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Subject:	Position of the Council at first reading with a view to the adoption of a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2000/60/EC establishing a framework for Community action in the field of water policy, Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Directive 2008/105/EC on environmental quality standards in the field of water policy
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DIRECTIVE (EU) .../...
OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of ...

**amending Directive 2000/60/EC establishing a framework
for Community action in the field of water policy,
Directive 2006/118/EC on the protection of groundwater
against pollution and deterioration
and Directive 2008/105/EC on environmental quality standards
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 Committee¹,

After consulting the Committee of the Regions,

Acting in accordance with the ordinary legislative procedure²,

¹ Opinion of 22 February 2023 (OJ C 146, 27.4.2023, p. 41).

² Position of the European Parliament of 24 April 2024 [(OJ ...)/(not yet published in the Official Journal)] and position of the Council at first reading of ... [(OJ ...)/(not yet published in the Official Journal)]. Position of the European Parliament of ... [(OJ ...)/(not yet published in the Official Journal)] [and decision of the Council of

Whereas:

- (1) On 28 July 2010, the United Nations General Assembly recognised , the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights. To fully realise that right in the Union, Member States should improve access to clean water and sanitation, in particular by improving the quality of both surface water and groundwater used for the abstraction of drinking water by implementing Directive 2000/60/EC³, and through the effective implementation of Directives (EU) 2020/2184⁴ and (EU) 2024/3019⁵ of the European Parliament and of the Council.
- (2) Chemical pollution of surface water and groundwater 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, as well as to human health. Setting environmental quality standards helps to implement the zero-pollution ambition for a toxic-free environment.

³ 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 (OJ L 327, 22.12.2000, p. 1, ELI: <http://data.europa.eu/eli/dir/2000/60/oj>).

⁴ Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (OJ L 435, 23.12.2020, p. 1, ELI: <http://data.europa.eu/eli/dir/2020/2184/oj>).

⁵ Directive (EU) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment (OJ L, 2024/3019, 12.12.2024, ELI: <http://data.europa.eu/eli/dir/2024/3019/oj>).

- (3) According to the European Environment Agency's report entitled 'Europe's state of water 2024', in 2021 Member States reported that around 90 % of the area of groundwater bodies was in good quantitative status, and around 75 % was in good chemical status, while 40 % of surface water bodies were in good or high ecological status, and 38 % in good chemical status. As outlined in the Commission's 7th Implementation Report (2024), assessing the third river basin management plans, the reasons for this are manifold. As regards chemical status, some positive trends are masked by historic, widespread contamination by mercury and other ubiquitous, bioaccumulative and toxic pollutants or are overshadowed by new, emerging pollution challenges. As regards ecological status, there has been some improvement in certain biological quality elements. However, rivers, lakes and coastal waters in the Union are still subject to significant pressures and, even when effective measures are taken, progress may not be visible over the short term in the monitoring results because nature needs sufficient time to recover.

- (4) Overall, the conclusions of the 2019 Fitness Check of Directives 2000/60/EC, 2006/118/EC⁶, 2007/60/EC⁷ and 2008/105/EC⁸ of the European Parliament and of the Council (the ‘Fitness Check’) indicate that those Directives are broadly fit for purpose, with some scope for improvement. The conclusions indicate that those Directives have so far generally led to a higher level of protection of water bodies and better flood risk management. However, they also point out that currently more than half of all European water bodies are subject to exemptions under Directive 2000/60/EC, which indicates that Member States face a very substantial challenge to achieve the objective of good water status, and in particular to comply with the environmental quality standards (EQS) for priority substances, within the given deadlines. In addition, the Fitness Check concluded that the slow progress made as regards achieving the objectives of those Directives can, amongst other things, be attributed to slow implementation, in part due to a lack of sufficient financial resources as well as insufficient integration of environmental objectives into sectoral legislation.

⁶ Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the prevention and control of groundwater pollution (OJ L 372, 27.12.2006, p. 19, ELI: <http://data.europa.eu/eli/dir/2006/118/oj>).

⁷ Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (OJ L 288, 6.11.2007, p. 27, ELI: <http://data.europa.eu/eli/dir/2007/60/oj>).

⁸ Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards and on the prevention and control of surface water pollution, 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 (OJ L 348, 24.12.2008, p. 84, ELI: <http://data.europa.eu/eli/dir/2008/105/oj>).

- (5) As reported in the Commission assessment of 4 February 2025 on the implementation of Directive 2000/60/EC based on the Member States' third river basin management plans, the Union's water resources remain under severe pressure due to structural mismanagement, unsustainable land use, hydro-morphological changes, pollution, climate change, increased demand for water and urbanisation. The most significant pressures on surface water bodies in all reporting Member States are, in descending order of the percentage of water bodies affected: pollution from atmospheric deposition, hydro-morphological changes stemming from drainage and irrigation for agriculture, hydropower, flood protection, navigation or drinking water supply, and pollution from agriculture. Similarly, the biggest pressures on groundwater bodies are, first, diffuse agricultural pollution, for example from the use of pesticides and fertilisers, and second, in descending order, abstraction for public water supply, for agriculture, for industrial use and for other purposes. Addressing those combined pressures is essential to ensure the sustainable management and protection of water bodies. This requires integrated approaches that promote the reduction of pollution at source and the remediation of existing pollution, the restoration of ecosystems, the adoption of efficient water-use technologies, and the implementation of sustainable practices across sectors. Member States should strengthen the coordination between water and sectorial policies to reduce negative impacts on water resources and support the achievement of good ecological, quantitative and chemical status as set out in Directive 2000/60/EC.

- (6) Pursuant to 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 is to be taken, that environmental damage is, as a priority, to be rectified at source and that the polluter is to pay.
- (7) In seeking to achieve a high level of environmental protection and in implementing the Zero Pollution Action Plan set out in the communication of the Commission of 12 May 2021 on the Pathway to a Healthy Planet for All - EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil', the Union should take account of the diversity of situations in the different regions of the Union, the impact on food security, food production and food affordability, as well as healthy and sustainable diets.

- (8) The Commission’s communication of 11 December 2019 on the European Green Deal sets out a strategy to ensure, by 2050, a climate-neutral, clean and circular economy, optimising resource management while minimising pollution. The communication of the Commission of 14 October 2020 on the Chemicals Strategy for Sustainability Towards a Toxic-Free Environment and the Zero Pollution Action Plan specifically address pollution aspects of the European Green Deal. Other particularly relevant and complementary policies are set out in the communications of the Commission of 16 January 2018 on a European Strategy for Plastics in a Circular Economy, of 19 February 2020 on Shaping Europe’s digital future, of 19 February 2020 on a European strategy for data, of 20 May 2020 on a Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system, of 20 May 2020 on the EU Biodiversity Strategy for 2030 Bringing nature back into our lives, of 25 November 2020 on the Pharmaceutical Strategy for Europe, of 17 November 2021 on the EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate and of 4 June 2025 on the European Water Resilience Strategy.
- (9) The objectives of achieving ‘good status of water bodies’ and of ensuring water availability are cross-cutting and are often not pursued in a sufficiently coherent way. Sustainable water management should be mainstreamed across all Union policies concerning water-using sectors.

- (10) Directive 2000/60/EC establishes a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. That framework involves the identification of priority substances amongst those that pose a significant risk to or via the aquatic environment at Union level. Directive 2008/105/EC lays down Union-wide EQS for the 45 priority substances previously listed in Annex X to Directive 2000/60/EC and eight other pollutants that were already regulated at Union level before that Annex was introduced by Decision No 2455/2001/EC of the European Parliament and of the Council⁹. Directive 2006/118/EC lays down Union-wide groundwater quality standards for nitrates and for active substances in pesticides and criteria for establishing national threshold values for other groundwater pollutants. It also sets out a minimum list of 12 pollutants and indicators of pollution for which Member States are required to consider establishing such national threshold values. The groundwater quality standards are set out in Annex I to Directive 2006/118/EC.

⁹ 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 and amending Directive 2000/60/EC (OJ L 331, 15.12.2001, p. 1, ELI: <http://data.europa.eu/eli/dec/2001/2455/oj>).

- (11) It should be ensured that the discharges, emissions and losses of priority hazardous substances cease or are phased out within an appropriate timeline and, in any case, not later than 20 years after a given priority substance is listed as hazardous in Part A of Annex I to Directive 2008/105/EC. That timeline should apply without prejudice to the application of stricter timelines in any other applicable Union legislation.
- (12) Substances are considered for listing in Part A of Annex I to Directive 2008/105/EC or in Annex I or Part B of Annex II to Directive 2006/118/EC based on an assessment of the risk they pose to humans and the aquatic environment. The key components of that assessment are knowledge of the environmental concentrations of the substances, including information collected from watch-list monitoring, and the (eco)toxicity of the substances, as well as their persistence, bioaccumulation, mobility, carcinogenicity, mutagenicity, reprotoxicity and endocrine disrupting potential.

- (13) The Commission has conducted a review of the list of priority substances previously in Annex X to Directive 2000/60/EC in accordance with Article 16 thereof and with Article 8 of Directive 2008/105/EC, and a review of the lists of substances in Annex I and Part B of Annex II to Directive 2006/118/EC in accordance with Article 10 thereof and has concluded, in the light of new scientific knowledge, that it is appropriate to amend those lists by adding new substances, setting EQS or groundwater quality standards for those newly added substances, revising the EQS for some existing substances in line with scientific progress and setting biota or sediment EQS for some existing and newly added substances. The Commission has also identified which additional substances are likely to accumulate in sediment or biota, and clarified that trend monitoring of such substances should be conducted in sediment or biota. The reviews of the lists of substances have been supported by an extensive consultation with experts from the Commission services, Member States, stakeholder groups and the Scientific Committee on Health, Environmental and Emerging Risks.

- (14) A combination of source-control and end-of-pipe measures is required to effectively deal with most pollutants across their life cycle, including, as relevant, chemical design, authorisation or approval, control of emissions during manufacturing and use or other processes, and waste handling. The setting of new or stricter quality standards in water bodies therefore complements and is coherent with other Union legislation that addresses or could address the pollution problem at one or more of those stages, including Directive 2001/83/EC of the European Parliament and of the Council¹⁰, Regulations (EC) No 1907/2006¹¹ and (EC) No 1107/2009¹² of the European Parliament and of the Council,

¹⁰ 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, ELI: <http://data.europa.eu/eli/dir/2001/83/oj>).

¹¹ 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, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1, ELI: <http://data.europa.eu/eli/reg/2006/1907/oj>).

¹² 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 and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1, ELI: <http://data.europa.eu/eli/reg/2009/1107/oj>).

Directives 2009/128/EC¹³ and 2010/75/EU¹⁴ of the European Parliament and of the Council, Regulations (EU) No 528/2012¹⁵ and (EU) 2019/6¹⁶ of the European Parliament and of the Council and Directive (EU) 2024/3019. In order to achieve the environmental objectives laid down in Article 4 of Directive 2000/60/EC in the most cost-effective way possible, the Commission and the Member States should prioritise, where possible, in their actions and programmes of measures, respectively, source-control measures, as well as their enforcement. Coherence between all pieces of Union and national legislation addressing pollutant emissions at source should be ensured in order to reduce pollution to levels no longer considered harmful to health and natural ecosystems.

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- ¹³ Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, (OJ L 309, 24.11.2009, p. 71, ELI: <http://data.europa.eu/eli/dir/2009/128/oj>).
- ¹⁴ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17, ELI: <http://data.europa.eu/eli/dir/2010/75/oj>).
- ¹⁵ 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, ELI: <http://data.europa.eu/eli/reg/2012/528/oj>).
- ¹⁶ Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 43, ELI: <http://data.europa.eu/eli/reg/2019/6/oj>).

- (15) New scientific evidence points to a significant risk from several other pollutants found in water bodies, in addition to those already regulated. In groundwater, a particular problem has been identified through voluntary monitoring for per- and polyfluoroalkyl substances (PFAS) and pharmaceuticals. PFAS have been detected at more than 70 % of the groundwater measuring points in the Union and existing national threshold values are clearly exceeded at a considerable number of locations. A subset of specific PFAS should therefore be added to the list of groundwater pollutants. In surface waters, perfluorooctane sulfonic acid (PFOS) and its derivatives are already listed as priority substances, but other PFAS are now also recognised as posing a risk. A subset of specific PFAS should therefore be added to the list of priority substances. Voluntary monitoring in groundwater and watch-list monitoring under Article 8b of Directive 2008/105/EC have also confirmed a risk in groundwaters and surface waters from a number of pharmaceutical substances which should therefore be added, as relevant, to the list of pollutants in Annex I to Directive 2006/118/EC or to the priority substances list in Annex I to Directive 2008/105/EC. In groundwater, the Commission should consider addressing the cumulative risk from pharmaceuticals, by setting quality standards for the sum(s) of selected pharmaceuticals, potentially based on mode of action, at the next review.

For that reason, ‘sum(s) of selected pharmaceuticals by mode of action’ should be added to Annex V to Directive 2006/118/EC. In surface water, the cumulative risk from estrogenic pharmaceuticals should be addressed by effect-based monitoring and, taking into account data from more recent and ongoing watch-list monitoring, the Commission should consider setting standards for the sum(s) of selected pharmaceuticals, potentially based on mode of action, at the next review; for that reason ‘sum(s) of selected pharmaceuticals by mode of action’ should be added to Annex III to Directive 2008/105/EC. The Commission should also consider setting standards for total pharmaceuticals, supported by appropriate monitoring methods. Member States are encouraged to monitor also the totality of PFAS (‘PFAS Total’) in groundwater using the guidance adopted under Article 13(7) of Directive (EU) 2020/2184. The Commission should consider the guidance and the results obtained by Member States in defining a monitoring method for PFAS Total specifically in groundwater and encourage Member States to apply it. The Commission should adapt that monitoring method to facilitate the monitoring of PFAS Total in surface water and encourage the Member States to apply it. The Commission should also consider setting quality standards for PFAS Total in groundwater and surface waters during the next review of the lists of pollutants set out in Annex I to Directives 2006/118/EC and Annex I to Directive 2008/105/EC.

- (16) Bisphenol-A should be added to the list of substances in Annex I to Directive 2008/105/EC and designated as a priority hazardous substance. Scientific evidence shows that bisphenols other than Bisphenol-A have endocrine-disrupting potential, and thus that replacing the use of one by the use of another might not have the intended benefit. Further, mixtures of bisphenols could pose a cumulative risk. The Commission should therefore review the listing of bisphenols in general at the next review, and consider the establishment of an EQS for the totality of bisphenols ('Bisphenols Total') or at least for the sum of selected bisphenols ('Sum of Bisphenols'), including at least Bisphenol-B and Bisphenol-S, supported by appropriate monitoring methods. The 'Sum of Bisphenols' should therefore be listed in Annex III to Directive 2008/105/EC. Furthermore, Member States should give particular consideration to whether to identify and monitor at least Bisphenol B and Bisphenol S as river basin specific pollutants, where potentially relevant, and to reporting the data in accordance with Article 8(4) of Directive 2000/60/EC to ensure that the risk from the sum of those bisphenols and Bisphenol A can be properly assessed at the next review. The Commission should also consider establishing quality standards for 'Bisphenols Total' and 'Sum of Bisphenols' in Directive 2006/118/EC.

- (17) Taking into account that groundwater is the main source of drinking water in the Union, it is essential to ensure that the quality standards set in Directive 2006/118/EC support the achievement of the parametric values set for drinking water under Directive (EU) 2020/2184. Although it might be appropriate to harmonise the standards for PFAS, it has recently been demonstrated that the parametric value relating to the sum of the 20 PFAS, as listed in Part B, point 3, of Annex III to Directive (EU) 2020/2184, is not in line with the latest scientific developments with respect to the list of PFAS to be given priority consideration, the toxicity of these substances and the variability of toxicity between the substances in this family. In the absence of a complete and final agreement on PFAS standards, a quality standard for the group of 20 PFAS, as listed in Part B, point 3, of Annex III to Directive (EU) 2020/2184, is set out in Annex I of Directive 2006/118/EC, by way of reference to the parametric value for that group in Directive (EU) 2020/2184 in order to ensure that any change to the composition of that group or that value be automatically incorporated into Directive 2006/118/EC. To take account of the most recent scientific knowledge, a quality standard for the sum of the four most problematic PFAS should be added to Annex I to Directive 2006/118/EC in accordance with the value proposed by the European Food Safety Authority (EFSA). For the same reason, it is of utmost importance that the parametric values for PFAS in Directive (EU) 2020/2184 be promptly reviewed and revised as appropriate and, in such a case that the quality standards in Annex I to Directive 2006/118/EC also be aligned.

