



# EUROPEAN UNION

THE EUROPEAN PARLIAMENT

THE COUNCIL

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**DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
AMENDING DIRECTIVES 2000/60/EC AND 2008/105/EC  
AS REGARDS PRIORITY SUBSTANCES IN THE FIELD OF WATER POLICY**

**DIRECTIVE 2013/39/EU**  
**OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**of 12 August 2013**

**amending Directives 2000/60/EC and 2008/105/EC**  
**as regards priority substances in the field of water policy**

**(Text with EEA relevance)**

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee<sup>1</sup>,

Having regard to the opinion of the Committee of the Regions<sup>2</sup>,

Acting in accordance with the ordinary legislative procedure<sup>3</sup>,

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<sup>1</sup> OJ C 229, 31.7.2012, p. 116.

<sup>2</sup> OJ C 17, 19.1.2013, p. 91.

<sup>3</sup> Position of the European Parliament of 2 July 2013 (not yet published in the Official Journal) and decision of the Council of 22 July 2013.

Whereas:

- (1) Chemical pollution of surface water poses a threat to the aquatic environment, with effects such as acute and chronic toxicity in aquatic organisms, accumulation of pollutants in the ecosystem and loss of habitats and biodiversity, and also poses a threat to human health. As a matter of priority, causes of pollution should be identified and emissions of pollutants should be dealt with at source, in the most economically and environmentally effective manner.
- (2) Pursuant to the second sentence of Article 191(2) of the Treaty on the Functioning of the European Union (TFEU), Union 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) Treating waste water can be very costly. In order to facilitate cheaper and more cost effective treatment, the development of innovative water treatment technologies could be stimulated.

- (4) 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<sup>1</sup> lays down a strategy against the pollution of water. That strategy involves the identification of priority substances amongst those that pose a significant risk to, or via, the aquatic environment at Union level. 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<sup>2</sup> set out the first list of 33 substances or groups of substances that were prioritised at Union level for inclusion in Annex X to Directive 2000/60/EC.
- (5) 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<sup>3</sup> lays down environmental quality standards (EQS), in accordance with Directive 2000/60/EC, for the 33 priority substances identified in Decision No 2455/2001/EC and eight other pollutants that were already regulated at Union level.

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<sup>1</sup> OJ L 327, 22.12.2000, p. 1.  
<sup>2</sup> OJ L 331, 15.12.2001, p. 1.  
<sup>3</sup> OJ L 348, 24.12.2008, p. 84.

- (6) Pursuant to Article 191(3) TFEU, in preparing its policy on the environment, the Union is to take account of available scientific and technical data, environmental conditions in the various regions of the Union, the potential benefits and costs of action or lack of action as well as the economic and social development of the Union as a whole and the balanced development of its regions. Scientific, environmental and socio-economic factors, including human health considerations, should be taken into account in developing a cost-effective and proportionate policy on the prevention and control of chemical pollution of surface waters, including in reviewing the list of priority substances in accordance with Article 16(4) of Directive 2000/60/EC. In view of that aim, the polluter pays principle underpinning Directive 2000/60/EC should be consistently applied.
- (7) The Commission has conducted a review of the list of priority substances in accordance with Article 16(4) of Directive 2000/60/EC and with Article 8 of Directive 2008/105/EC and has come to the conclusion that it is appropriate to amend the list of priority substances by identifying new substances for priority action at Union level, setting EQS for those newly identified substances, revising the EQS for some existing substances in line with scientific progress and setting biota EQS for some existing and newly identified priority substances.
- (8) The review of the priority substances list has been supported by an extensive consultation with experts from the Commission services, Member States, stakeholders and the Scientific Committee on Health and Environmental Risks.

- (9) The revised EQS for existing priority substances should be taken into account for the first time in river basin management plans covering the period 2015 to 2021. The newly identified priority substances and their EQS should be taken into account in the establishment of supplementary monitoring programmes and in preliminary programmes of measures to be submitted by the end of 2018. With the aim of achieving good surface water chemical status, the revised EQS for existing priority substances should be met by the end of 2021 and the EQS for newly identified priority substances by the end of 2027, without prejudice to Article 4(4) to (9) of Directive 2000/60/EC, which includes inter alia provisions for extending the deadline for achieving good surface water chemical status or achieving less stringent environmental objectives for specific bodies of water on the grounds of disproportionate cost and/or socio-economic need, provided that no further deterioration occurs in the status of the affected bodies of water. The determination of surface water chemical status by the 2015 deadline laid down in Article 4 of Directive 2000/60/EC should be based, therefore, only on the substances and EQS set out in Directive 2008/105/EC in the version in force on 13 January 2009 unless those EQS are stricter than the revised EQS under this Directive, in which case the latter should be applied.

