQS ⁽²⁾ Inland surface waters ⁽²⁾	AA-EQS ⁽²⁾ Other surface waters	MAC-EQS ⁽⁴⁾ Inland surface waters ⁽²⁾	MAC-EQS ⁽⁴⁾ Other surface waters	EQS Biota ⁽¹²⁾
(9a)	Cyclodiene pesticides: Aldrin ⁽⁷⁾ Dieldrin ⁽⁷⁾ Endrin ⁽⁷⁾ Isodrin ⁽⁷⁾	309-00-2 60-57-1 72-20-8 465-73-6	$\Sigma = 0,01$	$\Sigma = 0,005$	not applicable	not applicable	
(9b)	DDT total ^{(7), (9)}	not applicable	0,025	0,025	not applicable	not applicable	
	para-para-DDT ⁽⁷⁾	50-29-3	0,01	0,01	not applicable	not applicable	
(10)	1,2-Dichloroethane	107-06-2	10	10	not applicable	not applicable	
(11)	Dichloromethane	75-09-2	20	20	not applicable	not applicable	
(12)	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	1,3	1,3	not applicable	not applicable	
(13)	Diuron	330-54-1	0,2	0,2	1,8	1,8	
(14)	Endosulfan	115-29-7	0,005	0,0005	0,01	0,004	
(15)	Fluoranthene	206-44-0	0,0063	0,0063	0,12	0,12	30
(16)	Hexachlorobenzene	118-74-1			0,05	0,05	10
(17)	Hexachlorobutadiene	87-68-3			0,6	0,6	55
(18)	Hexachlorocyclohexane	608-73-1	0,02	0,002	0,04	0,02	
(19)	Isoproturon	34123-59-6	0,3	0,3	1,0	1,0	
(20)	Lead and its compounds	7439-92-1	1,2 ⁽¹³⁾	1,3	14	14	
(21)	Mercury and its compounds	7439-97-6			0,07	0,07	20
(22)	Naphthalene	91-20-3	2	2	130	130	

▼ M1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number ⁽¹⁾	AA-EQS ⁽²⁾ Inland surface waters ⁽²⁾	AA-EQS ⁽²⁾ Other surface waters	MAC-EQS ⁽⁴⁾ Inland surface waters ⁽²⁾	MAC-EQS ⁽⁴⁾ Other surface waters	EQS Biota ⁽¹²⁾
(23)	Nickel and its compounds	7440-02-0	4 ⁽¹³⁾	8,6	34	34	
(24)	Nonylphenols (4-Nonylphenol)	84852-15-3	0,3	0,3	2,0	2,0	
(25)	Octylphenols ((4-(1,1',3,3'-tetramethylbutyl)-phenol))	140-66-9	0,1	0,01	not applicable	not applicable	
(26)	Pentachlorobenzene	608-93-5	0,007	0,0007	not applicable	not applicable	
(27)	Pentachlorophenol	87-86-5	0,4	0,4	1	1	
(28)	Polyaromatic hydrocarbons (PAH) ⁽¹¹⁾	not applicable	not applicable	not applicable	not applicable	not applicable	
	Benzo(a)pyrene	50-32-8	$1,7 \times 10^{-4}$	$1,7 \times 10^{-4}$	0,27	0,027	5
	Benzo(b)fluoranthene	205-99-2	see footnote 11	see footnote 11	0,017	0,017	see footnote 11
	Benzo(k)fluoranthene	207-08-9	see footnote 11	see footnote 11	0,017	0,017	see footnote 11
	Benzo(g,h,i)-perylene	191-24-2	see footnote 11	see footnote 11	$8,2 \times 10^{-3}$	$8,2 \times 10^{-4}$	see footnote 11
	Indeno(1,2,3-cd)-pyrene	193-39-5	see footnote 11	see footnote 11	not applicable	not applicable	see footnote 11
(29)	Simazine	122-34-9	1	1	4	4	
(29a)	Tetrachloroethylene ⁽⁷⁾	127-18-4	10	10	not applicable	not applicable	
(29b)	Trichloroethylene ⁽⁷⁾	79-01-6	10	10	not applicable	not applicable	
(30)	Tributyltin compounds (Tributyltin-cation)	36643-28-4	0,0002	0,0002	0,0015	0,0015	