- (18) Considering the toxicity of trifluoroacetic acid (TFA), its persistence and prevalence in the environment, and its many sources, including the use of PFAS pesticides and fluorine-containing refrigerant gases, it is extremely important to address its presence in both surface water and groundwater. For surface water, TFA should therefore be included in a sum of 25 PFAS with an EQS in Annex I to Directive 2008/105/EC. At the next review, the Commission should consider establishing a separate EQS for TFA in Annex I to Directive 2008/105/EC. For groundwater, the Commission should also consider establishing a quality standard for TFA, whether separate or as a part of a sum, in Annex I to Directive 2006/118/EC, taking into account the most recent scientific knowledge on TFA, including work carried out by the European Chemicals Agency (ECHA), EFSA and the World Health Organization (WHO). Future amendments of Directive (EU) 2020/2184 should also be taken into account.
- (19) There is a need to gather more knowledge about the presence, importance and sensitivity of groundwater ecosystems in order to properly protect them. Additional scientific research should therefore be encouraged, funded and conducted, and the findings should be disseminated, and, where necessary, taken into account, along with existing knowledge, when implementing or revising Directives 2000/60/EC and 2006/118/EC. The Commission should work with Member States under the Common Implementation Strategy for Directive 2000/60/EC to establish a methodology for identifying groundwater ecosystems. As soon as a reliable methodology is available, Member States should, where relevant, apply that methodology, and set stricter standards where necessary to protect those ecosystems.

- (20) Directive 2000/60/EC requires Member States to identify water bodies used for the abstraction of water intended for human consumption, to monitor them, and to take the necessary measures to avoid deterioration in their quality and to reduce the level of purification treatment required in the production of water that is fit for human consumption. In that context, micro-plastics have been identified as a potential risk to human health, but more monitoring data are required to confirm the need for setting quality standards for micro-plastics in surface water and groundwater. Micro-plastics should therefore be included in the surface water and groundwater watch lists and should be monitored as soon as suitable monitoring methods are available. In that context, account should be taken of the methodologies, developed under Directive (EU) 2020/2184, for monitoring and assessing the risks from micro-plastics in drinking water.
- (21) It is estimated that in 2019, between 900 000 and 1,7 million deaths around the world were attributable to antimicrobial resistance (AMR) infections. At the same time, concern has been expressed about the risk of antimicrobial resistance developing from the presence of antimicrobial resistant microorganisms and antimicrobial resistance genes in the aquatic environment, but little monitoring has taken place. Appropriate indicators for the presence, evolution or transmission of antimicrobial resistance should also be included in the surface water and groundwater watch lists and monitored as soon as suitable monitoring methods have been developed. This is in line with the ‘European One Health Action Plan against Antimicrobial Resistance’, adopted by the Commission in June 2017, and with the Commission communication of 25 November 2020 entitled ‘Pharmaceutical Strategy for Europe’, which also addresses that concern.

- (22) Directives 2006/118/EC and 2008/105/EC should each contain an annex listing selected substances, groups of substances, and indicators to be considered by the Commission in the next review of those Directives, pending development of reliable monitoring methodologies and appropriate quality standards or trigger values and final confirmation that they pose a risk to or via groundwater or surface water. That confirmation could, if necessary, be obtained by including the substances, groups of substances, or indicators in the relevant watch list.

- (23) The conventional chemical analytical methods used for monitoring substances under Directives 2000/60/EC, 2006/118/EC and 2008/105/EC cannot, in general, determine the cumulative risk from mixtures of substances. Considering the growing awareness of the relevance of mixtures and therefore of effect-based monitoring for determining chemical status, and considering that sufficiently robust effect-based monitoring methods already exist for estrogenic substances, Member States should apply such effect-based monitoring methods to assess the cumulative effects of estrogenic substances in surface waters over a period of at least two years. This will allow the comparison of effect-based results with the results obtained using the conventional methods for monitoring the three estrogenic pharmaceutical substances listed in Annex I to Directive 2008/105/EC. For that purpose, the Commission should adopt an implementing act setting out the technical specifications for the monitoring of estrogenic substances using effect-based monitoring methods. The Commission should also publish a report on the comparison of effect-based results with the results obtained using the conventional methods, and an analysis of it should be used to assess whether effect-based monitoring methods deliver data that are robust and accurate enough to allow those methods to be used as reliable screening methods. Using such screening methods would have the advantage of allowing the effects of all estrogenic substances having similar effects to be covered, not only those listed in Annex I to Directive 2008/105/EC, and could also replace substance-by-substance monitoring at many locations. The concept of effect-based trigger values should be defined. The definition of good surface water chemical status in Directive 2000/60/EC should be modified to ensure that it could, in the future, also cover trigger values that might be set for assessing the results of effect-based monitoring.

- (24) Whereas the risk from mixtures of pesticides is to some degree covered in Directive 2006/118/EC by the quality standard for total pesticides, the risk from such mixtures is not addressed in Directive 2008/105/EC. To at least partly address that cumulative risk, an EQS should therefore be set for the sum of the pesticides that are already included in the list of priority substances that are to be monitored in water, and that EQS should be taken into account when assessing chemical status. To take better account of mixture risk in the future, the Commission should consider setting standards for the sum(s) of selected pesticides, potentially based on mode of action and possibly covering more pesticides than those listed individually in Annex I to Directive 2008/105/EC, at the next review. For that reason, the ‘sum(s) of selected pesticides by mode of action’ should be included in a new annex to that Directive. The Commission should also consider whether a risk-based approach could be taken to establishing an EQS for total pesticides, supported by an appropriate monitoring method. Because the generic quality standards of 0,1 µg/L and 0,5 µg/L for individual and total pesticides in groundwater specified in Annex I to Directive 2006/118/EC were established in the 1980s, and limited by the sensitivity of the analytical methods available at that time, they may not be sufficiently protective of human health or the environment. The Commission should therefore review those values at the next review of the list of pollutants in groundwater.

- (25) As a result of its review of the list of substances in Part A of Annex I to Directive 2008/105/EC, the Commission identified a number of substances that it could remove from the list because they no longer pose a widespread risk to or via the aquatic environment within the Union. However, because those substances still pose a risk in some Member States, it is appropriate to include them, with their EQS, in a new annex to Directive 2008/105/EC. Member States should continue to monitor those substances if they identify them as pollutants of national, regional or local concern, and to apply the EQS accordingly. Some other substances were considered for deselection but have been retained in the list because of the need to determine whether their concentrations are showing a downward trend. For some of them, monitoring under Directives 2000/60/EC and 2008/105/EC also contributes to fulfilling monitoring obligations under the Stockholm Convention on persistent organic pollutants¹⁷ ('Stockholm Convention'), signed in Stockholm on 22 May 2001, and Regulation (EU) 2019/1021 of the European Parliament and of the Council¹⁸.

¹⁷ OJ L 209, 31.7.2006, p. 3, ELI: <http://data.europa.eu/eli/convention/2006/507/oj>.

¹⁸ Regulation (EU) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants (OJ L 169, 25.6.2019, p. 45, ELI: <http://data.europa.eu/eli/reg/2019/1021/oj>).

- (26) In accordance with the Stockholm Convention and Regulation (EU) 2019/1021, Member States are obliged to ensure the protection of human health and the environment from persistent organic pollutants. Member States are required to monitor the presence of persistent organic pollutants in the environment in accordance with Article 13(1), point (d), of Regulation (EU) 2019/1021 implementing the requirements of Article 11(1) of the Stockholm Convention.
- (27) Until now, river basin specific pollutants that are not identified as priority substances under Directive 2000/60/EC have been subject to national EQS and been counted as physico-chemical quality elements supporting the assessment of ecological status in surface waters. In groundwaters, it has also been possible for Member States to set their own threshold values, even for man-made synthetic substances. That flexibility has led to sub-optimal results in terms of comparability of the status of water bodies between Member States, and in terms of environmental protection. Therefore, it is necessary to provide for a procedure that allows for an agreement at Union level on EQS and threshold values that are to be applied for those substances if they are identified as being of national concern, and to establish repositories of the applicable threshold values in Annex II to Directive 2006/118/EC and of the applicable EQS in a new annex to Directive 2008/105/EC. The harmonised EQS and threshold values should only be applied by Member States in assessing the status of their water bodies in the river basin districts where a risk has been identified from those substances.

- (28) Furthermore, integrating river basin specific pollutants into the definition of chemical status of surface waters ensures a more coordinated, coherent and transparent approach in terms of monitoring and assessment of chemical status of surface water bodies and of related information to the public. It also facilitates a more targeted approach to identifying and implementing measures to address all ‘chemical related’ issues in a more holistic, effective and efficient way. Therefore, the definitions of ‘ecological status’ and ‘chemical status’ should be modified and the scope of ‘chemical status’ should be widened to cover also the river basin specific pollutants, hitherto part of the definition of ‘ecological status’ in Annex V to Directive 2000/60/EC. As a result, the concept of EQS for river basin specific pollutants and related procedures should be included in Directive 2008/105/EC. The status of a water body should not be considered as having deteriorated merely because of that change.

- (29) The surface water and groundwater watch list mechanisms aim to gather information on the presence and distribution of substances of potential concern in the aquatic environment, which, to date, have been poorly documented and for which there are often no standardised analytical methods available. In addition, for substances listed in Annex I to Directive 2006/118/EC and in Annex I to Directive 2008/105/EC, the analytical methods available on the market are not always sensitive enough to achieve the proposed quality standards. Developing new methods and monitoring an increased number of substances, groups of substances, or indicators is challenging and generates increased costs but also a need for strengthened administrative capacity in the Member States, especially those with fewer resources. Therefore, the establishment of a joint monitoring facility for managing the monitoring requirements, when so requested by the Member States, could help them in carrying out that challenging task, easing their financial and administrative burdens. The Commission should assess the options for the establishment, financing and functioning of such a monitoring facility. The use of such a facility should be voluntary, accessible to all interested Member States and without prejudice to arrangements already in place at national level.

- (30) Several judgments of the Court of Justice of the European Union have clarified the concept of deterioration of status. A definition of deterioration of status should therefore be introduced into Directive 2000/60/EC. As referred to in Annex V to that Directive, the status of a surface water body comprises both its ecological and chemical status and the status of a groundwater body comprises both its quantitative and chemical status. Instead of referring to each of those elements separately in the definition, reference should be made simply to Annex V to that Directive. If the status of a quality element for surface water assessed as ‘bad’ or ‘failing to achieve good’ or the status of a quality element for groundwater assessed as ‘poor’ deteriorates further, that deterioration should also be considered as a deterioration of the status of the water body.

- (31) The judgments of the Court of Justice of the European Union, combined with additions to the lists of substances as well as stricter standards for existing pollutants, have rendered the application of the non-deterioration principle of Directive 2000/60/EC more challenging, in particular for projects that have a negative short-term impact on water bodies or projects and activities that have a negative impact on water bodies due to relocation of water or sediments containing pollutants. In the case of projects causing a negative short-term impact on one or more quality elements of a water body, it is essential to confirm that the negative impact on those quality elements is no longer detectable after one year or, for biological quality elements, after a maximum of three years. To ascertain that the negative impact is no longer present, it should be possible for Member States to use existing monitoring arrangements. However, such arrangements might not be sufficient, for instance where status is usually determined by extrapolation, or if the affected quality elements are different from those considered most sensitive to routine pressures and impacts, and thus not regularly monitored. In those cases, the ex-post verification should be done through supplementary and tailored monitoring. In the case of projects or activities having a negative impact on water bodies due to relocation of polluted water or sediments, the pollutant concentrations in the source-water body might decrease and those in the receiving water body might increase despite there being no overall change in pollutant mass balance. Such activities include the discharge of contaminated drainage water from construction works or the relocation of dredged sediments for flood protection or navigation and should be allowed, provided that several criteria are met.

Those criteria should include a requirement that all practicable steps, including treatment, be taken to mitigate any adverse impact and that the receiving surface water body is already in less-than-good chemical status with respect to most of the substances relocated, and in particular with respect to the most persistent and bioaccumulative substances, such as PFAS, and that information relating to the criteria, and reasons for the relocation, are provided in the relevant river basin management plan. The criteria are intended to ensure that the overall level of protection of human health and the environment provided by Directive 2000/60/EC is maintained. The relocation of polluted water or sediment should not detract from the quality of drinking water resources, and a zone should therefore be established adjacent to any drinking water abstraction point where stricter precautions are needed. If Member States have already established safeguard zones under Article 7 of Directive 2000/60/EC, or Article 8 of Directive (EU) 2020/2184, those zones might serve the purpose.

- (32) The green transition and other activities of public interest, such as in the areas of security and defence, require significant investments in and development of new technologies, which can be challenging to reconcile with the objectives of Directive 2000/60/EC, for example if they require the mining and use of critical raw materials which result in emissions of substances of emerging concern. It is important to assess potential risks to the environment or human health from those substances. This should be taken into account when listing substances on the watch lists. It is equally important to identify the potential conflicts between those overall objectives and develop appropriate responses to them. This could be done as part of the implementation report drawn up by the Commission in accordance with Article 18 of Directive 2000/60/EC.
- (33) In order to ensure a harmonised approach and level playing field in the Union, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to amend Parts A and C of Annex II and Annexes III and IV to Directive 2006/118/EC concerning guidelines for the establishment of threshold values by Member States, information to be provided by Member States with regard to the pollutants and indicators of pollution for which threshold values have been established, the assessment of groundwater chemical status and the identification and reversal of significant and sustained upward trends.

- (34) Given the need to swiftly adapt to scientific and technical knowledge and to ensure a harmonised approach and level playing field in the Union in respect of the procedure on how to derive EQS for river basin specific pollutants, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to amend Part B of Annex II to Directive 2008/105/EC.
- (35) The review of the list of priority substances in Part A of Annex I to Directive 2008/105/EC has concluded that several priority substances are no longer of Union-wide concern and should therefore no longer be included in that Annex. Those substances should therefore be considered as river basin specific pollutants and included in a new annex to Directive 2008/105/EC together with their corresponding EQS.

- (36) In order to ensure a level playing field in the Union and allow comparability of water body status between Member States, there is a need to harmonise national threshold values for some man-made synthetic groundwater pollutants. Threshold values should be established as necessary at Union level for pollutants which have an anthropogenic origin or for the products of their degradation or decomposition, provided that those pollutants and degradation products either do not occur naturally in groundwater, or, if identical natural counterparts exist, provided that their natural background levels are, at most, low. Those threshold values should be included in the repository of harmonised threshold values for man-made synthetic substances in groundwater of national, regional or local concern in a new Part D of Annex II to Directive 2006/118/EC. A harmonised threshold value for individual pharmaceuticals should be included for application by Member States to any pharmaceutical active substance identified as posing a risk at national level unless a stricter standard or threshold value has been set specifically for that substance at Union or national level.

- (37) All provisions of Directive 2006/118/EC relating to the assessment of groundwater chemical status should be adapted to the introduction of the third category of harmonised threshold values in a new Part D of Annex II to that Directive, in addition to the quality standards set out in Annex I to that Directive and the national threshold values set out in accordance with the methodology set out in Part A of Annex II to that Directive.
- (38) To ensure effective and coherent decision-making and develop synergies with the work carried out in the framework of other Union legislation on chemicals, ECHA should be given a permanent and clearly circumscribed role in the prioritisation of substances to be included in the watch lists and in the lists of substances in Annexes I and II to Directive 2008/105/EC and Annexes I and II to Directive 2006/118/EC, and in the derivation of appropriate science-based quality standards. The Committee for Risk Assessment (RAC) and the Committee for Socio-Economic Analysis (SEAC) of ECHA should facilitate the carrying out of certain tasks conferred on ECHA by providing opinions. ECHA should also ensure better coordination between various pieces of environmental law through increased transparency as regards pollutants on a watch list or the development of Union-wide or national EQS or threshold values, by making relevant scientific reports publicly available. When deriving threshold values for pharmaceutical substances, ECHA should liaise with the European Medicines Agency (EMA).

- (39) The Fitness Check concluded that more frequent and streamlined electronic reporting is needed to foster better implementation and enforcement of Union water legislation. In view of its role also to more regularly monitor the state of pollution as described in the Zero Pollution Action Plan, the European Environment Agency (EEA) should facilitate such more frequent and streamlined reporting of monitoring data by Member States. It is important that this essential environmental information be made available to the public and to the Commission in a timely manner. Without prejudice to the monitoring frequency obligations in Directives 2000/60/EC, 2006/118/EC and 2008/105/EC, and insofar as the monitoring obligations under those Directives have led to the generation of new monitoring data, Member States should make the following data available to the public and to the EEA: (i) every three years, monitoring data on biological quality elements in surface waters collected and validated during the preceding three years; and (ii) every two years, monitoring data on chemical quality elements in surface water and groundwater collected and validated during the preceding two years. This should take place through the existing electronic data delivery mechanisms, such as the EEA's Reportnet system, with data submission facilitated by automation, aligned with the relevant Water Information System for Europe State of the Environment data flows. Member States are encouraged to make available to the public and to the EEA the monitoring data on chemical quality elements annually.

The reporting of status will continue to take place in the six-yearly river basin management plans. The administrative burden is expected to be limited insofar as Member States are already required to make spatial data themes publicly available under Directive 2007/2/EC of the European Parliament and of the Council¹⁹ as well as under Directive (EU) 2019/1024 of the European Parliament and of the Council²⁰.