- (10) Since the adoption of Directive 2000/60/EC, numerous Union acts have been adopted, in accordance with Article 16(6) of that Directive, which constitute emission controls for individual priority substances. Moreover, many environmental protection measures fall under the scope of other existing Union law. Where the objectives laid down in Article 16(1) of Directive 2000/60/EC can be effectively achieved by existing instruments, priority should be given to implementing and revising those instruments rather than establishing new measures. The inclusion of a substance in Annex X to Directive 2000/60/EC is without prejudice to the application of 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<sup>1</sup>.
- (11) In order to improve coordination between Directive 2000/60/EC, 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), establishing a European Chemicals Agency<sup>2</sup>, and relevant sectoral legislation, potential synergies should be explored with a view to identifying possible areas where data gathered through implementation of Directive 2000/60/EC can be used to support REACH and other relevant substance evaluation procedures and, conversely, areas where data generated for the purpose of substance evaluations under REACH and relevant sectoral legislation can be used to support the implementation of Directive 2000/60/EC, including the prioritisation outlined in Article 16(2) of that Directive.

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<sup>1</sup> OJ L 309, 24.11.2009, p. 1.

<sup>2</sup> OJ L 396, 30.12.2006, p. 1.

(12) The progressive reduction of pollution from priority substances and the cessation or phasing-out of discharges, emissions and losses of priority hazardous substances, as required by Directive 2000/60/EC, may often be achieved most cost-effectively through Union substance-specific measures at source, for example pursuant to Regulations (EC) No 1907/2006, (EC) No 1107/2009, (EU) No 528/2012<sup>1</sup> or Directives 2001/82/EC<sup>2</sup>, 2001/83/EC<sup>3</sup> or 2010/75/EU<sup>4</sup>. Coherence between those legal acts, Directive 2000/60/EC and other relevant legislation should therefore be strengthened to ensure that source-control mechanisms are applied as appropriate. Where the outcome of the regular review of Annex X to Directive 2000/60/EC, and available monitoring data, show that the measures in place at Union or Member State level are insufficient to achieve the EQS for certain priority substances or the cessation or phasing-out objective for certain priority hazardous substances, appropriate action should be taken at Union or Member State level with a view to achieving the objectives of Directive 2000/60/EC, taking into account the risk evaluations, socio-economic and cost-benefit analyses carried out under the relevant legislation as well as the availability of alternatives.

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<sup>1</sup> 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).

<sup>2</sup> 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).

<sup>3</sup> 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).

<sup>4</sup> 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).



- (13) Since the derivation of the EQS for the 33 priority substances included in Annex X to Directive 2000/60/EC, a number of risk assessments under Council Regulation (EEC) No 793/93 of 23 March 1993 on the evaluation and control of the risks of existing substances<sup>1</sup>, later replaced by Regulation (EC) No 1907/2006, have been concluded. In order to ensure an appropriate level of protection and to update EQS in line with the latest scientific and technical knowledge concerning risks to, or via, the aquatic environment, the EQS for some of the existing substances should be revised.
- (14) Additional substances posing a significant risk to, or via, the aquatic environment at Union level have been identified and prioritised using the approaches specified in Article 16(2) of Directive 2000/60/EC and should be added to the list of priority substances. The latest available scientific and technical information has been taken into account in deriving the EQS for those substances.
- (15) The contamination of water and soil with pharmaceutical residues is an emerging environmental concern. In evaluating and controlling the risk to, or via, the aquatic environment from medicinal products, adequate attention should be paid to Union environmental objectives. In order to address that concern, the Commission should study the risks of environmental effects from medicinal products and provide an analysis of the relevance and effectiveness of the current legislative framework in protecting the aquatic environment and human health via the aquatic environment.

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<sup>1</sup> OJ L 84, 5.4.1993, p. 1.