▼ **M1**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number ⁽¹⁾	AA-EQS ⁽²⁾ Inland surface waters ⁽³⁾	AA-EQS ⁽²⁾ Other surface waters	MAC-EQS ⁽⁴⁾ Inland surface waters ⁽³⁾	MAC-EQS ⁽⁴⁾ Other surface waters	EQS Biota ⁽¹²⁾
(31)	Trichlorobenzenes	12002-48-1	0,4	0,4	not applicable	not applicable	
(32)	Trichloromethane	67-66-3	2,5	2,5	not applicable	not applicable	
(33)	Trifluralin	1582-09-8	0,03	0,03	not applicable	not applicable	
(34)	Dicofol	115-32-2	$1,3 \times 10^{-3}$	$3,2 \times 10^{-5}$	not applicable ⁽¹⁰⁾	not applicable ⁽¹⁰⁾	33
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1	$6,5 \times 10^{-4}$	$1,3 \times 10^{-4}$	36	7,2	9,1
(36)	Quinoxifen	124495-18-7	0,15	0,015	2,7	0,54	
(37)	Dioxins and dioxin-like compounds	See footnote 10 in Annex X to Directive 2000/60/EC			not applicable	not applicable	Sum of PCDD+PCDF+PCB-DL 0,0065 $\mu\text{g. kg}^{-1}$ TEQ ⁽¹⁴⁾
(38)	Aclonifen	74070-46-5	0,12	0,012	0,12	0,012	
(39)	Bifenox	42576-02-3	0,012	0,0012	0,04	0,004	
(40)	Cybutryne	28159-98-0	0,0025	0,0025	0,016	0,016	
(41)	Cypermethrin	52315-07-8	8×10^{-5}	8×10^{-6}	6×10^{-4}	6×10^{-5}	
(42)	Dichlorvos	62-73-7	6×10^{-4}	6×10^{-5}	7×10^{-4}	7×10^{-5}	
(43)	Hexabromocyclododecane (HBCDD)	See footnote 12 in Annex X to Directive 2000/60/EC	0,0016	0,0008	0,5	0,05	167

▼ **M1**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number ⁽¹⁾	AA-EQS ⁽²⁾ Inland surface waters ⁽³⁾	AA-EQS ⁽²⁾ Other surface waters	MAC-EQS ⁽⁴⁾ Inland surface waters ⁽³⁾	MAC-EQS ⁽⁴⁾ Other surface waters	EQS Biota ⁽¹²⁾
(44)	Heptachlor and heptachlor epoxide	76-44-8/ 1024-57-3	2×10^{-7}	1×10^{-8}	3×10^{-4}	3×10^{-5}	$6,7 \times 10^{-3}$
(45)	Terbutryn	886-50-0	0,065	0,0065	0,34	0,034	

⁽¹⁾ CAS: Chemical Abstracts Service.

⁽²⁾ This parameter is the EQS expressed as an annual average value (AA-EQS). Unless otherwise specified, it applies to the total concentration of all isomers.

⁽³⁾ Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.

⁽⁴⁾ This parameter is the EQS expressed as a maximum allowable concentration (MAC-EQS). Where the MAC-EQS are marked as 'not applicable', the AA-EQS values are considered protective against short-term pollution peaks in continuous discharges since they are significantly lower than the values derived on the basis of acute toxicity.

⁽⁵⁾ For the group of priority substances covered by brominated diphenylethers (No 5), the EQS refers to the sum of the concentrations of congener numbers 28, 47, 99, 100, 153 and 154.

⁽⁶⁾ For Cadmium and its compounds (No 6) the EQS values vary depending on the hardness of the water as specified in five class categories (Class 1: < 40 mg CaCO₃/l, Class 2: 40 to < 50 mg CaCO₃/l, Class 3: 50 to < 100 mg CaCO₃/l, Class 4: 100 to < 200 mg CaCO₃/l and Class 5: ≥ 200 mg CaCO₃/l).

⁽⁷⁾ This substance is not a priority substance but one of the other pollutants for which the EQS are identical to those laid down in the legislation that applied prior to 13 January 2009.