¹⁹ Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (OJ L 108, 25.4.2007, p. 1, ELI: <http://data.europa.eu/eli/dir/2007/2/oj>).

²⁰ Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information (OJ L 172, 26.6.2019, p. 56, ELI: <http://data.europa.eu/eli/dir/2019/1024/oj>).

- (40) The status assessment under Directive 2000/60/EC is based on the one-out-all-out-principle and it should remain so. It is therefore important that Member States take all possible measures to achieve good status or potential, as appropriate, in relation to each relevant individual quality element. At the same time, to ensure that progress or lack thereof on individual quality elements is visible, even when not all of them reach good status or potential, and that progress or lack thereof across the Member States can be compared, indicators of progress should be developed and harmonised at Union level for the uniform presentation and reporting by Member States of the status or potential of those individual quality elements in a disaggregated way. Those indicators of progress should be interpreted without prejudice to the conclusions drawn from applying the one-out-all-out principle.

- (41) Better integration of data flows reported to the EEA under Union water legislation and, in particular, of the inventories of emissions required by Directive 2008/105/EC, with the data flows reported to the Industrial Emissions Portal under Directive 2010/75/EU and Regulation (EU) 2024/1244 of the European Parliament and of the Council²¹, will make the inventory reporting in accordance with Article 5 of Directive 2008/105/EC simpler and more efficient. At the same time, it will reduce administrative burden and peak workload in the preparation of the river basin management plans. In combination with the abolition of interim reporting on progress on the implementation of programmes of measures, which did not prove effective, this simplified reporting will allow Member States to put more effort into reporting emissions which until recently were not covered by the legislation on industrial emissions although they were covered by the emissions reporting under Article 5 of Directive 2008/105/EC.

²¹ Regulation (EU) 2024/1244 of the European Parliament and of the Council of 24 April 2024 on reporting of environmental data from industrial , establishing an Industrial Emissions Portal and repealing Regulation (EC) No 166/2006 (OJ L, 2024/1244, 2.5.2024, ELI: <http://data.europa.eu/eli/reg/2024/1244/oj>).

- (42) The Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community²², signed at Lisbon on 13 December 2007, introduced a distinction between powers delegated to the Commission to adopt delegated acts, that is non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act, and the powers conferred upon the Commission to adopt implementing acts, that is acts to ensure uniform conditions for implementing legally binding Union acts. Directives 2000/60/EC and 2006/118/EC should be aligned to the legal framework introduced by that Treaty.
- (43) The empowerment in Article 20(1), first subparagraph, of Directive 2000/60/EC, which provides for the use of the regulatory procedure with scrutiny, fulfils the criteria in Article 290(1) TFEU, since it concerns adaptations of the Annexes to that Directive and adoption of rules supplementing it. It should therefore be converted to an empowerment for the Commission to adopt delegated acts. The empowerment in section 1.4.1(ix) of Annex V to Directive 2000/60/EC, which provides for the use of the regulatory procedure with scrutiny, fulfils the criteria in Article 291(2) TFEU since it concerns uniform conditions for implementing that Directive. It should therefore be converted to an empowerment for the Commission to adopt implementing acts.

²² OJ C 306, 17.12.2007, p. 1, ELI: <http://data.europa.eu/eli/treaty/lis/sign>.

- (44) The empowerment in Article 8(1) of Directive 2006/118/EC, which provides for the use of the regulatory procedure with scrutiny, fulfils the criteria in Article 290(1) TFEU, since it concerns adaptations of Parts A and C of Annex II and Annexes III and IV to that Directive. It should therefore be converted to an empowerment for the Commission to adopt delegated acts.
- (45) It is of particular importance that the Commission carry out appropriate consultations during its preparatory work on delegated acts, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making²³. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as the Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.

²³ OJ L 123, 12.5.2016, p. 1, ELI: http://data.europa.eu/eli/agree_interinstit/2016/512/oj.

- (46) The empowerment in Article 8(3) of Directive 2000/60/EC, which provides for the use of the regulatory procedure with scrutiny, fulfils the criteria in Article 291(2) TFEU, since it concerns the adoption of technical specifications and standardised methods for analysis and monitoring of water status and therefore aims at ensuring uniform conditions for the harmonised implementation of that Directive. It should therefore be converted to an empowerment for the Commission to adopt implementing acts. In order to ensure comparability of data, the empowerment should also be extended to include the establishment of formats for reporting monitoring and status data in accordance with Article 8(4) of Directive 2000/60/EC. The implementing powers conferred on the Commission should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council²⁴.

²⁴ 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 (OJ L 55, 28.2.2011, p. 13, ELI: <http://data.europa.eu/eli/reg/2011/182/oj>).

- (47) Member States experts should continue to be involved in the regular cooperation facilitated by the Common Implementation Strategy for Directive 2000/60/EC and in particular in the working groups established under it, and thus closely involved especially in the revision of the watch lists, the updates of the lists of pollutants and the establishment of the reporting formats.
- (48) In order to ensure uniform conditions for the implementation of Directive 2000/60/EC, implementing powers should be conferred on the Commission to set out technical specifications and standardised methods for analysis and monitoring of water status in accordance with Annex V to that Directive, to establish formats for the reporting of monitoring and status data, to adopt the results of the intercalibration exercise and the values established for the Member State monitoring system classifications in accordance with section 1.4.1 (ix) of Annex V to that Directive and to adopt indicators of progress allowing comparison of the progress made by Member States towards achieving the good status or potential of their water bodies. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.

- (49) In order to ensure uniform conditions for the implementation of Directive 2006/118/EC, implementing powers should be conferred on the Commission to adopt a groundwater watch list and to establish a list of relevant and non-relevant metabolites of pesticide substances. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (50) In order to ensure uniform conditions for the implementation of Directive 2008/105/EC, implementing powers should be conferred on the Commission to adopt standardised formats for the reporting of point-source emissions not covered by Regulation (EU) 2024/1244 and of diffuse emissions to the EEA. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.

- (51) It is necessary to take into account scientific and technical progress in the area of monitoring of the status of water bodies in accordance with the monitoring requirements set out in Annex V to Directive 2000/60/EC. Therefore, Member States should be allowed to use data and services from remote sensing technologies, earth observation, such as Copernicus services, in-situ sensors and devices, online water-quality monitoring systems, or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing. In accordance with the EU Digital Strategy, including its objectives for increased digitalisation of public services and businesses, Member States are encouraged to tap the potential of digitalisation for water management and in particular for water quality monitoring. It is important to assess the technical and economic feasibility of using online systems for the continuous, precise and real-time monitoring of water quality, and develop, if appropriate, guidance on their application. This could be done in the context of the Common Implementation Strategy for Directive 2000/60/EC, with the aim of assisting Member States to digitalise, where possible and appropriate, their water quality monitoring techniques. Member States that have taken measures to digitalise monitoring techniques are encouraged to include a summary of those measures in their river basin management plans.
- (52) Member States should encourage deployment of digital tools such as remote sensing technologies and earth observation, such as Copernicus services.

- (53) The competent authorities should support training, skills development programmes and investment in human capital to support the effective implementation of the best technologies and innovative solutions within the framework of Directive 2000/60/EC.
- (54) In accordance with the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters²⁵, signed in Aarhus on 25 June 1998, members of the public concerned are to have access to justice in order to contribute to the protection of the right to live in an environment which is adequate for personal health and well-being. Therefore Member States should ensure access to justice under Directive 2000/60/EC in accordance with that Convention. Moreover, according to settled case law of the Court of Justice of the European Union, it is for the courts of the Member States to ensure judicial protection of a person's rights under Union law. Furthermore, Article 19(1) of the Treaty on European Union (TEU) requires Member States to provide remedies sufficient to ensure effective judicial protection in the fields covered by Union law.

²⁵ OJ L 124, 17.5.2005, p. 4, ELI: <http://data.europa.eu/eli/convention/2005/370/oj>.

- (55) Considering the increases in unforeseeable weather events, in particular extreme floods and prolonged droughts, and in significant pollution incidents resulting in or exacerbating transboundary accidental pollution, Member States should be required to ensure that information on such incidents is provided without delay to other potentially affected Member States and effectively cooperate with such Member States to mitigate the effects of the event or incident. It is also necessary to reinforce cooperation between Member States and streamline procedures for transboundary cooperation in the case of more structural, i.e. non-accidental and longer-term transboundary issues which cannot be solved at Member State level, in accordance with Article 12 of Directive 2000/60/EC. Where Member States have already established effective cooperation, this should be taken into account. If Union assistance is necessary, competent national authorities can send requests for assistance to the Emergency Response Coordination Centre of the Commission, which will facilitate the coordination of the provision of the required assistance through the Union Civil Protection Mechanism, in accordance with Article 15 of Decision No 1313/2013/EU of the European Parliament and of the Council²⁶. Moreover, considering that river basin districts can also extend beyond the territory of the Union, it is important to ensure that Member States effectively implement Directive 2000/60/EC within their respective territories. Member States should also endeavour to establish appropriate coordination with the relevant third countries which would contribute to the fulfilment of the objectives set out in that Directive for those specific river basin districts.

²⁶ Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism (OJ L 347, 20.12.2013, p. 924, ELI: <http://data.europa.eu/eli/dec/2013/1313/oj>).

- (56) The Commission should report on the possibility of including an extended producer responsibility mechanism in Directive 2000/60/EC. That report should take into account experience gained in particular from implementing the provisions concerning extended producer responsibility in the Union legislation on urban waste-water treatment, waste, and single-use plastics.
- (57) Directives 2000/60/EC, 2006/118/EC and 2008/105/EC should therefore be amended accordingly.
- (58) Since the objectives of this Directive, namely to ensure a high level of environmental protection and an improvement of the environmental quality of European freshwaters, cannot be sufficiently achieved by Member States alone but can rather, by reason of the transboundary nature of water pollution, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 TEU. 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 those objectives,

HAVE ADOPTED THIS DIRECTIVE:

Article 1
Amendments to Directive 2000/60/EC

Directive 2000/60/EC is amended as follows:

- (1) in Article 1, the fourth indent is replaced by the following:
- ‘ – achieving the objectives of relevant international agreements, including those which aim to prevent and eliminate pollution of the marine environment, by Union action to cease or phase out discharges, emissions and losses of priority hazardous substances, with the ultimate aim of achieving concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances.’;

(2) Article 2 is amended as follows:

(a) point 24 is replaced by the following:

‘24. “Good surface water chemical status” means the chemical status required to meet the environmental objectives for surface waters set out in Article 4(1)(a) of this Directive, that is the chemical status achieved by a body of surface water in which concentrations of pollutants exceed neither the environmental quality standards for priority substances listed in Part A of Annex I to Directive 2008/105/EC of the European Parliament and of the Council* nor the environmental quality standards for river basin specific pollutants set and applied in accordance with Article 8d of that Directive, and in which effect-based trigger values, where available, are also not exceeded.

* 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 (OJ L 348, 24.12.2008, p. 84, ELI: <http://data.europa.eu/eli/dir/2008/105/oj>).’;

(b) point 30 is replaced by the following:

‘30. “Priority substances” means substances listed in Part A of Annex I to Directive 2008/105/EC, that are substances which present a significant risk to or via the aquatic environment and are prioritised in accordance with Article 16(2) of this Directive.’;

(c) the following points are inserted:

‘30a. “Priority hazardous substances” means priority substances which are identified as “hazardous” in accordance with the legislation referred to in Article 16(3).

30b. “River basin specific pollutants” means pollutants that are not or no longer identified as priority substances, but which Member States have identified, on the basis of the assessment of pressures and impacts on surface water bodies carried out in accordance with Annex II, as being discharged or deposited in significant quantities into a river basin or sub-basin and thus posing a significant risk to or via the aquatic environment within their territory.’;

(d) point 35 is replaced by the following:

‘35. “Environmental quality standard” means the concentration of a particular pollutant or group of pollutants in water, sediment or biota not to be exceeded in order to protect human health and the environment.’;

(e) the following point is inserted:

‘35a. “Effect-based trigger value” means a threshold for the effects of a pollutant or group of pollutants in water, sediment or biota, where those effects are measured by an appropriate and scientifically validated effect-based monitoring method, above which adverse effects on human health or the environment from that pollutant or group of pollutants in water, sediment or biota, could occur.’;

(f) point 37 is replaced by the following:

‘37. “Water intended for human consumption” means water intended for human consumption as defined in Article 2, point (1), of Directive (EU) 2020/2184 of the European Parliament and of the Council*.

* Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption (OJ L 435, 23.12.2020, p. 1, ELI: <http://data.europa.eu/eli/dir/2020/2184/oj>).’;

(g) the following point is added:

’42. “Deterioration of the status of a body of water” means the lowering of the status of at least one of the quality elements, within the meaning of Annex V, by one class, even if that lowering does not result in a fall in the classification of the body of water as a whole; however, if a quality element is already at the lowest class, any further deterioration of that element constitutes a deterioration of the status of the body of water.’;

(3) Article 4 is amended as follows:

(a) paragraph 1 is amended as follows:

(i) in point (a), points (i), (ii) and (iii) are replaced by the following:

‘(i) Member States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water, subject to the application of paragraphs 6 to 7b and without prejudice to paragraph 8;

- (ii) Member States shall protect, enhance and restore all bodies of surface water, subject to the application of point (iii) for artificial and heavily modified bodies of water, with the aim of achieving good surface water status at the latest 15 years after the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V, subject to the application of extensions determined in accordance with paragraph 4 and to the application of paragraphs 5 to 7b without prejudice to paragraph 8;
 - (iii) Member States shall protect and enhance all artificial and heavily modified bodies of water, with the aim of achieving good ecological potential and good surface water chemical status at the latest 15 years from the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V, subject to the application of extensions determined in accordance with paragraph 4 and to the application of paragraphs 5 to 7b without prejudice to paragraph 8;’;
- (ii) in point (b), points (i) and (ii), are replaced by the following:
- ‘(i) Member States shall implement the measures necessary to prevent or limit the input of pollutants into groundwater and to prevent the deterioration of the status of all bodies of groundwater, subject to the application of paragraphs 6 to 7b of this Article and without prejudice to paragraph 8 thereof and subject to the application of Article 11(3)(j);

- (ii) Member States shall protect, enhance and restore all bodies of groundwater and ensure a balance between abstraction and recharge of groundwater, with the aim of achieving good groundwater status at the latest 15 years after the date of entry into force of this Directive, in accordance with the provisions laid down in Annex V, subject to the application of extensions determined in accordance with paragraph 4 of this Article and to the application of paragraphs 5 to 7b thereof without prejudice to paragraph 8 of this Article and subject to the application of Article 11(3)(j);’;
- (iii) in point (b)(iii), the second subparagraph is replaced by the following:
- ‘Measures to achieve trend reversal shall be implemented in accordance with Article 17(2) of this Directive and Article 5 and Annex IV of Directive 2006/118/EC of the European Parliament and of the Council*, subject to the application of paragraphs 6 to 7b of this Article and without prejudice to paragraph 8 thereof.

* Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the prevention and control of groundwater pollution (OJ L 372, 27.12.2006, p. 19, ELI: <http://data.europa.eu/eli/dir/2006/118/oj>);’;

(b) the following paragraphs are inserted:

‘7a. Member States will not be in breach of this Directive when any negative short-term impact on one or more quality elements of a body of water caused by a new project or a modification to an existing project in that body of water is no longer detectable after one year or, for biological quality elements, after a maximum of three years beyond initiation of the execution of the project, and all the following conditions are met:

- (a) the negative impact is not the result of direct discharges, emissions or losses of a pollutant;
- (b) the potential for the negative impact to occur is reliably assessed ex-ante by a competent authority, and it is concluded that there would be no negative impact for the body of water concerned or any connected body of water after one year or, for biological quality elements, after a maximum of three years;
- (c) an ex-post verification is carried out;
- (d) all practicable measures are taken to mitigate any negative impacts on the body and any connected bodies of water; and

- (e) a summary of the main activities carried out in accordance with this paragraph, the relevant ex-post verification results, and the measures taken to mitigate negative impacts, is included in the river basin management plan required under Article 13.

For the purposes of carrying out the ex-post verification under point (c) of the first subparagraph, existing monitoring arrangements set up pursuant to Annex V may be used and, where necessary, they shall be supplemented by additional ad-hoc monitoring.