- (16) The derivation of EQS for priority hazardous substances usually involves higher levels of uncertainty than is the case for priority substances but such EQS still establish a benchmark to assess compliance with the objective of good surface water chemical status, as defined in Article 2(24) and points (ii) and (iii) of point (a) of Article 4(1) of Directive 2000/60/EC. However, in order to ensure an adequate level of protection for the environment and human health, the cessation or phasing-out of discharges, emissions and losses of priority hazardous substances should also be aimed at, in accordance with point (iv) of point (a) of Article 4(1) of Directive 2000/60/EC.
- (17) Scientific knowledge about the fate and effects of pollutants in water has evolved significantly over recent years. More is known about which compartment of the aquatic environment (water, sediment or biota, hereinafter "matrix") a substance is likely to be found in, and therefore where its concentration is most likely to be measurable. Some very hydrophobic substances accumulate in biota and are hardly detectable in water even using the most advanced analytical techniques. For such substances, EQS should be set for biota. Nevertheless, in order to take advantage of their monitoring strategy and adapt it to their local circumstances, Member States should have flexibility to apply an EQS for an alternative matrix or, where relevant, an alternative biota taxon, for example sub-phylum Crustacea, paraphylum 'fish', class Cephalopoda or class Bivalvia (mussels and clams), provided that the level of protection afforded by the EQS and the monitoring system applied by the Member States is as good as that provided by the EQS and matrix laid down in this Directive.

- (18) Novel monitoring methods such as passive sampling and other tools show promise for future application, and their development should therefore be pursued.
- (19) 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<sup>1</sup>, establishes minimum performance criteria for the analytical methods used in monitoring water status. Those criteria ensure meaningful and relevant monitoring information by requiring the use of analytical methods that are sensitive enough to ensure that any exceedance of an EQS can be reliably detected and measured. Member States should be permitted to monitor in matrices or in biota taxa other than those specified by this Directive only if the analytical method used meets the minimum performance criteria set out in Article 4 of Directive 2009/90/EC for the relevant EQS and matrix or biota taxon, or performs at least as well as the method available for the EQS and matrix or biota taxon specified in this Directive.
- (20) The implementation of this Directive involves challenges which include the diversity of the possible solutions to scientific, technical and practical questions and the incomplete development of monitoring methods, as well as constraints on human and financial resources. To help address some of those challenges, the development of monitoring strategies and analytical methods should be supported by technical work by expert groups under the Common Implementation Strategy for Directive 2000/60/EC.

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<sup>1</sup> OJ L 201, 1.8.2009, p. 36.

- (21) Persistent, bioaccumulative and toxic substances (PBTs) and other substances that behave like PBTs can be found for decades in the aquatic environment at levels posing a significant risk, even if extensive measures to reduce or eliminate emissions of such substances have already been taken. Some are also capable of long-range transport and are largely ubiquitous in the environment. Several such substances are among the existing and newly identified priority hazardous substances. For some of those substances there is evidence of long-term ubiquity in the aquatic environment at Union level, and those particular substances therefore need special consideration as regards their impact on the presentation of chemical status under Directive 2000/60/EC and as regards monitoring requirements.
- (22) As regards the presentation of chemical status under Section 1.4.3 of Annex V to Directive 2000/60/EC, Member States should be allowed to present separately the impact on chemical status of substances that behave like ubiquitous PBTs so that improvements in water quality achieved in relation to other substances are not obscured. In addition to the obligatory map covering all substances, additional maps, covering substances behaving like ubiquitous PBTs and separately covering the rest of the substances, could be provided.
- (23) Monitoring should be adapted to the spatial and temporal scale of the expected variation in concentrations. Given the widespread distribution and long recovery times expected for substances behaving like ubiquitous PBTs, Member States should be allowed to reduce the number of monitoring sites and/or the frequency of monitoring for those substances to the minimum level sufficient for reliable long-term trend analysis, provided that a statistically robust monitoring baseline is available.

- (24) The special consideration given to substances behaving like ubiquitous PBTs does not exempt the Union or the Member States from taking measures additional to those already taken, including at international level, to reduce or eliminate discharges, emissions and losses of those substances so as to achieve the objectives set out in point (a) of Article 4(1) of Directive 2000/60/EC.
- (25) Under Article 10(3) of Directive 2000/60/EC, where a quality objective or quality standard established pursuant to that Directive, to the Directives listed in Annex IX to Directive 2000/60/EC, or pursuant to any other Union legislation, requires stricter conditions than those which would result from the application of Article 10(2) of that Directive, more stringent emission controls are to be set accordingly. A similar provision has also been included in Article 18 of Directive 2010/75/EU. It follows from those Articles that the emission controls set under the legislation listed in Article 10(2) of Directive 2000/60/EC should be the minimum controls applied. Where those controls cannot ensure that an EQS is met, for example in the case of a substance behaving like a ubiquitous PBT, but stricter conditions would not either, even in conjunction with stricter conditions for other discharges, emissions and losses affecting the water body, such stricter conditions could not be considered as being required to meet that EQS.