⁽⁸⁾ No indicative parameter is provided for this group of substances. The indicative parameter(s) must be defined through the analytical method.

⁽⁹⁾ DDT total comprises the sum of the isomers 1,1,1-trichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 50-29-3; EU number 200-024-3); 1,1,1-trichloro-2 (o-chlorophenyl)-2-(p-chlorophenyl) ethane (CAS number 789-02-6; EU Number 212-332-5); 1,1-dichloro-2,2 bis (p-chlorophenyl) ethylene (CAS number 72-55-9; EU Number 200-784-6); and 1,1-dichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 72-54-8; EU Number 200-783-0).

⁽¹⁰⁾ There is insufficient information available to set a MAC-EQS for these substances.

⁽¹¹⁾ For the group of priority substances of polyaromatic hydrocarbons (PAH) (No 28), the biota EQS and corresponding AA-EQS in water refer to the concentration of benzo(a)pyrene, on the toxicity of which they are based. Benzo(a)pyrene can be considered as a marker for the other PAHs, hence only benzo(a)pyrene needs to be monitored for comparison with the biota EQS or the corresponding AA-EQS in water.

⁽¹²⁾ Unless otherwise indicated, the biota EQS relate to fish. An alternative biota taxon, or another matrix, may be monitored instead, as long as the EQS applied provides an equivalent level of protection. For substances numbered 15 (Fluoranthene) and 28 (PAHs), the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status, monitoring of Fluoranthene and PAHs in fish is not appropriate. For substance number 37 (Dioxins and dioxin-like compounds), the biota EQS relates to fish, crustaceans and molluscs, in line with section 5.3 of the Annex to Commission Regulation (EU) No 1259/2011 of 2 December 2011 amending Regulation (EC) No 1881/2006 as regards maximum levels for dioxins, dioxin-like PCBs and non-dioxin-like PCBs in foodstuffs (OJ L 320, 3.12.2011, p. 18).

⁽¹³⁾ These EQS refer to bioavailable concentrations of the substances.

⁽¹⁴⁾ PCDD: polychlorinated dibenzo-p-dioxins; PCDF: polychlorinated dibenzofurans; PCB-DL: dioxin-like polychlorinated biphenyls; TEQ: toxic equivalents according to the World Health Organisation 2005 Toxic Equivalence Factors.

▼ **B**

PART B: APPLICATION OF THE EQS SET OUT IN PART A

- Columns 4 and 5 of the table: For any given surface water body, applying the AA-EQS means that, for each representative monitoring point within the water body, the arithmetic mean of the concentrations measured at different times during the year does not exceed the standard.

The calculation of the arithmetic mean, the analytical method used and, where there is no appropriate analytical method meeting the minimum performance criteria, the method of applying an EQS must be in accordance with implementing acts adopting technical specifications for chemical monitoring and quality of analytical results, in accordance with Directive 2000/60/EC.

▼ **M1**

- Columns 6 and 7 of the table: for any given surface water body, applying the MAC-EQS means that the measured concentration at any representative monitoring point within the water body does not exceed the standard.

▼ M1

However, in accordance with Section 1.3.4 of Annex V to Directive 2000/60/EC, Member States may introduce statistical methods, such as a percentile calculation, to ensure an acceptable level of confidence and precision for determining compliance with the MAC-EQS. Where Member States do so, such statistical methods shall comply with detailed rules laid down in accordance with the examination procedure referred to in Article 9(2) of this Directive.

3. The water EQS laid down in this Annex are expressed as total concentrations in the whole water sample.

By way of derogation from the first subparagraph, in the case of cadmium, lead, mercury and nickel (hereinafter 'metals'), the water EQS refer to the dissolved concentration, i.e. the dissolved phase of a water sample obtained by filtration through a 0,45 µm filter or any equivalent pre-treatment, or, where specifically indicated, to the bioavailable concentration.

Member States may, when assessing the monitoring results against the relevant EQS, take into account:

- (a) natural background concentrations for metals and their compounds where such concentrations prevent compliance with the relevant EQS;
 - (b) hardness, pH, dissolved organic carbon or other water quality parameters that affect the bioavailability of metals, the bioavailable concentrations being determined using appropriate bioavailability modelling.
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