- 7b. Member States will not be in breach of this Directive when deterioration occurs in the status of a receiving body of surface water as a result of relocating, by human activity, water or sediment from the same or another body of surface water, or from a body of groundwater to the receiving body of surface water, without causing a net increase in pollutant load, and all the following conditions are met:
 - (a) all practicable steps, in particular the treatment of the water or sediment, if feasible, to minimise the transfer of pollutant load are taken to mitigate the adverse impact on the status of the bodies of water impacted by the relocation;
 - (b) the composition of the water or sediments to be relocated is established, and the relocation does not increase the overall risk to human health and the environment compared to the existing risk prior to the relocation;

- (c) the receiving body of surface water is confirmed as already not being in good chemical status with respect to most of the pollutants relocated, and in particular with respect to the most persistent and bioaccumulative pollutants relocated, and the ecological status or potential of the receiving body of water is not expected to fall into a lower class as a result of the relocation of those pollutants;
- (d) the relocation shall not result in an increase in the purification treatment required for the production of drinking water;
- (e) within the receiving body of water, a zone where relocation is prohibited has been established around any abstraction point for water intended for human consumption;
- (f) there are no significantly better environmental options for reasons of technical feasibility or disproportionate cost;
- (g) the relocation is subject to prior regulation or authorisation; and
- (h) a summary, including information related to points (a) to (g) of this paragraph and the reasons for the relocation, is included in the river basin management plan required under Article 13.’;

(c) paragraphs 8 and 9 are replaced by the following:

- ‘8. When applying paragraphs 3 to 7b, Member States shall ensure that the achievement of the objectives of this Directive in other bodies of water within the same river basin district is not thereby permanently excluded or compromised and that the application of those provisions is consistent with the implementation of other Union environmental legislation.
9. Member States shall take steps to ensure that the application of the new provisions, including the application of paragraphs 3 to 7b, guarantees at least the same level of protection as the existing Union legislation.’;

(4) Article 7(2) is replaced by the following:

- ‘2. For each body of water identified under paragraph 1 of this Article, in addition to meeting the objectives of Article 4 of this Directive in accordance with the requirements of this Directive, and for surface water bodies including the quality standards established at Union level in accordance with Article 16 of this Directive, Member States shall ensure that under the water treatment regime applied, and in accordance with Union legislation, the resulting water will meet the requirements of Directive (EU) 2020/2184.’;

(5) Article 8 is amended as follows:

(a) paragraph 3 is replaced by the following:

‘3. The Commission is empowered to adopt implementing acts to set out technical specifications and standardised methods for analysis and monitoring of water status in accordance with Annex V, to establish formats for the reporting of monitoring and status data, to adopt the results of the intercalibration exercise and the values established for the Member State monitoring system classifications in accordance with section 1.4.1 (ix) of Annex V, and to adopt indicators of progress allowing comparison of the progress made by Member States towards achieving the good status or potential of their water bodies. When establishing the formats for the reporting of monitoring and status data, the Commission may avail itself of technical and scientific support available from the European Environment Agency (EEA). Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).’;

(b) the following paragraphs are added:

- ‘4. Member States shall ensure that the available and validated monitoring data on biological quality elements in surface waters collected in accordance with section 1.3 of Annex V to this Directive are made available to the public and to the EEA every three years, and that the available and validated monitoring data on chemical quality elements in surface waters and groundwater collected in accordance with sections 1.3 and 2.4 of Annex V to this Directive are made available to the public and to the EEA every two years electronically in accordance with Directives 2003/4/EC*, 2007/2/EC** and (EU) 2019/1024*** of the European Parliament and of the Council. For those purposes, Member States shall use the formats established in accordance with paragraph 3 of this Article and automated reporting and data delivery mechanisms aligned with the relevant Water Information System for Europe State of the Environment data flows.
5. The EEA shall ensure that the information made available in accordance with paragraph 4 is regularly processed and analysed for the purpose of making it available, via relevant Union portals, for reuse by the Commission and relevant Union agencies and for the purpose of providing the Commission, the Member States and the public with objective, reliable and comparable information, in accordance with Regulation (EC) No 401/2009 of the European Parliament and of the Council****.

6. By ... [*18 months after the date of entry into force of this amending Directive*], the Commission shall publish a report on options for the establishment, financing and functioning of a European Union joint monitoring facility.

The report shall take into account, inter alia, the following:

- (a) the voluntary nature of the use of such a joint monitoring facility;
- (b) the scope of the analyses to be performed by such a facility, including the range of substances and indicators to be covered from the lists established under this Directive, Directive 2006/118/EC and Directive 2008/105/EC of the European Parliament and of the Council****;
- (c) the sources of funding for such a facility, which may include Union co-funding;
- (d) the operating model of such a facility, considering both centralised and decentralised options;

Following the report, the Commission shall, where appropriate, present a legislative proposal in order to establish a European Union joint monitoring facility.

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- * Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (OJ L 41, 14.2.2003, p. 26, ELI: <http://data.europa.eu/eli/dir/2003/4/oj>).
- ** Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (OJ L 108, 25.4.2007, p. 1, ELI: <http://data.europa.eu/eli/dir/2007/2/oj>).
- *** Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information (OJ L 172, 26.6.2019, p. 56, ELI: <http://data.europa.eu/eli/dir/2019/1024/oj>).
- **** Regulation (EC) No 401/2009 of the European Parliament and of the Council of 23 April 2009 on the European Environment Agency and the European Environment Information and Observation Network (OJ L 126, 21.5.2009, p. 13, ELI: <http://data.europa.eu/eli/reg/2009/401/oj>).
- ***** 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 (OJ L 348, 24.12.2008, p.84, ELI: <http://data.europa.eu/eli/dir/2008/105/oj>).’;

(6) Article 10 is amended as follows:

(a) paragraph 2 is replaced by the following:

‘2. For the purpose of complying with the objectives, quality standards and threshold values established pursuant to this Directive, Member States shall ensure the establishment and implementation of the following:

- (a) emission controls based on best available techniques;
- (b) relevant emission limit values;
- (c) in the case of diffuse impacts, controls including, as appropriate, best environmental practices,

in accordance with Council Directive 91/676/EEC* and Directives 2009/128/EC**, 2010/75/EU*** and (EU) 2024/3019**** of the European Parliament and of the Council, as well as any other Union legislation relevant for addressing point source or diffuse pollution including any relevant legislation adopted in accordance with Article 16 of this Directive.

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- * Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1, ELI: <http://data.europa.eu/eli/dir/1991/676/oj>).
- ** Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p. 71, ELI: <http://data.europa.eu/eli/dir/2009/128/oj>).
- *** Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17, ELI: <http://data.europa.eu/eli/dir/2010/75/oj>).
- **** Directive (EU) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment (OJ L, 2024/3019, 12.12.2024, ELI: <http://data.europa.eu/eli/dir/2024/3019/oj>).’;

(b) paragraph 3 is replaced by the following;

- ‘3. Where a quality objective, quality standard or threshold, whether established pursuant to this Directive, to Directives 2006/118/EC or 2008/105/EC, or pursuant to any other Union legislation, requires stricter conditions than those which would result from the application of paragraph 2, more stringent emission controls shall be set accordingly.’;

(7) Article 11 is amended as follows:

(a) the following paragraph is inserted:

‘1a. In addressing chemical pollution, Member States shall, where possible, prioritise source-control measures in accordance with the relevant Union sectoral legislation on pollution. Where necessary, measures to reduce the risk from potential pollutants already in products and from pollutants already in the environment shall also be considered for the purpose of achieving the good status of water bodies.’;

(b) in paragraph 3, point (k) is replaced by the following:

‘(k) in accordance with action taken pursuant to Article 16, measures to eliminate pollution of surface waters by priority hazardous substances and to progressively reduce pollution by other substances which would otherwise prevent Member States from achieving the environmental objectives for the bodies of surface waters set out in Article 4;’;

(c) in paragraph 5, the second indent is replaced by the following:

‘— relevant permits and authorisations are reviewed and revised, as appropriate,’;

- (8) Article 12 is replaced by the following:

‘Article 12

Issues which cannot be dealt with at Member State level

1. Where a Member State identifies an issue which has an impact on the management of its water but which cannot be resolved by that Member State, it shall notify the issue to the competent authorities of any relevant Member State and, where an international river basin district is concerned, to any relevant coordination structure identified under Article 3(4) and make recommendations for the resolution of it.
2. The Member States concerned shall cooperate to identify the sources of the issues referred to in paragraph 1 and the measures required for addressing those issues.

Member States shall respond to each other in a timely manner and no later than three months after the notification referred to paragraph 1.

3. The Commission shall be informed of, and be invited to assist in, any cooperation referred to in paragraph 2 of this Article. Where appropriate, the Commission shall, taking into account the plans reported pursuant to Article 15, consider whether further action needs to be taken at Union level in order to reduce the transboundary impacts on water bodies.÷

4. The Commission shall comment within a period of six months on any recommendations received from Member States in the context of the cooperation referred to in paragraphs 2 and 3.
5. Where a Member State faces exceptional circumstances of natural or anthropogenic origin or force majeure, in particular extreme floods and prolonged droughts, or significant pollution incidents, which could affect water bodies situated in other Member States, it shall ensure that the competent authorities for the affected water bodies in those Member States, as well as any relevant coordination structure identified under Article 3(4) for an international river basin, and the Commission, are informed without delay, and that the necessary cooperation, if not already in place, is established between the Member States affected and used to investigate the causes and address the consequences of the exceptional circumstances or incidents and mobilise emergency response as appropriate.’;

(9) the following Article is inserted:

‘Article 14a

Access to justice

1. In line with the objective of contributing to the implementation of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, signed in Aarhus on 25 June 1998, Member States shall ensure that in accordance with the relevant national legal system, members of the public concerned have access to a review procedure before a court of law or another independent and impartial body established by law, to challenge the substantive or procedural legality of decisions, acts or omissions subject to Articles 4 and 11 and Article 13(1) of this Directive, where at least one of the following conditions is met:
 - (a) they have a sufficient interest; or
 - (b) they maintain the impairment of a right, where administrative procedural law of a Member State requires this as a precondition.

2. Member States shall determine what constitutes a sufficient interest and impairment of a right, consistent with the objective of giving the public concerned wide access to justice. To this end, the interest of any non-governmental organisation promoting environmental protection and meeting any requirements under national law shall be deemed sufficient for the purpose of paragraph 1(a). Such organisations shall also be deemed to have rights capable of being impaired for the purpose of paragraph 1(b).
3. Standing in the review procedure shall not be conditional on the role that the member of the public concerned played during a participatory phase of the decision-making procedures under this Directive.
4. Member States shall determine at what stage the decisions, acts or omissions referred to in paragraph 1 may be challenged.
5. The review procedure shall be fair, equitable, timely and not prohibitively expensive, and shall provide for adequate and effective redress mechanisms, including injunctive relief where appropriate.
6. Member States shall ensure that practical information is made available to the public on access to administrative and judicial review procedures referred to in this Article.

* OJ L 124, 17.5.2005, p. 4, ELI: <http://data.europa.eu/eli/convention/2005/370/oj>.’;

- (10) in Article 15, paragraph 3 is deleted;
- (11) Article 16 is replaced by the following:

‘Article 16

Strategies against pollution of water

1. The European Parliament and the Council shall adopt specific measures against pollution of water by individual pollutants or groups of pollutants presenting a significant risk to or via the aquatic environment, including such risks to waters used for the abstraction of drinking water. For those pollutants, measures shall be aimed at the progressive reduction of priority substances, as defined in Article 2(30), and at the cessation or phasing-out of discharges, emissions and losses of priority hazardous substances, as defined in Article 2(30a). Such measures shall be adopted acting on the proposals presented by the Commission in accordance with the procedures laid down in the Treaty.

2. The Commission shall review the list of priority substances and the corresponding EQS for those substances set out in Part A of Annex I to Directive 2008/105/EC by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter, and, where appropriate, accompany the review with a legislative proposal to update the list of priority substances and the corresponding EQS in surface water, sediment or biota. In conducting the review, the Commission shall prioritise substances for action on the basis of risk to or via the aquatic environment, identified by:
- (a) risk assessment carried out under Directive 2001/83/EC of the European Parliament and of the Council*, Regulation (EC) No 1907/2006 of the European Parliament and of the Council**, Directive 2009/128/EC and Regulations (EC) No 1107/2009***, (EU) No 528/2012**** and (EU) 2019/6***** of the European Parliament and of the Council; or
 - (b) a simplified risk-based assessment procedure based on scientific principles, taking particular account of:
 - evidence regarding the intrinsic hazard of the substance concerned, and in particular its aquatic ecotoxicity and human toxicity via aquatic exposure routes,

- evidence from monitoring of widespread environmental contamination, including monitoring data reported by the Member States to the Commission in accordance with Article 8b(4) of Directive 2008/105/EC, and
 - other proven factors which could indicate the possibility of widespread environmental contamination, such as production or use volume of the substance concerned, and use patterns.
3. In the course of the review referred to in paragraph 2, the Commission shall categorise, where appropriate, the priority substances into one or more of the following categories:
- (a) priority hazardous substances;
 - (b) substances behaving like ubiquitous persistent bioaccumulative and toxic substances (uPBTs);
 - (c) substances that tend to accumulate in sediment or in biota, or in both.

In doing so, the Commission shall take into account the identification of substances of concern under other, relevant, Union legislation concerning hazardous substances, including Regulation (EC) No 1272/2008 of the European Parliament and of the Council^{*****}, in relevant international agreements, and in relevant scientific reports. Particular account shall be taken of substances meeting the criteria in Article 57 of Regulation (EC) No 1907/2006 where the criteria of concern are relevant to the aquatic environment.

- 3a. As part of the review and accompanying proposal referred to in paragraph 2 of this Article the Commission shall, where appropriate, propose the deselection of substances from the list of substances in Part A of Annex I to Directive 2008/105/EC if they no longer pose a significant risk to or via the aquatic environment within the Union and include them in the repository of harmonised EQS for river basin specific pollutants in Part C of Annex II to that Directive. The proposal shall take into account the results of Member States' assessments of pressures and impacts on surface water bodies carried out in accordance with Annex II to this Directive. Member States shall implement the corresponding harmonised EQS if the pollutants are of national or regional concern, in accordance with Article 8d of Directive 2008/105/EC.

4. The Commission shall review the list of river basin specific pollutants and corresponding EQS in Part C of Annex II to Directive 2008/105/EC by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter, and, where appropriate, accompany the review with a legislative proposal to update that list.
- 4a. When identifying river basin specific pollutants for which it could be necessary to set EQS at Union level, the Commission shall take into account the following criteria:
- (a) the risk posed by the pollutants, including their hazard, their environmental concentrations and the concentration above which effects might be expected, as well as possible cumulative effects;
 - (b) the disparity between the national EQS set for river basin specific pollutants by different Member States and the degree to which such disparity is justifiable;
 - (c) the number of Member States already implementing EQS for the river basin specific pollutants under consideration.
- 4b. The Commission shall review the indicative list of categories of river basin specific pollutants set out in Part A of Annex II to Directive 2008/105/EC by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter, and where appropriate, accompany the review with a legislative proposal to update that list.

5. For the purpose of assisting the Commission in its review of Annexes I and II to Directive 2008/105/EC, the European Chemicals Agency (ECHA) shall prepare scientific reports, which shall take account of the following:
- (a) the opinions of the Committee for Risk Assessment (RAC) and the Committee for Socio-Economic Analysis (SEAC) of ECHA;
 - (b) the results of the monitoring programmes established in accordance with Article 8 of this Directive;
 - (c) the monitoring data collected in accordance with Article 8b(4) of Directive 2008/105/EC;
 - (d) the outcome of the reviews of the Annexes to Directives 2006/118/EC and (EU) 2020/2184;
 - (e) requirements to address soil pollution, including related monitoring data;
 - (f) Union research programmes and scientific publications, including information resulting from remote sensing technologies, earth observation, such as Copernicus services, in-situ sensors and devices, and citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing;

- (g) comments and information from relevant stakeholders; and
- (h) recommendations from the working groups established under the Common Implementation Strategy for Directive 2000/60/EC.

By ... [*four years after the date of entry into force of this amending Directive*] and every six years thereafter, ECHA shall prepare and make publicly available a report summarising the findings of the scientific reports prepared under this paragraph.

6. The Commission shall submit proposals, where appropriate, for controls to achieve:
 - (a) the progressive reduction of discharges, emissions and losses of priority substances; and
 - (b) in particular the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances as identified in accordance with paragraph 3, including, where appropriate, a timetable for doing so within 20 years of the designation of the substances as priority hazardous substances.

In doing so, the Commission shall identify the appropriate cost-effective and proportionate level and combination of product and process controls for both point and diffuse sources and take account of Union-wide uniform emission limit values for process controls. Where appropriate, action at Union level for process controls may be established on a sector-by-sector basis. Where product or process controls include a review of the relevant authorisations or substance approvals issued under Directive 2001/83/EC, Regulation (EC) No 1907/2006, Directive 2009/128/EC, Regulation (EC) No 1107/2009, Directive 2010/75/EU, Regulation (EU) No 528/2012 or Regulation (EU) 2019/6, such reviews shall be carried out in accordance with the provisions of those Directives and Regulations as indicated in Article 7a of Directive 2008/105/EC. Such reviews shall take into account the Commission's assessment in accordance with Article 7a(1) of Directive 2008/105/EC. Each proposal for controls shall, where appropriate, specify arrangements for their review and updating and for the assessment of their effectiveness.

9. The Commission may prepare strategies against water pollution by any other pollutants or groups of pollutants, including any such pollution which occurs as a result of accidents.