- (26) High-quality monitoring data, along with data on ecotoxicological and toxicological effects, are needed for the risk assessments that support the selection of new priority substances. The monitoring data collected from Member States, although significantly improved over the past years, are not always fit for purpose in terms of quality and Union coverage. Monitoring data are particularly lacking for many emerging pollutants, which can be defined as pollutants currently not included in routine monitoring programmes at Union level but which could pose a significant risk requiring regulation, depending upon their potential ecotoxicological and toxicological effects and on their levels in the aquatic environment.
- (27) A new mechanism is needed to provide the Commission with targeted high-quality monitoring information on the concentration of substances in the aquatic environment, with a focus on emerging pollutants and substances for which available monitoring data are of insufficient quality for the purpose of risk assessment. The new mechanism should facilitate the gathering of that information across Union river basins and complement monitoring data from programmes under Articles 5 and 8 of Directive 2000/60/EC and other reliable sources. In order to maintain monitoring costs at reasonable levels, the mechanism should focus on a limited number of substances, included temporarily in a watch list, and a limited number of monitoring sites, but should provide representative data that are fit for the purpose of the Union prioritisation process. The list should be dynamic and its validity in time should be limited, in order to respond to new information on the potential risks posed by emerging pollutants and to avoid monitoring substances for longer than necessary.

- (28) In order to simplify and streamline reporting obligations for the Member States, and increase coherence with other related aspects of water management, the notification requirements in Article 3 of Directive 2008/105/EC should be merged with the overall reporting obligations under Article 15 of Directive 2000/60/EC.
- (29) As regards the presentation of chemical status in accordance with Section 1.4.3 of Annex V to Directive 2000/60/EC, for the purposes of the update of the programmes of measures and of the river basin management plans to be carried out in accordance with Article 11(8) and Article 13(7) of Directive 2000/60/EC respectively, Member States should be allowed to present separately the impact on chemical status of newly identified priority substances and of existing priority substances with revised EQS, so that the introduction of new requirements is not mistakenly perceived as an indication that the chemical status of surface waters has deteriorated. In addition to the obligatory map covering all substances, additional maps, covering newly identified substances and existing substances with revised EQS, and separately covering the rest of the substances, could be provided.
- (30) It is important that environmental information on the status of Union surface waters and on the achievements of strategies against chemical pollution is made available to the public in a timely manner. With a view to strengthening access and transparency, a central portal providing information on the river basin management plans and their reviews and updates should be accessible to the public electronically in each Member State.

- (31) With the adoption of this proposal and submission of its report to the European Parliament and to the Council, the Commission has completed its first review of the list of priority substances as required under Article 8 of Directive 2008/105/EC. This has included a review of the substances listed in Annex III to that Directive, some of which have been identified for prioritisation. There is currently insufficient evidence to prioritise the other substances listed in Annex III. The possibility of new information regarding those substances becoming available means that they are not excluded from future review, as is the case for the other substances considered but not prioritised in the present review. Annex III to Directive 2008/105/EC has therefore become obsolete and should be deleted. Article 8 of that Directive should be amended accordingly, also regarding the date of reporting to the European Parliament and to the Council.
- (32) In order to react to relevant technical and scientific progress in the area covered by this Directive in a timely manner, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission in respect of the updating of the methods for applying the EQS laid down in the Directive. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level. The Commission, when preparing and drawing up delegated acts, should ensure simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and to the Council.



- (33) In order to improve the information basis for future identification of priority substances, in particular as regards emerging pollutants, implementing powers should be conferred on the Commission in respect of the establishment and updating of a watch list. Furthermore, in order to ensure uniform conditions for the implementation of this Directive and for the formats for the reporting to the Commission of the monitoring data and information, implementing powers should be conferred on the Commission. Those powers should be exercised in accordance with 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 the Member States of the Commission's exercise of implementing powers<sup>1</sup>.
- (34) In accordance with the Joint Political Declaration of Member States and the Commission of 28 September 2011 on explanatory documents<sup>2</sup>, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the legislator considers the transmission of such documents to be justified.

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<sup>1</sup> OJ L 55, 28.2.2011, p. 13.

<sup>2</sup> OJ C 369, 17.12.2011, p. 14.