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- * 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, ELI: <http://data.europa.eu/eli/dir/2001/83/oj>).
- ** 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, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1, ELI: <http://data.europa.eu/eli/reg/2006/1907/oj>).
- *** 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 and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1, ELI: <http://data.europa.eu/eli/reg/2009/1107/oj>).
- **** 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, ELI: <http://data.europa.eu/eli/reg/2012/528/oj>).
- ***** Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 43, ELI: <http://data.europa.eu/eli/reg/2019/6/oj>).
- ***** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1, ELI: <http://data.europa.eu/eli/reg/2008/1272/oj>).’;

- (12) in Article 17, paragraphs 4 and 5 are deleted;
- (13) in Article 18, paragraph 4 is deleted;
- (14) the following Article is inserted:

‘Article 19a

Report on an extended producer responsibility mechanism

By ... [36 months after the date of entry into force of this amending Directive], the Commission shall publish a report on the possibility to include in this Directive an extended producer responsibility mechanism. The report shall evaluate in particular the feasibility of requiring producers to contribute to the costs of monitoring programmes designed under Article 8 of this Directive if those producers place on the Union market products that contain any of the substances listed in Annex I to Directive 2006/118/EC or in Annex I to Directive 2008/105/EC.’;

- (15) Articles 20 and 21 are replaced by the following:

‘Article 20

Technical adaptations and implementation of this Directive

The Commission is empowered to adopt delegated acts in accordance with Article 20a to amend Annexes I and III and section 1.3.6 of Annex V in order to adapt the information requirements related to competent authorities, the content of the economic analysis and the selected monitoring standards, respectively, to scientific and technical progress.

Article 20a

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 20 shall be conferred on the Commission for an indeterminate period of time from ... [*the date of entry into force of this amending Directive*].
3. The delegation of power referred to in Article 20 may be revoked at any time by the European Parliament and 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 the delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6. A delegated act adopted pursuant to Article 20 shall enter into force only if no objection has been expressed either by the European Parliament or by 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.

Article 21

Committee procedure

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council*.
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 Article 5(4), third subparagraph, of Regulation (EU) No 182/2011 shall apply.

* 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 (OJ L 55, 28.2.2011, p. 13, ELI: <http://data.europa.eu/eli/reg/2011/182/oj>).';

- (16) in Article 22, paragraph 4 is replaced by the following:
- ‘4. The environmental objectives in Article 4, the environmental quality standards set out in Part A of Annex I to Directive 2008/105/EC and the environmental quality standards for river basin specific pollutants established pursuant to Article 16(4) of this Directive shall be regarded as environmental quality standards for the purposes of Directive 2010/75/EU.’;
- (17) Annex V is amended in accordance with Annex I to this Directive;
- (18) in Part B of Annex VII, the following point is added:
- ‘5. a summary of any measures adopted to take into account the suggestions for improvement made by the Commission, in accordance with Article 18(2)(c), to the previous plan.’;
- (19) Annex VIII is amended in accordance with Annex II to this Directive;
- (20) Annexes IX and X are deleted.

Article 2
Amendments to Directive 2006/118/EC

Directive 2006/118/EC is amended as follows:

- (1) the title is replaced by the following

‘Directive 2006/118/EC of the European Parliament and of the Council
of 12 December 2006 on the prevention and control of groundwater pollution’;

- (2) in Article 1, paragraph 1 is replaced by the following:

‘1. This Directive establishes specific measures as provided for in Article 17 of
Directive 2000/60/EC to prevent and control groundwater pollution with the aim of
achieving the environmental objectives set out in Article 4(1)(b) of that Directive.

Those measures include the following:

- (a) criteria for the assessment of good groundwater chemical status; and
- (b) criteria for the identification and reversal of significant and sustained upward trends and for the definition of starting points for trend reversals.’;

(3) Article 2 is amended as follows:

(a) point 2) is replaced by the following:

‘2) “threshold value” means a groundwater quality standard established at Union level and listed in Annex II part D or established by Member States in accordance with Article 3(1)(b);’;

(b) the following point is added:

‘7) “indicator of pollution” means a parameter which can be monitored to give a value that is representative of the level or concentration of a pollutant or a group of pollutants and thus of the risk posed by them.’;

(4) Article 3 is amended as follows:

(a) in paragraph 1, first subparagraph, the following point is added:

‘(c) threshold values established at Union level listed in Part D of Annex II.’;

(b) the following paragraphs are inserted:

‘1a. The quality standards for the substances numbered 3 to 8 in Annex I to this Directive shall take effect from 22 December 2027, with the aim of achieving good groundwater chemical status in relation to those substances by 22 December 2039 and preventing deterioration in the chemical status of groundwater bodies in relation to those substances. For that purpose, Member States shall, by 22 December 2027, establish a supplementary monitoring programme and, by 22 December 2030, 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 included in the 2033 river basin management plan produced in accordance with Article 13(7) of that Directive.

Article 4(4) to (9) of Directive 2000/60/EC shall apply *mutatis mutandis* to the substances referred to in the first subparagraph of this paragraph. Insofar as the time extensions provided for in Article 4(4) of that Directive are concerned, they shall be limited to a maximum of one further update of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within that period.

- 1b. Threshold values established in accordance with Article 3(1)(b) and the threshold values listed in Part D of Annex II shall take effect from the beginning of the following river basin management plan period after the date the threshold value was set, with the aim of achieving good groundwater chemical status in relation to the corresponding substances by the end of that river basin management plan period and of preventing deterioration in the chemical status of groundwater bodies in relation to those substances.

Article 4(4) to (9) of Directive 2000/60/EC shall apply *mutatis mutandis* to the substances referred to in the first subparagraph of this paragraph. Insofar as the time extensions provided for in Article 4(4) of that Directive are concerned, they shall be limited to a maximum of one further update of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within that period.’;

- (c) paragraph 2 is replaced by the following:

- ‘2. Threshold values referred to in paragraph 1(b) may be established at the national level, at the level of the river basin district or the part of the international river basin district falling within the territory of a Member State, or at the level of a body or a group of bodies of groundwater.

Threshold values referred to in paragraph 1(b) and (c) shall be applied at the level relevant to the occurrence of the pollutant.’;

(d) paragraph 5 is replaced by the following:

- ‘5. Member States shall publish all threshold values referred to in paragraph 1(b) of this Article in their river basin management plans to be produced under Article 13 of Directive 2000/60/EC, together with a summary of the information set out in Part C of Annex II to this Directive.

Member States shall, by 22 December 2027, inform the Commission of their lists of pollutants of national concern and national threshold values referred to in paragraph 1(b). The Commission shall ensure that that information is made publicly available. Subsequent updates of the list of national threshold values shall be published in accordance with the first subparagraph of this paragraph.’;

(e) in paragraph 6, the first subparagraph is replaced by the following:

- ‘6. Member States shall amend the list of threshold values applied in their territories whenever new information on pollutants, groups of pollutants or indicators of pollution, also taking into account the precautionary principle, indicates that a threshold value needs to be set for an additional substance, that an existing threshold value needs to be modified or that a threshold value previously removed from the list needs to be re-inserted. If relevant threshold values are established or amended at Union level, Member States shall adapt the list of threshold values applied in their territories to those values.’;

(5) Article 4 is amended as follows:

(a) in paragraph 2, point (b) is replaced by the following:

‘(b) the values for the groundwater quality standards listed in Annex I and the threshold values referred to in Article 3(1)(b) and (c) are not exceeded at any monitoring point in that body or group of bodies of groundwater; or’;

(b) the following paragraph is inserted:

‘2a. The Commission is empowered to adopt an implementing act to establish a list of pesticide metabolites that may be found in groundwater and for which an assessment of their relevance has been carried out in the Union, indicating whether they are relevant or not relevant, by ... [*twenty four months after the date of entry into force of this amending Directive*]. The list shall not include metabolites assessed as being of no concern. The list shall be based on data generated during the process for approving active substances under Regulation (EC) No 1107/2009 of the European Parliament and of the Council* and Regulation (EU) No 528/2012 of the European Parliament and of the Council** and associated scientific output from the European Food Safety Authority (EFSA) and the European Chemicals Agency (ECHA), and, if available, new scientific data on existing metabolites or newly discovered previously unidentified metabolites. The Commission shall adopt an implementing act to update the list at least every six years. The implementing acts referred to in this paragraph shall be adopted in accordance with the examination procedure referred to in Article 9(2) of this Directive.

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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 and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1, ELI: <http://data.europa.eu/eli/reg/2009/1107/oj>).
- ** 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, ELI: <http://data.europa.eu/eli/reg/2012/528/oj>).’;

(6) the following Article is inserted:

‘Article 6a

Watch list

1. The Commission is empowered to adopt implementing acts to establish, having regard to scientific reports prepared by ECHA in accordance with paragraph 2 of this Article, a watch list of substances for which Union-wide monitoring data are to be gathered by the Member States for the purpose of supporting future reviews of Annexes I and II and to lay down the formats to be used by the Member States for reporting the results of that monitoring 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 watch list shall contain a maximum of five substances, groups of substances, or indicators of pollution at any one time, and the possible methods of analysis for each substance. Those methods shall not entail excessive costs for the competent authorities. The substances to be included in the watch list shall be selected from amongst those substances for which the information available indicates that they could pose a significant risk at Union level to or via the aquatic environment and for which monitoring data are insufficient. This watch list shall include substances of emerging concern.

On the basis of the scientific reports prepared by ECHA in accordance with paragraph 2, the Commission shall include microplastics and appropriate indicators of the presence, evolution or transmission of antimicrobial resistance (‘indicators of antimicrobial resistance’) in the watch list, provided that methods of sampling and analysis that are reliable and do not entail excessive cost are available. By ... *[the first day of the month following 18 months after the date of entry into force of this amending directive]* the Commission shall identify such methods of sampling and analysis.

2. ECHA shall prepare scientific reports to assist the Commission in selecting the substances, and indicators for inclusion in the watch list referred to in paragraph 1 of this Article, taking into account the following information:
- (a) Annex I to Directive 2008/105/EC of the European Parliament and of the Council* and the results of the most recent review of that Annex, as well as the results of the most recent review of Annex I to this Directive;
 - (b) the watch lists established in accordance with Directives 2008/105/EC and (EU) 2020/2184;
 - (c) requirements to address soil pollution, including related monitoring data;
 - (d) Member States' characterisation of river basin districts in accordance with Article 5 of Directive 2000/60/EC and the results of monitoring programmes established in accordance with Article 8 of that Directive;

- (e) information on production volumes, use patterns, intrinsic properties (including mobility in soils and, where relevant, particle size), concentrations in the environment and adverse effects on human health and the aquatic environment of a particular substance or group of substances, including information gathered in accordance with Directive 2001/83/EC of the European Parliament and of the Council^{**}, Regulations (EC) No 1907/2006^{***} and (EC) No 1107/2009, Directive 2009/128/EC of the European Parliament and of the Council^{****} and Regulations (EU) No 528/2012, (EU) 2019/6^{*****} and (EU) 2022/2379^{*****} of the European Parliament and of the Council;
- (f) research projects and scientific publications, including, information on trends, and forecasts based on modelling or other predictive assessments, as well as information and data collected by remote sensing technologies, earth observation, such as Copernicus services, in situ sensors and devices, or citizen science data, taking advantage of the opportunities offered by artificial intelligence and advanced data analysis and processing;
- (g) recommendations from stakeholders;
- (h) recommendations from the working groups established under the Common Implementation Strategy for Directive 2000/60/EC;

- (i) information on emissions, discharges and losses available in the Industrial Emissions Portal under Regulation (EU) 2024/1244 of the European Parliament and of the Council^{*****}, as well as any additional information available on substances covered by permits under Directive 2010/75/EU of the European Parliament and of the Council^{*****}.
- 3. The scientific reports prepared by ECHA in accordance with paragraph 2 shall present a list of candidate substances, groups of substances, or indicators, an indicative method of analysis and maximum acceptable limit of quantification for each of them, with a supporting reference to scientific literature or guidance.
- 4. By ... [*the first day of the twenty-first month after the date of entry into force of this amending Directive*] and every three years thereafter, ECHA shall prepare a report summarising the findings of the scientific reports prepared in accordance with paragraph 2 and shall make that report publicly available. .
- 5. By ... [*the first day of the month following 24 months after the date of entry into force of this amending Directive*], the Commission shall establish the first watch list referred to in paragraph 1, and update it every three years thereafter.

When updating the watch list, the Commission shall remove any substance, group of substances, or indicator from the watch list, where the Commission considers it possible to assess the risk for the aquatic environment without additional monitoring data. However, an individual substance, group of substances, or indicator may be kept on the watch list for another period of three years where additional monitoring data are needed to assess the risk to the aquatic environment.

The Commission may also add one or more additional substances, groups of substances, or indicators where it considers, having regard to the scientific reports of ECHA, that there could be a widespread risk to the aquatic environment, subject to the updated watch list containing a maximum of five substances, groups of substances, or indicators, in accordance with paragraph 1.

Microplastics and indicators of antimicrobial resistance shall not be kept on the watch list for a second consecutive period of three years unless a harmonised and reliable risk assessment methodology is available which, when applied, shows that the monitoring data collected during the first monitoring period are insufficient to assess the risk they pose to or via the aquatic environment.

6. Member States shall monitor each substance, group of substances, and indicator on the watch list referred to in paragraph 1 at selected representative monitoring stations over a 24-month period. The monitoring period shall commence within six months of the establishment of the watch list, but sampling and analysis need not commence at the start of that period.

Each Member State shall select at least two monitoring stations, plus the number of stations equal to its total area in km² of groundwater bodies divided by 45 000, rounded to the nearest integer.

In selecting the representative monitoring stations, the monitoring frequency and the timing for each substance, group of substances, or indicator, Member States shall take into account seasonal variability in rainfall, water levels, use patterns and the possibility of the substance, group of substances, or indicator occurring. The frequency of monitoring shall be not less than once per year.

Where a Member State is in a position to generate sufficient, comparable, representative and recent monitoring data for a particular substance, group of substances, or indicator from existing monitoring programmes or studies, it may decide not to undertake additional monitoring under the watch list mechanism for that substance, group of substances, or indicator, provided that the substance, group of substances, or indicator was monitored using a methodology that is compliant with the methods of analysis referred to in the implementing act establishing the watch list.

7. Member States shall make available the results of the monitoring referred to in paragraph 6 of this Article annually in accordance with Article 8(4) of Directive 2000/60/EC and with the implementing act establishing the watch list as adopted pursuant to paragraph 1 of this Article. They shall also make available information on the representativeness of the monitoring stations and on the monitoring strategy.
8. At the end of the 24-month period referred to in paragraph 6 ECHA shall review the monitoring results and assess which substances, groups of substances, or indicators need to be monitored for another 24-month period and therefore are to be kept on the watch list and which substances, groups of substances, or indicators can be removed from the watch list.

Where the Commission, having regard to the assessment by ECHA referred to in the first subparagraph of this paragraph, concludes that no further monitoring is required to further assess the risk to the aquatic environment, that assessment shall be taken into account in the review of Annex I or II referred to in Article 8.

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- * 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 (OJ L 348, 24.12.2008, p. 84, ELI: <http://data.europa.eu/eli/dir/2008/105/oj>).
- ** 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, ELI: <http://data.europa.eu/eli/dir/2001/83/oj>).
- *** 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, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1, ELI: <http://data.europa.eu/eli/reg/2006/1907/oj>).
- **** Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, (OJ L 309, 24.11.2009, p. 71, ELI: <http://data.europa.eu/eli/dir/2009/128/oj>).
- ***** Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 43, ELI: <http://data.europa.eu/eli/reg/2019/6/oj>).

- ***** Regulation (EU) 2022/2379 of the European Parliament and of the Council of 23 November 2022 on statistics on agricultural input and output, amending Commission Regulation (EC) No 617/2008 and repealing Regulations (EC) No 1165/2008, (EC) No 543/2009 and (EC) No 1185/2009 of the European Parliament and of the Council and Council Directive 96/16/EC (OJ L 315, 7.12.2022, p.1, ELI: <http://data.europa.eu/eli/reg/2022/2379/oj>).
- ***** Regulation (EU) 2024/1244 of the European Parliament and of the Council of 24 April 2024 on reporting of environmental data from industrial installations, establishing an Industrial Emissions Portal and repealing Regulation (EC) No 166/2006 (OJ L, 2024/1244, 2.5.2024, ELI: <http://data.europa.eu/eli/reg/2024/1244/oj>).
- ***** Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17, ELI: <http://data.europa.eu/eli/dir/2010/75/oj>).’;

(7) Article 8 is replaced by the following:

‘Article 8

Review of Annexes I to IV and specific provisions for certain substances

1. The Commission shall review the list of pollutants and indicators of pollution and the corresponding quality standards for those pollutants set out in Annex I by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter and, where appropriate, accompany the review with a legislative proposal to update the list of pollutants and the corresponding quality standards.