- (35) Since the objective of this Directive, namely that of achieving 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 the need to maintain the same level of protection of surface water throughout the Union, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. 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.
- (36) Directives 2000/60/EC and 2008/105/EC should therefore be amended accordingly,

HAVE ADOPTED THIS DIRECTIVE:

### *Article 1*

Directive 2000/60/EC is amended as follows:

1. Article 16(4) is replaced by the following:
  - '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 six years thereafter, and come forward with proposals as appropriate.'
2. Annex X is replaced by the text set out in Annex I to this Directive.

### *Article 2*

Directive 2008/105/EC is amended as follows:

1. Article 2 is replaced by the following:

#### *'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\* 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.

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\* OJ L 201, 1.8.2009, p. 36.'

2. Article 3 is replaced by the following:

*'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.

- 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.

- 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 1 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 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\*.
  
- 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.

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.

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\* OJ L 41, 14.2.2003, p. 26.!

3. Article 4(4) and Article 5(6) are deleted.

4. The following Article is inserted:

*'Article 7a*

*Coordination*

1. For priority substances that fall within the scope of Regulations (EC) No 1907/2006, (EC) No 1107/2009<sup>\*</sup>, (EU) No 528/2012<sup>\*\*</sup> or Directive 2010/75/EU<sup>\*\*\*</sup>, 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.

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.

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\* 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).

\*\* 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).

\*\*\* 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).<sup>1</sup>.

5. Articles 8 and 9 are replaced by the following:

*'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).

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,
- (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\* and 2001/83/EC\*\*, 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 ...<sup>+</sup> 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 ...<sup>++</sup> 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 km<sup>2</sup> 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.

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<sup>+</sup> OJ: please insert date: one year after the entry into force of the amending Directive.

<sup>++</sup> OJ: please insert the date: 24 months after the date of entry into force of the amending Directive.

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).

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 ...<sup>+</sup> 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).

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<sup>+</sup> OJ: please insert the date: 24 months after the date of entry into force of the amending Directive.

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 ...<sup>+</sup> 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 ...<sup>++</sup> 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.

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<sup>+</sup> OJ please insert date of entry into force of the amending Directive.

<sup>++</sup> OJ please insert date: four years from entry into force of the amending Directive.

## *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<sup>\*\*\*</sup>.
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 ...<sup>+</sup>. 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.

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<sup>+</sup> OJ: please insert the date of entry into force of the amending Directive.

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.

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- \* 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).
- \*\* 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).
- \*\*\* OJ L 55, 28.2.2011, p. 13.'.



6. Annex I is amended as follows:

(a) Part A is replaced by the text set out in Annex II to this Directive;

(b) points 2 and 3 of Part B are replaced by the following:

'2. 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.

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.<sup>1</sup>

7. Annexes II and III are deleted.

### *Article 3*

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by ...<sup>+</sup>. They shall forthwith communicate to the Commission the text of those provisions.

When Member States adopt those provisions, 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.

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<sup>+</sup> OJ: please insert the date: 24 months after the date of entry into force of this Directive.

*Article 4*

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

*Article 5*

This Directive is addressed to the Member States.

Done at Brussels,

*For the European Parliament*

*The President*

*For the Council*

*The President*

## ANNEX I

### 'ANNEX X LIST OF PRIORITY SUBSTANCES IN THE FIELD OF WATER POLICY

Number	CAS number <sup>1</sup>	EU number <sup>2</sup>	Name of priority substance <sup>3</sup>	Identified as priority hazardous substance
(1)	15972-60-8	240-110-8	Alachlor	
(2)	120-12-7	204-371-1	Anthracene	X
(3)	1912-24-9	217-617-8	Atrazine	
(4)	71-43-2	200-753-7	Benzene	
(5)	not applicable	not applicable	Brominated diphenylethers	X <sup>4</sup>
(6)	7440-43-9	231-152-8	Cadmium and its compounds	X
(7)	85535-84-8	287-476-5	Chloroalkanes, C <sub>10-13</sub>	X
(8)	470-90-6	207-432-0	Chlorfenvinphos	
(9)	2921-88-2	220-864-4	Chlorpyrifos (Chlorpyrifos-ethyl)	
(10)	107-06-2	203-458-1	1,2-dichloroethane	
(11)	75-09-2	200-838-9	Dichloromethane	
(12)	117-81-7	204-211-0	Di(2-ethylhexyl)phthalate (DEHP)	X
(13)	330-54-1	206-354-4	Diuron	