2. The Commission shall review the list of pollutants and indicators of pollution for which Member States have to consider establishing national threshold values set out in Part B of Annex II by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter and, where appropriate, accompany the review with a legislative proposal to update the list of pollutants in Part B of Annex II.
3. The Commission shall review the repository of harmonised threshold values in Part D of Annex II by ... [*six years after the date of entry into force of this amending Directive*] and every six years thereafter and, where appropriate, accompany the review with a legislative proposal to update the repository and the corresponding harmonised threshold values in Part D of Annex II.
4. When conducting the reviews referred to in paragraphs 1, 2 and 3, the Commission shall take the scientific reports prepared by ECHA pursuant to paragraph 6 into account.
5. The Commission is empowered to adopt delegated acts in accordance with Article 8a to amend Parts A and C of Annex II and Annexes III and IV concerning guidelines for the establishment of threshold values by Member States, information to be provided by Member States with regard to the pollutants and indicators of pollution for which threshold values have been established, the assessment of groundwater chemical status and the identification and reversal of significant and sustained upward trends in order to adapt them to scientific and technical progress.

6. For the purpose of assisting the Commission with regard to the review of Annexes I and II, ECHA shall prepare scientific reports. Those reports shall take account of the following:
- (a) the opinions of the Committee for Risk Assessment (RAC) and the Committee for Socio-Economic Analysis (SEAC) of ECHA;
 - (b) the results of the monitoring programmes established in accordance with Article 8 of Directive 2000/60/EC;
 - (c) the review of the monitoring results in accordance with Article 6a(8) of this Directive;
 - (d) the outcome of the reviews of the Annexes to Directive 2008/105/EC and Directive (EU) 2020/2184;
 - (e) information and requirements to address soil pollution;
 - (f) Union research programmes and scientific publications, including the latest available information resulting from remote sensing technologies, earth observation, such as Copernicus services, in-situ sensors and devices and citizen science data, leveraging the opportunities offered by new technologies, which could include artificial intelligence, advanced data analysis and processing;

- (g) comments and information from relevant stakeholders, including national regulatory authorities and other relevant bodies;
- (h) recommendations from the working groups established under the Common Implementation Strategy for Directive 2000/60/EC.

The scientific reports referred to in the first subparagraph shall include proposals for quality standards or threshold values for the respective pollutants or indicators of pollution as well as a suitable analytical method.

7. Every six years, ECHA shall prepare and make publicly available a report, summarising the findings of the scientific reports prepared under paragraph 6. The first report shall be submitted to the Commission by ... [*four years after the date of entry into force of this amending Directive*].

8. When next conducting the review referred to in paragraph 1 of this Article, the Commission shall consider establishing a quality standard for PFAS Total in groundwater and aim to complement the guidance on monitoring PFAS Total in drinking water, developed in accordance with Article 13(7) of Directive (EU) 2020/2184, to make it applicable to monitoring PFAS Total in groundwater. Member States are encouraged to already apply that guidance to monitor PFAS Total in groundwater and to report the data in accordance with Article 8(4) of Directive 2000/60/EC. Considering the toxicity, persistence and prevalence of trifluoroacetic acid (TFA) in the environment, the Commission shall, at the next review, also consider establishing a quality standard for TFA separately, or as a part of a sum, in Annex I to this Directive.
9. When next conducting the review referred to in paragraph 1, the Commission shall consider whether to establish quality standards for the sum(s) of selected pharmaceuticals by mode of action and for the sum of bisphenols; for this reason ‘sum(s) of selected pharmaceuticals by mode of action’ and ‘sum of bisphenols’ are listed in Annex V to Directive 2006/118/EC. The Commission shall also consider whether a risk-based approach could be taken to establishing quality standards for total pharmaceuticals and total bisphenols in groundwater, supported by suitable monitoring methods.

10. When next conducting the review referred to in paragraph 1, the Commission shall consider whether to revise the quality standards in Annex I for individual pesticides, total pesticides and for non-relevant metabolites in groundwater.’;

(8) the following Article is inserted:

‘Article 8a

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 8(5) shall be conferred on the Commission for a period of six years from ... [*the date of entry into force of this amending Directive*]. 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 8(5) 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 the delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to Article 8(5) shall enter into force only if no objection has been expressed either by the European Parliament or by 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.’;

(9) Article 9 is replaced by the following:

‘Article 9

Committee procedure

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council*.
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 Article 5(4), third subparagraph, of Regulation (EU) No 182/2011 shall apply.;

* 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 (OJ L 55, 28.2.2011, p. 13, ELI: <http://data.europa.eu/eli/reg/2011/182/oj>).’;

- (10) Article 10 is deleted;
- (11) Annex I is replaced by the text set out in Annex III to this Directive;
- (12) Annex II is amended in accordance with Annex IV to this Directive;
- (13) in Annex III, point 2(c) is replaced by the following:
 - ‘(c) any other relevant information including a comparison of the annual arithmetic mean concentration of the relevant pollutants at a monitoring point with the groundwater quality standards set out in Annex I and with the threshold values referred to in Article 3(1)(b) and (c).’;
- (14) in Annex IV, Part B, point 1, the introductory wording is replaced by the following:
 - ‘1) the starting point for implementing measures to reverse significant and sustained upward trends will be when the concentration of the pollutant reaches 75 % of the parametric values of the groundwater quality standards set out in Annex I and of the threshold values referred to in Article 3(1)(b) and (c), unless.’;
- (15) the text set out in Annex V of this Directive is added as Annex V.

Article 3
Amendments to Directive 2008/105/EC

Directive 2008/105/EC is amended as follows:

- (1) the title is replaced by the following:

‘Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards and on the prevention and control of surface water pollution, 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’;

- (2) in Article 2 the following point is added:

‘(3) “indicator of pollution” means a parameter which can be monitored to give a value that is representative of the level or concentration of a pollutant or a group of pollutants and thus of the risk posed by them.’;

(3) Article 3 is amended as follows:

(a) paragraph 1a is amended as follows:

(i) in the first subparagraph, the following points are added:

‘(iii) the substances numbered 5, 9, 13, 15, 17, 21, 23, 24, 28, 30, 34, 37, 41 and 43 in Part A of Annex I, for which revised EQS are set, with effect from 22 December 2027, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2033 and preventing deterioration in the chemical status of surface water bodies in relation to those substances by means of programmes of measures included in the 2027 river basin management plans produced in accordance with Article 13(7) of Directive 2000/60/EC;

- (iv) the newly identified substances numbered 46 to 70 in Part A of Annex I, with effect from 22 December 2027, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2039 and preventing deterioration in the chemical status of surface water bodies in relation to those substances; for that purpose, Member States shall, by 22 December 2027, establish a supplementary monitoring programme and, by 22 December 2030, 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 included in the 2033 river basin management plan produced in accordance with Article 13(7) of that Directive.’;

- (ii) the second subparagraph is replaced by the following:

‘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 of this paragraph.

Article 4(4) to (9) of Directive 2000/60/EC shall also apply *mutatis mutandis* to the substances listed in points (iii) and (iv) of the first subparagraph of this paragraph. Insofar as the time extensions provided for in Article 4(4) of that Directive are concerned, they shall be limited to a maximum of one further update of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within that river basin management plan period.’;

(b) the following paragraph is added:

‘1b. EQS set at Union level for river basin specific pollutants in accordance with Article 16(4) of Directive 2000/60/EC and listed in Part C of Annex II to this Directive or additional river basin specific pollutants and corresponding EQS identified by Member States in accordance with Article 8d(1) of this Directive, shall take effect from the beginning of the following river basin management plan period after the date the EQS was set, with the aim of achieving good surface water chemical status in relation to those pollutants by the end of that river basin management plan period and of preventing deterioration in the chemical status of surface water bodies in relation to those pollutants.

Article 4(4) to (9) of Directive 2000/60/EC shall apply *mutatis mutandis* to the pollutants referred to in the first subparagraph of this paragraph. Insofar as the time extensions provided for in Article 4(4) of that Directive are concerned, they shall be limited to a maximum of one further update of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within that river basin management plan period.’;

(c) paragraph 2 is replaced by the following:

- ‘2. With regard to substances for which a biota EQS or a sediment EQS is laid down in Part A of Annex I, Member States shall apply such biota EQS or sediment EQS.

With regard to 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.’;

(d) in paragraph 6, the first subparagraph is replaced by the following:

- ‘6. Member States shall arrange for the long-term trend analysis of concentrations of those priority substances identified in Part A of Annex I as substances that tend to accumulate in sediment or biota, on the basis of monitoring in sediment or biota as part 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 or biota.’;

(e) paragraph 7 is deleted;

(f) paragraph 8 is replaced by the following:

- ’8. The Commission is empowered to adopt delegated acts in accordance with Article 9a to amend point 3 of Part B of Annex I in order to adapt it to scientific or technical progress.’;

- (4) Article 5 is replaced by the following:

‘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 and other available data, each Member State shall establish an inventory of emissions, discharges and losses of all priority substances listed in Part A of Annex I to this Directive and all substances identified by the Member State as river basin specific pollutants for each river basin district or part of a river basin district within their territory.

The first subparagraph shall not apply to emissions, discharges and losses reported by electronic means, on a yearly basis, to the Industrial Emissions Portal established under Regulation (EU) 2024/1244 of the European Parliament and of the Council*, in accordance with Article 7 of that Regulation.

4. Member States shall update their inventories as part of the reviews 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 the year in which the reviews specified in Article 5(2) of Directive 2000/60/EC are to be completed.

As part of those updates, Member States shall ensure that the point source emissions to water that do not fall under the scope of Regulation (EU) 2024/1244 or that fall below the annual reporting thresholds set out in that Regulation, as well as the emissions of pollutants from diffuse sources as defined in point (12) of Article 3 of that Regulation, to water, are also reported by electronic means to the Commission, in order to be made available in the Industrial Emissions Portal established under that Regulation, at least every six years, and aggregated at the level of each river basin district or part thereof within a Member State's territory.

The Commission shall adopt an implementing act establishing the format of the reporting referred to in the third subparagraph of this paragraph. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 9(2) of this Directive. When establishing that implementing act, the Commission shall be assisted, where so required, by the EEA.

6. Member States shall ensure that the river basin management plans established in accordance with Article 13 of Directive 2000/60/EC include a clear reference or weblink to all the information on emissions to water made available in the Industrial Emissions Portal in accordance with paragraphs 1 and 4 of this Article.

* Regulation (EU) 2024/1244 of the European Parliament and of the Council of 24 April 2024 on reporting of environmental data from industrial , establishing an Industrial Emissions Portal and repealing Regulation (EC) No 166/2006 (OJ L, 2024/1244, 2.5.2024, ELI: <http://data.europa.eu/eli/reg/2024/1244/oj>).';

(5) in Article 7a, paragraph 1 is replaced by the following:

- ‘1. For priority substances that fall within the scope of Directive 2001/83/EC of the European Parliament and of the Council*, Regulations (EC) No 1907/2006** or (EC) No 1107/2009*** of the European Parliament and of the Council, Directives 2009/128/EC**** or 2010/75/EU***** of the European Parliament and of the Council or Regulations (EU) No 528/2012***** or (EU) 2019/6 of the European Parliament and of the Council*****, the Commission shall, taking into account the monitoring data referred to in Article 8(4) of Directive 2000/60/EC, and as part of the report referred to in Article 18(1) 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) of Directive 2000/60/EC.

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- * 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, ELI: <http://data.europa.eu/eli/dir/2001/83/oj>).
- ** 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, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1, ELI: <http://data.europa.eu/eli/reg/2006/1907/oj>).
- *** 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 and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1, ELI: <http://data.europa.eu/eli/reg/2009/1107/oj>).
- **** Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides, (OJ L 309, 24.11.2009, p. 71, ELI: <http://data.europa.eu/eli/dir/2009/128/oj>).
- ***** Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17, ELI: <http://data.europa.eu/eli/dir/2010/75/oj>).
- ***** 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, ELI: <http://data.europa.eu/eli/reg/2012/528/oj>).
- ***** Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products and repealing Directive 2001/82/EC (OJ L 4, 7.1.2019, p. 43, ELI: <http://data.europa.eu/eli/reg/2019/6/oj>).’;

- (6) Articles 8, 8a and 8b are replaced by the following:

‘Article 8

Review of Annexes I and II

1. The Commission shall consider establishing quality standards for PFAS Total in surface waters at the next review of Annex I to this Directive to be conducted in accordance with Article 16 of Directive 2000/60/EC and aim to complement the guidance on monitoring PFAS Total in drinking water, developed in accordance with Article 13(7) of Directive (EU) 2020/2184 of the European Parliament and of the Council*, to make it applicable to monitoring PFAS Total in surface waters. Member States are encouraged to already apply that guidance to monitor PFAS Total in surface waters and to report the data in line with Article 8(4) of Directive 2000/60/EC. Considering the toxicity, persistence and prevalence of trifluoroacetic acid (TFA) in the environment, the Commission shall consider establishing a quality standard for TFA separately in Annex I to this Directive at the next review.

2. A parameter “Sum of Bisphenols” and parameters for the sum(s) of selected pesticides by mode of action and selected pharmaceuticals by mode of action are included in Annex III to this Directive. The Commission shall review the possible inclusion of these parameters in the priority substances list at its next review of Annex I to this Directive to be conducted in accordance with Article 16 of Directive 2000/60/EC, and set EQS as appropriate. The Commission shall also consider at the next review whether a risk-based approach could be taken to establishing EQS for total bisphenols, total pesticides and total pharmaceuticals in surface waters, supported by suitable monitoring methods.
3. The Commission is empowered to adopt delegated acts, in accordance with Article 9a, to amend Part B of Annex II in order to adapt it to scientific and technological progress.

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 to that Directive regarding the presentation of the overall chemical status and the objectives and obligations laid down in point (a) of Article 4(1), point (k) of Article 11(3) and in Article 16(6) of that Directive, Member States may provide additional maps to present the chemical status as provided for in section 1.4.3 of Annex V of Directive 2000/60/EC.

2. Member States may monitor substances identified in Part A of Annex I to this Directive as substances behaving like ubiquitous PBTs 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 at least every three years, unless the use or emission of the substance, or technical knowledge and expert judgment, justify another interval.

3. Over a period of two years from 1 January 2030, Member States shall monitor the presence of estrogenic substances in water bodies, using effect-based monitoring methods. Sampling and analysis need not commence at the start of that two-year period, but shall be conducted at least four times each year. Member States shall conduct the monitoring at a selection of the sites where the three estrogenic hormones 17-beta estradiol (E2), Estrone (E1) and 17-alpha-ethinylestradiol (EE2), listed in Part A to Annex I to this Directive, are being monitored using conventional analytical methods in accordance with Article 8 of Directive 2000/60/EC and Annex V thereto in order to obtain comparative results at a range of concentrations. Data shall be reported together, and in accordance with Article 8(4) of that Directive. The number of sites shall be no fewer than that specified in Article 8b(3) of this Directive for monitoring substances on the watch list. Member States may start the monitoring before 1 January 2030 as long as the technical specifications referred to in paragraph 4 of this Article have been adopted. Member States shall not use the effect-based results from the two-year comparative monitoring period for the purpose of classifying the chemical status of the monitored water bodies as described in section 1.4.3 of Annex V to Directive 2000/60/EC.

4. By ... [*the first day of the month following 18 months after the date of entry into force of this amending Directive*], the Commission shall adopt an implementing act setting out the technical specifications for the monitoring of estrogenic substances using effect-based monitoring methods. The implementing act shall be adopted in accordance with the examination procedure referred to in Article 9(2).
5. Within 18 months of the data being reported by the Member States, the Commission shall publish a report comparing the results from the conventional analytical and the effect-based methods and analyse the possibility of using effect-based monitoring methods in conjunction with an effect-based trigger value for estrogens as defined in point 35a of Article 2 of Directive 2000/60/EC for screening purposes to support the assessment of chemical status.

In the context of future reviews of the list of pollutants in accordance with Article 16(2) of Directive 2000/60/EC, taking into account the analysis in the report referred to in the first subparagraph of this paragraph, the Commission shall consider setting a trigger value for estrogens for screening purposes and for the assessment of chemical status. Once effect-based methods are ready to use also for other substances, the Commission shall consider, in the context of future reviews, requiring Member States to use them, if necessary, at least initially in parallel with conventional analytical methods, and consider setting corresponding trigger values.

Article 8b

Watch list

1. The Commission is empowered to adopt implementing acts to establish, having regard to scientific reports prepared by the European Chemicals Agency (ECHA) in accordance with paragraph 1a of this Article, a watch list of substances for which it is necessary to gather Union-wide monitoring data from the Member States for the purpose of supporting future reviews in accordance with Article 16(2) of Directive 2000/60/EC and to lay down the formats to be used by the Member States for reporting the results of that monitoring 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 watch list shall contain a maximum of 10 substances, groups of substances, or indicators of pollution at any one time and shall indicate the monitoring matrices and the possible methods of analysis for each substance. Those monitoring matrices and methods shall not entail excessive costs for the competent authorities. The substances to be included in the watch list shall be selected from amongst the substances for which the information available indicates that they could pose a significant risk at Union level to, or via, the aquatic environment and for which monitoring data are insufficient. The watch list shall include substances of emerging concern.

On the basis of the scientific reports prepared by ECHA in accordance with paragraph 1a, the Commission shall include microplastics and appropriate indicators of the presence, evolution or transmission of antimicrobial resistance (“indicators of antimicrobial resistance”) in the watch list, provided that methods of sampling and analysis that are reliable and do not entail excessive costs are available. By ... [*the first day of the month following 18 months after the date of entry into force of this amending Directive*], the Commission shall identify such methods of sampling and analysis.

- 1a. ECHA shall prepare scientific reports to assist the Commission in selecting the substances and indicators for inclusion in the watch list referred to in paragraph 1 of this Article, taking into account the following information:
- (a) Annex I to Directive 2006/118/EC of the European Parliament and of the Council* and the results of the most recent review of that Annex, as well as the results of the most recent regular review of Annex I to this Directive;
 - (b) the watch lists established in accordance with Directives 2006/118/EC and (EU) 2020/2184;
 - (c) recommendations from the stakeholders;
 - (d) Member States’ characterisation of river basin districts in accordance with Article 5 of Directive 2000/60/EC and the results of monitoring programmes established in accordance with Article 8 of that Directive;

- (e) information on production volumes, use patterns, intrinsic properties, including, where relevant, particle size, concentrations in the environment and adverse effects on human health and the aquatic environment of a substance, including information gathered in accordance with Directive 2001/83/EC, Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 of the European Parliament and of the Council**, Regulation (EC) No 1107/2009, Directive 2009/128/EC, Regulation (EU) No 528/2012 and Regulation (EU) 2022/2379 of the European Parliament and of the Council***;
- (f) research projects and scientific publications, including information on trends and forecasts based on modelling or other predictive assessments, as well as information and data collected by remote sensing technologies, earth observation, such as Copernicus services, in situ sensors and devices or citizen science data, taking advantage of the opportunities offered by artificial intelligence, and advanced data analysis and processing;
- (g) recommendations from the working groups established under the Common Implementation Strategy for Directive 2000/60/EC;
- (h) information on emissions, discharges and losses available in the Industrial Emissions Portal under Regulation (EU) 2024/1244, as well as any additional information available on substances covered by permits under Directive 2010/75/EU.

- 1b. The scientific reports prepared by ECHA in accordance with paragraph 1a shall present a list of substances, groups of substances, or indicators, the recommended monitoring matrix, and an indicative method of analysis and maximum acceptable limit of quantification for each of them, with a supporting reference to scientific literature or guidance.
- 1c. By ... [*first day of the twenty first month after the date of entry into force of this amending Directive*] and every three years thereafter, ECHA shall prepare a report summarising the findings of the scientific reports prepared in accordance with paragraph 1a and shall make that report publicly available.
- 2. The Commission shall update the watch list referred to in paragraph 1 by ... [*the first day of the twenty-fourth month after the date of entry into force of this amending Directive*], and every three years thereafter.

When updating the watch list, the Commission shall remove any substance or indicator from the watch list for which a risk-based assessment as referred to in Article 16(2) of Directive 2000/60/EC can be conducted without additional monitoring data. However, an individual substance, group of substances, or indicator may be kept on the watch list for another period of maximum three years where additional monitoring data are needed to assess the risk to the aquatic environment.

Each updated watch list shall also include one or more additional substances, groups of substances, or indicators for which the Commission considers, on the basis of the scientific reports of ECHA, that there could be a widespread risk to or via the aquatic environment, subject to the updated watch list containing a maximum of 10 substances, groups of substances, or indicators, in accordance with paragraph 1.

Microplastics and indicators of antimicrobial resistance shall not be kept on the list for a second consecutive period of three years unless a harmonised and reliable risk assessment methodology is available which, when applied, shows that the monitoring data collected during the first monitoring period are insufficient to assess the risk they pose to or via the aquatic environment.

3. Member States shall monitor each substance, group of substances, and indicator on the watch list referred to in paragraph 1 at selected representative monitoring stations over a 24-month period. The monitoring period shall commence within six months of the inclusion of the substance in the list, but sampling and analysis need not commence at the start of that period.

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 the timing for each substance, group of substances, or indicator, Member States shall take into account seasonal variability in rainfall, water levels, use patterns and the possibility of the substance, group of substances, or indicator occurring. The frequency of monitoring shall be no less than twice per year when carried out in water and no less than once per year when carried out in sediment or biota. When higher frequencies are required, as for substances that are sensitive to climatic or seasonal variabilities, the increase in frequency shall be set out and technically justified in the implementing act establishing the watch list adopted pursuant to paragraph 1.

Where a Member State is in a position to generate and provide the Commission with sufficient, comparable, representative and recent monitoring data for a particular substance, group of substances, or indicator from existing monitoring programmes or studies, it may decide not to undertake additional monitoring under the watch list mechanism for that substance, group of substances, or indicator, provided that the substance, group of substances, or indicator was monitored using a methodology that is compliant with the monitoring matrices and the methods of analysis referred to in the implementing act establishing the watch list, as well as with Commission Directive 2009/90/EC****.

4. Member States shall make available the results of the monitoring referred to in paragraph 3 of this Article annually in accordance with Article 8(4) of Directive 2000/60/EC and with the implementing act establishing the watch list adopted pursuant to paragraph 1 of this Article. They shall also make available information on the representativeness of the monitoring stations and on the monitoring strategy.
5. At the end of the 24-month period referred to in paragraph 3 ECHA shall review the monitoring results and assess which substances, groups of substances, or indicators need to be monitored for another 24-month period and therefore are to be kept on the watch list and which substances, groups of substances, or indicators can be removed from the watch list.

Where the Commission, having regard to the assessment by ECHA referred to in the first subparagraph of this paragraph, concludes that no further monitoring is required to further assess the risk to the aquatic environment, this assessment by ECHA shall be taken into account in the review of the lists of substances in Annex I or Part C of Annex II to this Directive, in accordance with Article 16 of Directive 2000/60/EC.

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- * Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the prevention and control of groundwater pollution (OJ L 372, 27.12.2006, p. 19, ELI: <http://data.europa.eu/eli/dir/2006/118/oj>).
- ** Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1, ELI: <http://data.europa.eu/eli/reg/2008/1272/oj>).
- *** Regulation (EU) 2022/2379 of the European Parliament and of the Council of 23 November 2022 on statistics on agricultural input and output, amending Commission Regulation (EC) No 617/2008 and repealing Regulations (EC) No 1165/2008, (EC) No 543/2009 and (EC) No 1185/2009 of the European Parliament and of the Council and Council Directive 96/16/EC (OJ L 315, 7.12.2022, p. 1, ELI: <http://data.europa.eu/eli/reg/2022/2379/oj>).
- **** 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 (OJ L 201, 1.8.2009, p. 36, ELI: <http://data.europa.eu/eli/dir/2009/90/oj>).’;

(7) the following Article is inserted:

‘Article 8d

River Basin Specific Pollutants

1. Member States shall set and apply EQS for the river basin specific pollutants covered by the categories listed in Part A of Annex II to this Directive, where they identify those pollutants as posing a risk to water bodies in one or more of their river basin districts based on the analyses and reviews under Article 5 of Directive 2000/60/EC, in accordance with the procedure set out in Part B of Annex II to this Directive.

By 22 December 2027, Member States shall inform the Commission of their list of river basin specific pollutants and EQS set pursuant to the first subparagraph of this paragraph. The Commission shall ensure that that information is made publicly available.

Subsequent updates of the list of river basin specific pollutants identified by the Member States in accordance with the first subparagraph of this paragraph and their corresponding EQS shall be included in the river basin management plans to be produced under Article 13 of Directive 2000/60/EC.

2. Where EQS for river basin specific pollutants have been set at Union level in accordance with Article 16(4) of Directive 2000/60/EC, and listed in Part C of Annex II to this Directive, those EQS shall take precedence over EQS for river basin specific pollutants established at national level in accordance with paragraph 1 of this Article. Those EQS set at Union level shall also be applied by the Member States to establish whether the river basin specific pollutants listed in Part C of Annex II to this Directive pose a risk.
3. Compliance with the applicable national EQS or, where relevant, with the EQS set at Union level, is required for a water body to achieve good surface water chemical status, as defined in point 24 of Article 2 of Directive 2000/60/EC.’;

(8) Article 9a is amended as follows:

(a) paragraphs 2 and 3 are replaced by the following:

- ‘2. The power to adopt delegated acts referred to in Article 3(8) and Article 8(3) shall be conferred on the Commission for a period of six years from ... [*the date of entry into force of this amending Directive*]. The Commission shall draw up a report in respect of the delegation of power at the latest 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) and Article 8(3) 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.
- 3a. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.’;

(b) paragraph 5 is replaced by the following:

‘5. A delegated act adopted pursuant to Article 3(8) or Article 8(3) 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.’;

(9) Article 10 is deleted;

(10) Annex I is amended in accordance with Annex VI to this Directive;

(11) the text set out in Annex VII to this Directive is added as Annex II;

(12) the text set out in Annex VIII to this Directive is added as Annex III.

Article 4
Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 21 December 2027. They shall immediately communicate the text of those measures to the Commission.

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. They shall determine how such reference is to be made.

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

Article 5
Entry into force

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

Article 6
Addressees

This Directive is addressed to the Member States.

Done at ..., ...

For the European Parliament
The President

For the Council
The President

ANNEX I

Annex V to Directive 2000/60/EC is amended as follows:

(1) sections 1.1.1 to 1.1.4 are replaced by the following:

‘1.1.1. Rivers

Biological elements

Composition and abundance of aquatic flora

Composition and abundance of benthic invertebrate fauna

Composition, abundance and age structure of fish fauna

Hydromorphological elements supporting the biological elements

Hydrological regime

quantity and dynamics of water flow

connection to groundwater bodies

River continuity

Morphological conditions

river depth and width variation

structure and substrate of the river bed

structure of the riparian zone

General physico-chemical elements supporting the biological elements

Thermal conditions

Oxygenation conditions

Salinity

Acidification status

Nutrient conditions

1.1.2. Lakes

Biological elements

Composition, abundance and biomass of phytoplankton

Composition and abundance of other aquatic flora

Composition and abundance of benthic invertebrate fauna

Composition, abundance and age structure of fish fauna

Hydromorphological elements supporting the biological elements

Hydrological regime

quantity and dynamics of water flow

residence time

connection to the groundwater body

Morphological conditions

lake depth variation

quantity, structure and substrate of the lake bed

structure of the lake shore

General physico-chemical elements supporting the biological elements

Transparency

Thermal conditions

Oxygenation conditions

Salinity

Acidification status

Nutrient conditions

1.1.3. Transitional waters

Biological elements

Composition, abundance and biomass of phytoplankton

Composition and abundance of other aquatic flora

Composition and abundance of benthic invertebrate fauna

Composition and abundance of fish fauna

Hydro-morphological elements supporting the biological elements

Morphological conditions

depth variation

quantity, structure and substrate of the bed

structure of the intertidal zone

Tidal regime

freshwater flow

wave exposure

General physico-chemical elements supporting the biological elements

Transparency

Thermal conditions

Oxygenation conditions

Salinity

Nutrient conditions

1.1.4. Coastal waters

Biological elements

Composition, abundance and biomass of phytoplankton

Composition and abundance of other aquatic flora

Composition and abundance of benthic invertebrate fauna

Hydromorphological elements supporting the biological elements

Morphological conditions

depth variation

structure and substrate of the coastal bed

structure of the intertidal zone

Tidal regime

direction of dominant currents

wave exposure

General physico-chemical elements supporting the biological elements

Transparency

Thermal conditions

Oxygenation conditions

Salinity

Nutrient conditions’;

(2) in section 1.2.1, the table ‘Physico-chemical quality elements’ is replaced by the following:

‘General physico-chemical quality elements’

Element	High status	Good status	Moderate status
General conditions	<p>The values of the general physico-chemical elements correspond totally or nearly totally to undisturbed conditions.</p> <p>Nutrient concentrations remain within the range normally associated with undisturbed conditions.</p> <p>Levels of salinity, pH, oxygen balance, acid neutralising capacity and temperature do not show signs of anthropogenic disturbance and remain within the ranges normally associated with undisturbed conditions.</p>	<p>Temperature, oxygen balance, pH, acid neutralising capacity and salinity do not reach levels outside the ranges established so as to ensure the functioning of the type specific ecosystem and the achievement of the values specified above for the biological quality elements.</p> <p>Nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p>	<p>Conditions consistent with the achievement of the values specified above for the biological quality elements.</p>

(3) in section 1.2.2, the table ‘Physico-chemical quality elements’ is replaced by the following:

‘General physico-chemical quality elements

Element	High status	Good status	Moderate status
General conditions	<p>The values of the general physico-chemical elements correspond totally or nearly totally to undisturbed conditions.</p> <p>Nutrient concentrations remain within the range normally associated with undisturbed conditions.</p> <p>Levels of salinity, pH, oxygen balance, acid neutralising capacity, transparency and temperature do not show signs of anthropogenic disturbance and remain within the ranges normally associated with undisturbed conditions.</p>	<p>Temperature, oxygen balance, pH, acid neutralising capacity, transparency and salinity do not reach levels outside the ranges established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p> <p>Nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p>	<p>Conditions consistent with the achievement of the values specified above for the biological quality elements.</p>

(4) in section 1.2.3, the table ‘Physico-chemical quality elements’ is replaced by the following:

‘General physico-chemical quality elements

Element	High status	Good status	Moderate status
General conditions	<p>The general physico-chemical elements correspond totally or nearly totally to undisturbed conditions.</p> <p>Nutrient concentrations remain within the range normally associated with undisturbed conditions.</p> <p>Temperature, oxygen balance and transparency do not show signs of anthropogenic disturbance and remain within the ranges normally associated with undisturbed conditions.</p>	<p>Temperature, oxygenation conditions and transparency do not reach levels outside the ranges established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p> <p>Nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p>	<p>Conditions consistent with the achievement of the values specified above for the biological quality elements.</p>

(5) in section 1.2.4, the table ‘Physico-chemical quality elements’ is replaced by the following:

‘General physico-chemical quality elements’

Element	High status	Good status	Moderate status
General conditions	<p>The general physico-chemical elements correspond totally or nearly totally to undisturbed conditions.</p> <p>Nutrient concentrations remain within the range normally associated with undisturbed conditions.</p> <p>Temperature, oxygen balance and transparency do not show signs of anthropogenic disturbance and remain within the ranges normally associated with undisturbed conditions.</p>	<p>Temperature, oxygenation conditions and transparency do not reach levels outside the ranges established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p> <p>Nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values specified above for the biological quality elements.</p>	<p>Conditions consistent with the achievement of the values specified above for the biological quality elements.</p>

- (6) in section 1.2.5, the table is amended as follows:
 - (a) the fifth row for the entry ‘Specific synthetic pollutants’ is deleted;
 - (b) the sixth row for the entry ‘Specific non-synthetic pollutants’ is deleted;
 - (c) the seventh row for table note (1) is deleted;
- (7) section 1.2.6 is deleted;

(8) in section 1.3, the following paragraphs are added:

‘Where the monitoring network involves earth observation and remote sensing rather than local sampling points, or other innovative techniques, the map of the monitoring network shall include information on the quality elements and the water bodies or groups of water bodies which have been monitored using such monitoring methods. Reference shall be made to CEN, ISO, or other international or national standards that have been applied to ensure that the temporal and spatial data obtained are as reliable as those obtained through the use of conventional monitoring methods at local sampling and measuring points.

Member States may apply passive sampling methods to monitor chemical pollutants, where appropriate, in particular for screening purposes and for long term assessment, on the condition that those sampling methods do not underestimate the concentrations of pollutants for which environmental quality standards apply, and thus reliably identify “failure to achieve good status”, and that chemical analysis of water, biota or sediment samples, according to the environmental quality standards applied, is conducted wherever such failure is observed. Member States may also apply effect-based monitoring methods subject to the same conditions.’;

- (9) in section 1.3.1, the last paragraph, 'Selection of quality elements', is replaced by the following:

'Selection of quality elements

Surveillance monitoring shall be carried out for each monitoring site for a period of one year during the period covered by a river basin management plan. The surveillance monitoring shall cover the following:

- (a) parameters indicative of all biological quality elements;
- (b) parameters indicative of all hydromorphological quality elements;
- (c) parameters indicative of all general physico-chemical quality elements;
- (d) priority substances which are discharged or otherwise deposited into the river basin or sub-basin;
- (e) river basin specific pollutants.