Number	CAS number <sup>1</sup>	EU number <sup>2</sup>	Name of priority substance <sup>3</sup>	Identified as priority hazardous substance
(14)	115-29-7	204-079-4	Endosulfan	X
(15)	206-44-0	205-912-4	Fluoranthene	
(16)	118-74-1	204-273-9	Hexachlorobenzene	X
(17)	87-68-3	201-765-5	Hexachlorobutadiene	X
(18)	608-73-1	210-168-9	Hexachlorocyclohexane	X
(19)	34123-59-6	251-835-4	Isoproturon	
(20)	7439-92-1	231-100-4	Lead and its compounds	
(21)	7439-97-6	231-106-7	Mercury and its compounds	X
(22)	91-20-3	202-049-5	Naphthalene	
(23)	7440-02-0	231-111-4	Nickel and its compounds	
(24)	not applicable	not applicable	Nonylphenols	X <sup>5</sup>
(25)	not applicable	not applicable	Octylphenols <sup>6</sup>	
(26)	608-93-5	210-172-0	Pentachlorobenzene	X
(27)	87-86-5	201-778-6	Pentachlorophenol	
(28)	not applicable	not applicable	Polyaromatic hydrocarbons (PAH) <sup>7</sup>	X
(29)	122-34-9	204-535-2	Simazine	
(30)	not applicable	not applicable	Tributyltin compounds	X <sup>8</sup>

Number	CAS number <sup>1</sup>	EU number <sup>2</sup>	Name of priority substance <sup>3</sup>	Identified as priority hazardous substance
(31)	12002-48-1	234-413-4	Trichlorobenzenes	
(32)	67-66-3	200-663-8	Trichloromethane (chloroform)	
(33)	1582-09-8	216-428-8	Trifluralin	X
(34)	115-32-2	204-082-0	Dicofol	X
(35)	1763-23-1	217-179-8	Perfluorooctane sulfonic acid and its derivatives (PFOS)	X
(36)	124495-18-7	not applicable	Quinoxifen	X
(37)	not applicable	not applicable	Dioxins and dioxin-like compounds	X <sup>9</sup>
(38)	74070-46-5	277-704-1	Aclonifen	
(39)	42576-02-3	255-894-7	Bifenox	
(40)	28159-98-0	248-872-3	Cybutryne	
(41)	52315-07-8	257-842-9	Cypermethrin <sup>10</sup>	
(42)	62-73-7	200-547-7	Dichlorvos	
(43)	not applicable	not applicable	Hexabromocyclododecanes (HBCDD)	X <sup>11</sup>

Number	CAS number <sup>1</sup>	EU number <sup>2</sup>	Name of priority substance <sup>3</sup>	Identified as priority hazardous substance
(44)	76-44-8 / 1024-57-3	200-962-3 / 213-831-0	Heptachlor and heptachlor epoxide	X
(45)	886-50-0	212-950-5	Terbutryn	

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<sup>1</sup> CAS: Chemical Abstracts Service.

<sup>2</sup> EU-number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).

<sup>3</sup> Where groups of substances have been selected, unless explicitly noted, typical individual representatives are defined in the context of the setting of environmental quality standards.  
<sup>4</sup> Only Tetra, Penta, Hexa and Heptabromodiphenylether (CAS -numbers 40088-47-9, 32534-81-9, 36483-60-0, 68928-80-3, respectively).

<sup>5</sup> Nonylphenol (CAS 25154-52-3, EU 246-672-0) including isomers 4-nonylphenol (CAS 104-40-5, EU 203-199-4) and 4-nonylphenol (branched) (CAS 84852-15-3, EU 284-325-5).

<sup>6</sup> Octylphenol (CAS 1806-26-4, EU 217-302-5) including isomer 4-(1,1',3,3'-tetramethylbutyl)-phenol (CAS 140-66-9, EU 205-426-2).

<sup>7</sup> Including benzo(a)pyrene (CAS 50-32-8, EU 200-028-5), benzo(b)fluoranthene (CAS 205-99-2, EU 205-911-9), benzo(g,h,i)perylene (CAS 191-24-2, EU 205-883-8), benzo(k)fluoranthene (CAS 207-08-9, EU 205-916-6), indeno(1,2,3-cd)pyrene (CAS 193-39-5, EU 205-893-2) and excluding anthracene, fluoranthene and naphthalene, which are listed separately.

<sup>8</sup> Including tributyltin-cation (CAS 36643-28-4).

- 9 This refers to the following compounds:  
7 polychlorinated dibenzo-p-dioxins (PCDDs): 2,3,7,8-T4CDD (CAS 1746-01-6), 1,2,3,7,8-P5CDD (CAS 40321-76-4), 1,2,3,4,7,8-H6CDD (CAS 39227-28-6), 1,2,3,6,7,8-H6CDD (CAS 57653-85-7), 1,2,3,7,8,9-H6CDD (CAS 19408-74-3), 1,2,3,4,6,7,8-H7CDD (CAS 35822-46-9), 1,2,3,4,6,7,8,9-O8CDD (CAS 3268-87-9)  
10 polychlorinated dibenzofurans (PCDFs): 2,3,7,8-T4CDF (CAS 51207-31-9), 1,2,3,7,8-P5CDF (CAS 57117-41-6), 2,3,4,7,8-P5CDF (CAS 57117-31-4), 1,2,3,4,7,8-H6CDF (CAS 70648-26-9), 1,2,3,6,7,8-H6CDF (CAS 57117-44-9), 1,2,3,7,8,9-H6CDF (CAS 72918-21-9), 2,3,4,6,7,8-H6CDF (CAS 60851-34-5), 1,2,3,4,6,7,8-H7CDF (CAS 67562-39-4), 1,2,3,4,7,8,9-H7CDF (CAS 55673-89-7), 1,2,3,4,6,7,8,9-O8CDF (CAS 39001-02-0)  
12 dioxin-like polychlorinated biphenyls (PCB-DL): 3,3',4,4'-T4CB (PCB 77, CAS 32598-13-3), 3,3',4',5'-T4CB (PCB 81, CAS 70362-50-4), 2,3,3',4,4'-P5CB (PCB 105, CAS 32598-14-4), 2,3,4,4',5'-P5CB (PCB 114, CAS 74472-37-0), 2,3',4,4',5'-P5CB (PCB 118, CAS 31508-00-6), 2,3',4,4',5'-P5CB (PCB 123, CAS 65510-44-3), 3,3',4,4',5'-P5CB (PCB 126, CAS 57465-28-8), 2,3,3',4,4',5'-H6CB (PCB 156, CAS 38380-08-4), 2,3,3',4,4',5'-H6CB (PCB 157, CAS 69782-90-7), 2,3',4,4',5,5'-H6CB (PCB 167, CAS 52663-72-6), 3,3',4,4',5,5'-H6CB (PCB 169, CAS 32774-16-6), 2,3,3',4,4',5,5'-H7CB (PCB 189, CAS 39635-31-9).
- 10 CAS 52315-07-8 refers to an isomer mixture of cypermethrin, alpha-cypermethrin (CAS 67375-30-8), beta-cypermethrin (CAS 65731-84-2), theta-cypermethrin (CAS 71697-59-1) and zeta-cypermethrin (52315-07-8).
- 11 This refers to 1,3,5,7,9,11-Hexabromocyclododecane (CAS 25637-99-4), 1,2,5,6,9,10-Hexabromocyclododecane (CAS 3194-55-6),  $\alpha$ -Hexabromocyclododecane (CAS 134237-50-6),  $\beta$ -Hexabromocyclododecane (CAS 134237-51-7) and  $\gamma$ -Hexabromocyclododecane (CAS 134237-52-8).!
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## ANNEX II

### '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: [µg/l] for columns (4) to (7)

[µg/kg wet weight] for column (8)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQ S <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQ S <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(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 <sup>5</sup>	32534-81-9			0,14	0,014	0,0085

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQ S <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQ S <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(6)	Cadmium and its compounds (depending on water hardness classes) <sup>6</sup>	7440-43-9	≤ 0,08 (Class 1) 0,08 (Class 2) 0,09 (Class 3) 0,15 (Class 4) 0,25 (Class 5)	0,2	≤ 0,45 (Class 1) 0,45 (Class 2) 0,6 (Class 3) 0,9 (Class 4) 1,5 (Class 5)	≤ 0,45 (Class 1) 0,45 (Class 2) 0,6 (Class 3) 0,9 (Class 4) 1,5 (Class 5)	
(6a)	Carbon-tetrachloride <sup>7</sup>	56-23-5	12	12	not applicable	not applicable	
(7)	C10-13 Chloroalkanes <sup>8</sup>	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	
(9a)	Cyclodiene pesticides: Aldrin <sup>7</sup> Dieldrin <sup>7</sup> Endrin <sup>7</sup> Isodrin <sup>7</sup>	309-00-2 60-57-1 72-20-8 465-73-6	Σ = 0,01	Σ = 0,005	not applicable	not applicable	
(9b)	DDT total <sup>7,9</sup>	not applicable	0,025	0,025	not applicable	not applicable	
	para-para-DDT <sup>7</sup>	50-29-3	0,01	0,01	not applicable	not applicable	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQS <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQS <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(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)	Hexachloro-benzene	118-74-1			0,05	0,05	10
(17)	Hexachloro-butadiene	87-68-3			0,6	0,6	55
(18)	Hexachloro-cyclohexane	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 <sup>13</sup>	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	
(23)	Nickel and its compounds	7440-02-0	4 <sup>13</sup>	8,6	34	34	
(24)	Nonylphenols (4-Nonylphenol)	84852-15-3	0,3	0,3	2,0	2,0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQS <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQS <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(25)	Octylphenols ((4-(1,1',3,3'-tetramethylbutyl)-phenol))	140-66-9	0,1	0,01	not applicable	not applicable	
(26)	Pentachloro-benzene	608-93-5	0,007	0,0007	not applicable	not applicable	
(27)	Pentachloro-phenol	87-86-5	0,4	0,4	1	1	
(28)	Polyaromatic hydrocarbons (PAH) <sup>11</sup>	not applicable	not applicable	not applicable	not applicable	not applicable	
	Benzo(a)pyrene	50-32-8	1,7×10 <sup>-4</sup>	1,7×10 <sup>-4</sup>	0,27	0,027	5
	Benzo(b)fluor-anthene	205-99-2	see footnote 11	see footnote 11	0,017	0,017	see footnote 11
	Benzo(k)fluor-anthene	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	8,2×10 <sup>-3</sup>	8,2×10 <sup>-4</sup>	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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQ S <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQ S <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(29)	Simazine	122-34-9	1	1	4	4	
(29a)	Tetrachloro-ethylene <sup>7</sup>	127-18-4	10	10	not applicable	not applicable	
(29b)	Trichloro-ethylene <sup>7</sup>	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	
(31)	Trichloro-benzenes	12002-48-1	0,4	0,4	not applicable	not applicable	
(32)	Trichloro-methane	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	1,3×10 <sup>-3</sup>	3,2×10 <sup>-5</sup>	not applicable <sub>10</sub>	not applicable <sub>10</sub>	33
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1	6,5×10 <sup>-4</sup>	1,3×10 <sup>-4</sup>	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/E C			not applicable	not applicable	Sum of PCDD+PCDF+PC B-DL 0,0065 µg.kg <sup>-1</sup> TEQ <sup>14</sup>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
No	Name of substance	CAS number <sup>1</sup>	AA-EQS <sub>2</sub> Inland surface waters <sup>3</sup>	AA-EQS <sub>2</sub> Other surface waters	MAC-EQ S <sup>4</sup> Inland surface waters <sup>3</sup>	MAC-EQ S <sup>4</sup> Other surface waters	EQS Biota <sup>12</sup>
(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	$8 \times 10^{-5}$	$8 \times 10^{-6}$	$6 \times 10^{-4}$	$6 \times 10^{-5}$	
(42)	Dichlorvos	62-73-7	$6 \times 10^{-4}$	$6 \times 10^{-5}$	$7 \times 10^{-4}$	$7 \times 10^{-5}$	
(43)	Hexabromocyclododecane (HBCDD)	See footnote 12 in Annex X to Directive 2000/60/EC	0,0016	0,0008	0,5	0,05	167
(44)	Heptachlor and heptachlor epoxide	76-44-8 / 1024-57-3	$2 \times 10^{-7}$	$1 \times 10^{-8}$	$3 \times 10^{-4}$	$3 \times 10^{-5}$	$6,7 \times 10^{-3}$
(45)	Terbutryn	886-50-0	0,065	0,0065	0,34	0,034	

<sup>1</sup> CAS: Chemical Abstracts Service.

<sup>2</sup> 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  
4 water bodies.

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

9 For the group of priority substances covered by brominated diphenylethers (No 5), the  
10 EQS refers to the sum of the concentrations of congener numbers 28, 47, 99, 100, 153 and  
11 154.

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 CaCO<sub>3</sub>/l, Class 2: 40 to  
<50 mg CaCO<sub>3</sub>/l, Class 3: 50 to <100 mg CaCO<sub>3</sub>/l, Class 4: 100 to <200 mg CaCO<sub>3</sub>/l and  
Class 5: ≥200 mg CaCO<sub>3</sub>/l).

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.

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

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).

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

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 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\*.
- 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.

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\* OJ L 320, 3.12.2011, p. 18.!

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