However, where the previous surveillance monitoring exercise showed that the body concerned reached good status and there is no evidence from the review of impact of human activity referred to in Annex II that the impacts on the body have changed, the surveillance monitoring shall be carried out once during the period covered by three consecutive river basin management plans.';

(10) section 1.3.2 is amended as follows:

- (a) in the third paragraph, 'Selection of monitoring sites', the introductory part is replaced by the following:

‘Operational monitoring shall be carried out for all those bodies of water which on the basis of either the impact assessment carried out in accordance with Annex II or surveillance monitoring are identified as being at risk of failing to meet their environmental objectives under Article 4 and for those bodies of water into which priority substances are discharged or otherwise deposited or into which river basin specific pollutants are discharged or otherwise deposited in significant quantities. Monitoring points shall be selected for priority substances as specified in the legislation laying down the relevant environmental quality standard. In all other cases, including for priority substances where no specific guidance is given in such legislation, monitoring points shall be selected as follows:’;

- (b) in the fourth paragraph, 'Selection of quality elements', the second indent is replaced by the following:

‘— all priority substances discharged or otherwise deposited into water bodies and all river basin specific pollutants discharged or otherwise deposited into water bodies in significant quantities.’;

- (11) in section 1.3.4, paragraph 4 is replaced by the following:

‘Monitoring frequencies shall be adjusted, if necessary, to take account of the variability in parameters resulting from variation in both anthropogenic and natural conditions.

The times at which monitoring is undertaken shall be selected so as to take account of the impact of seasonal variations in substance use or water levels on the monitoring results, and thus ensure that the results effectively reflect any changes in the water body caused by anthropogenic pressure and by climatic variation. As regards priority substances whose concentration is likely to peak over short periods as a result of seasonal fluctuations in their use, monitoring shall, during those peak periods, be carried out at intervals shorter than for other substances, where necessary, to ensure that adequate information is obtained on the concentration of those substances.’;

- (12) in section 1.3.4, the table, the sixth row under the heading ‘Physico-chemical’, the words ‘Other pollutants’ are replaced by ‘River basin specific pollutants’;

- (13) section 1.4.1 is amended as follows:

- (a) in point (vii), the second sentence is deleted.;
- (b) point (viii) is deleted;

(c) point (ix) is replaced by the following:

‘(ix) The results of the intercalibration exercise and the values established for the Member State monitoring system classifications in accordance with points (i) to (viii) shall be published within six months of the adoption of the implementing act in accordance with Article 21.’;

(14) in section 1.4.2 the following point is added:

‘(iv) Member States may provide additional maps that present the ecological quality information for one or more of the following quality elements separately:

- Biological elements;
- Hydromorphological elements supporting the biological elements;
- Physico-chemical elements supporting the biological elements.

Member States may also provide maps or tables indicating the degree of change for those quality elements compared to the previous planning cycle.’;

(15) in section 1.4.3, the first paragraph is replaced by the following:

‘A body of water shall be recorded as achieving good chemical status where it has a good surface water chemical status as defined in Article 2(24). If not, the body shall be recorded as failing to achieve good chemical status.’;

- (16) in section 1.4.3, after the table with ‘Chemical status classification’ and ‘Colour code’ the following paragraphs are inserted:

‘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 of Directive 2008/105/EC:

- (a) priority substances identified in Part A of Annex I of Directive 2008/105/EC as substances behaving like ubiquitous persistent, bioaccumulative and toxic substances (uPBTs);
- (b) newly identified priority substances in the latest review carried out by the Commission in accordance with Article 16(2) of this Directive;
- (c) priority substances for which revised and stricter EQS has been set in the latest review in accordance with Article 16(2) of this Directive;
- (d) substances identified as river basin specific pollutants according to Article 8d of Directive 2008/105/EC and based on the assessment of pressures and impacts on surface water bodies carried out in accordance with Annex II to this Directive.

Member States may also present the extent of any deviation from the EQS value for the substances referred to in points (a) to (d) 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 at Union level.’;

(17) in section 2.2.1, the following paragraph is added:

‘Where the monitoring network involves earth observation methods or remote sensing rather than local sampling points, or other innovative techniques, reference shall be made to CEN, ISO, or other international or national standards that have been applied to ensure that the temporal and spatial data obtained are as reliable as those obtained through the use of conventional monitoring methods at local sampling points.’;

(18) section 2.3.2 is replaced by the following:

‘2.3.2. Definition of good groundwater chemical status

Element	Good status
Concentrations of pollutants	<p>The chemical composition of the groundwater body is such that the concentrations of pollutants, as specified below:</p> <ul style="list-style-type: none">– do not exhibit the effects of saline or other intrusions– do not exceed the groundwater quality standards as referred to in Annex I to Directive 2006/118/EC, the threshold values for groundwater pollutants and indicators of pollution set pursuant to Article 3(1)(b), of that Directive and the Union wide threshold values set pursuant to Article 8(3) of that Directive– are not such as would result in failure to achieve the environmental objectives specified under Article 4 for associated surface waters nor any significant diminution of the ecological or chemical quality of such bodies nor in any significant damage to terrestrial ecosystems which depend directly on the groundwater body
Conductivity	Changes in conductivity are not indicative of saline or other intrusion into the groundwater body

’;
’;

- (19) in section 2.4.1, the following paragraph is added:

‘Where the monitoring network involves earth observation or remote sensing rather than local sampling points, or other innovative techniques, reference shall be made to CEN, ISO, or other international or national standards that have been applied to ensure that the temporal and spatial data obtained are as reliable as those obtained through the use of conventional monitoring methods at local sampling points.’;

- (20) in section 2.4.3, under ‘operational monitoring’, the paragraph on ‘Frequency of monitoring’ is replaced by the following:

‘Frequency of monitoring

Operational monitoring shall be carried out for the periods between surveillance monitoring programmes at a frequency sufficient to detect the impacts of relevant pressures, including, where relevant, seasonal variation in the use of substances and of short- and long-term variations in recharge that might affect chemical status parameters, and at a minimum frequency of once per year, unless greater intervals would be justified on the basis of technical knowledge and expert judgement, in particular if it can be shown that over successive years, no exceedance or sustained upward trend has been detected for a particular parameter.’;

(21) section 2.4.5 is replaced by the following:

‘2.4.5. Interpretation and presentation of groundwater chemical status

In assessing the chemical status of groundwater, the results of individual monitoring points within a groundwater body shall be aggregated for the body as a whole. The mean value of the results of monitoring at each point in the groundwater body or group of bodies shall be calculated for the following parameters:

- (a) chemical parameters for which quality standards have been set in Annex I to Directive 2006/118/EC;
- (b) chemical parameters for which national threshold values have been set pursuant to Article 3(1)(b) of Directive 2006/118/EC;
- (c) chemical parameters for which Union wide threshold values have been set pursuant to Article 8(3) of Directive 2006/118/EC.

The mean values referred to in the first paragraph shall be used to demonstrate compliance with good groundwater chemical status defined by reference to the quality standards and threshold values referred to in the first paragraph.

Subject to section 2.5, Member States shall provide a map of groundwater chemical status, colour-coded as follows:

Poor: red

Good: green

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 Directive 2006/118/EC:

- (a) newly identified substances in the latest review in accordance with Article 8 of Directive 2006/118/EC;
- (b) substances for which revised and stricter quality standards (QS) or threshold values are established in accordance with Article 8 of Directive 2006/118/EC.

Member States may also present the extent of any deviation from the QS or threshold value for the substances referred to in points (a) and (b) 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.

Member States shall also indicate, by a black dot on the map, those groundwater bodies which are subject to a significant and sustained upward trend in the concentrations of any pollutant resulting from the impact of human activity. Reversal of such a trend shall be indicated by a blue dot on the map.

These maps shall be included in the river basin management plans.’

ANNEX II

Annex VIII to Directive 2000/60/EC is amended as follows:

- (1) points 11 and 12 are deleted.
- (2) the following point is added:
 - '13. Microorganisms, genes or genetic material reflecting the presence of microorganisms resistant to antimicrobial agents, in particular microorganisms pathogenic to humans or livestock.'

ANNEX III

Annex I to Directive 2006/118/EC is replaced by the following:

‘ANNEX I

QUALITY STANDARDS (QS) FOR GROUNDWATER POLLUTANTS AND INDICATORS OF POLLUTION

Where, for a given body of groundwater, it is considered that the groundwater quality standards could result in failure to achieve the environmental objectives specified in Article 4 of Directive 2000/60/EC for associated bodies of surface water, or in any significant deterioration of the ecological or chemical quality of such bodies, or in any significant damage to terrestrial ecosystems which depend directly on that body of groundwater, more stringent threshold values shall be established in accordance with Article 3 of and Annex II to this Directive. Provided that a reliable methodology is available to assess the presence of groundwater ecosystems, more stringent quality standards shall also be established for groundwater bodies where such ecosystems are present, unless the groundwater quality standards have been set to protect human health and are already sufficiently strict to protect those ecosystems.

(1)	(2)	(3)	(4)	(5)	(6)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	Quality Standard ⁽³⁾ [µg/l unless otherwise indicated]
1	Nitrates	Nutrients	not applicable	not applicable	50 mg/l
2	Active substances in pesticides, including their relevant metabolites, degradation and reaction products ⁽⁴⁾	Pesticides	not applicable	not applicable	0,1 (individual)
					0,5 (total) ⁽⁵⁾
3	PFAS				
3.1	Sum of PFAS	Industrial substances	See table note 6	See table note 6	The parametric value as defined in Part B of Annex I to Directive (EU) 2020/2184 ⁽⁶⁾
3.2	Sum of 4 PFAS ⁽⁷⁾	Industrial substances	See table note 7	See table note 7	0,0044 ⁽⁷⁾

(1)	(2)	(3)	(4)	(5)	(6)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	Quality Standard ⁽³⁾ [µg/l unless otherwise indicated]
4	Carbamazepine	Pharmaceuticals	298-46-4	not applicable	2,5 ⁽¹³⁾
5	Sulfamethoxazole	Pharmaceuticals	723-46-6	not applicable	0,1 ⁽¹³⁾
6	Primidone	Pharmaceuticals	125-33-7		2,5 ⁽¹³⁾
7	Non-relevant metabolites of pesticides (nrMs) ⁽⁴⁾	Pesticides	not applicable	not applicable	1 or up to 5 ⁽⁹⁾ (individual)
					5 ⁽¹⁰⁾ or 12,5 ⁽¹¹⁾ (total) ⁽¹²⁾
8	Trichloroethylene and Tetrachloroethylene (sum of two)	Industrial substances	79-01-6 and 127-18-4	201-167-4 and 204-825-9	10 (total) ⁽¹⁴⁾

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- (¹) CAS: Chemical Abstracts Service.
- (²) EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).
- (³) This parameter is the QS expressed as an annual average value. Unless otherwise specified, it applies to the total concentration of all substances and isomers.
- (⁴) “Pesticides” means plant protection products and biocidal products referred to in Article 2 of Regulation (EC) No 1107/2009 and in Article 3 of Regulation (EU) No 528/2012 respectively.
For that parameter, Member States shall monitor the active substances present in pesticidal products currently or previously used in their territory and any found to be present as a result of transboundary pollution, and their relevant and non-relevant metabolites, degradation and reaction products, drawing, when available, on the list to be established in accordance with Article 4(2a) of this Directive. Member States may stop monitoring specific active substances and their metabolites if they are no longer being used in their territory, provided that past monitoring has consistently shown that those substances and metabolites do not occur in the groundwater body.
A pesticide metabolite shall be deemed relevant if there is reason to consider that it has intrinsic properties comparable to those of the parent active substance in terms of its toxicity for the target pest or that either itself or its transformation products generate a health risk for consumers or the environment.
- (⁵) “Total” means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.
- (⁶) This refers to the PFAS listed in point 3 of Part B of Annex III to Directive (EU) 2020/2184. The parameter and the quality standard shall be updated according to amendments to that Directive.

- (⁷) This refers to the following compounds, listed with their CAS number and EU number: Perfluorohexane sulfonic acid (PFHxS), (CAS 355-46-4, EU 206-587-1); Perfluorooctanesulfonic acid (PFOS) (CAS 1763-23-1, EU 217-179-8); Perfluorooctanoic acid (PFOA) (CAS 335-67-1, EU 206-397-9); Perfluorononanoic acid (PFNA) (CAS 375-95-1, EU 206-801-3). For the sum of 4 PFAS, the CAS numbers listed refer only to the protonated form of the individual PFAS but the sum applies to the total concentration of the dissolved substances including protonated and deprotonated forms and their isomers linear and branched.
- (⁹) Member States shall apply a default quality standard of 1 µg/l unless they provide reliable evidence, including from tests of acute and chronic toxicity on the taxonomic group confidently predicted to be the most sensitive, that a more or less strict standard is justified, in which case they shall apply that standard, up to a maximum of 5 µg/l.
- (¹⁰) The total concentration of nrMs for which the default quality standard of 1 µg/l for individual nrMs applies, or a stricter standard, shall not exceed 5 µg/l.
- (¹¹) The total concentration of nrMs for which standards above 1 and up to 5 µg/l for individual nrMs apply shall not exceed 12.5 µg/l.
- (¹²) “Total” means the sum of all individual nrMs in each individual quality-standard category detected and quantified in the monitoring procedure, which should cover at least the nrMs listed in accordance with Article 4(2a).
- (¹³) When a reliable methodology is available, Member States shall assess the presence of groundwater ecosystems in groundwater bodies whose characteristics could support their existence and set, if such ecosystems are present, and in line with Article 3(1)(b), a stricter threshold value for this substance that is adequate to protect those ecosystems.
- (¹⁴) “Total” means the sum of concentrations of Trichloroethylene and Tetrachloroethylene.’.
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ANNEX IV

Annex II of Directive 2006/118/EC is amended as follows:

- (1) in Part A, the following paragraph is inserted after the first paragraph:

‘In accordance with Article 15 of Directive 2000/60/EC, Member States shall ensure that competent authorities inform the Commission of threshold values for pollutants and indicators of pollution.’;

- (2) in Part B, point 2 is replaced by the following:

‘2. Man-made synthetic substances^{*}

Trichloroethylene

Tetrachloroethylene

^{*} including synthetic substances with identical natural counterparts which may occur in groundwater, but where any natural background level is, at most, low.’;

(3) in Part C, the title is replaced by the following:

‘Information to be provided by Member States with regard to the pollutants and indicators of pollution for which threshold values have been established by the Member States’;

(4) the following Part is added:

‘Part D

Repository of harmonised threshold values for man-made synthetic substances* in groundwater of national, regional or local concern

* including synthetic substances with identical natural counterparts which may occur in groundwater, but where any natural background level is, at most, low.

(1)	(2)	(3)	(4)	(5)	(6)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	Threshold value [µg/l unless otherwise indicated]
	Individual pharmaceutical active substances ⁽³⁾	Pharmaceuticals			2,5 ⁽⁴⁾

⁽¹⁾ CAS: Chemical Abstracts Service.

⁽²⁾ EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).

⁽³⁾ Pharmaceutical active substances as defined in Directive 2001/83/EC and Regulation (EU) 2019/6.

⁽⁴⁾ Member States shall apply this threshold value unless a standard or threshold value has been specifically set for the substance concerned at Union or national level for either surface or groundwater. When a reliable methodology is available, Member States shall assess the presence of groundwater ecosystems in groundwater bodies whose characteristics could support their existence and set, if such ecosystems are present, and in accordance with Article 3(1)(b), a stricter threshold value if necessary to protect those ecosystems.’.

ANNEX V

The following Annex is added in Directive 2006/118/EC

‘ANNEX V

SUBSTANCES SUBJECT TO REVIEW FOR POSSIBLE INCLUSION IN ANNEX I WITH A UNION-WIDE GROUNDWATER QUALITY STANDARD

(1)	(2)	(3)	(4)	(5)	(6)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	Threshold value [µg/l unless otherwise indicated]
	Sum(s) of selected pharmaceuticals by mode of action	Pharmaceuticals			
	Sum of bisphenols	Industrial substances			

⁽¹⁾ CAS: Chemical Abstracts Service.

⁽²⁾ EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).’.

ANNEX VI

Annex I to Directive 2008/105/EC is amended as follows:

(1) the title is replaced by the following:

‘ENVIRONMENTAL QUALITY STANDARDS (EQS) FOR PRIORITY SUBSTANCES
IN SURFACE WATERS’;

(2) Part A is replaced by the following:

‘PART A: ENVIRONMENTAL QUALITY STANDARDS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(1)	The substance Alachlor has been moved to Part C of Annex II											
(2)	Anthracene	Industrial substances	120-12-7	204-371-1	0,1	0,1	0,1	0,1		X		X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(3)	The substance Atrazine has been moved to Part C of Annex II											
(4)	Benzene	Industrial substances	71-43-2	200-753-7	10	8	50	50				
(5)	Brominated diphenylethers ⁽⁷⁾	Industrial substances	not applicable	not applicable			0,14	0,014 ⁽⁷⁾	0,00028 ⁽⁷⁾	X ⁽⁸⁾	X	X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(6)	Cadmium and its compounds (depending on water hardness classes) ⁽⁹⁾	Metals	7440-43-9	231-152-8	≤ 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)		X		X
(6a)	The substance Carbon tetrachloride has been moved to Part C of Annex II											

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(7)	C ₁₀₋₁₃ Chloroalkanes ⁽¹⁰⁾	Industrial substances	85535-84-8	287-476-5	0,4	0,4	1,4	1,4		X		X
(8)	The substance Chlorfenvinphos has been moved to Part C of Annex II											
(9)	Chlorpyrifos (Chlorpyrifos-ethyl)	Pesticides - organophosphate	2921-88-2	220-864-4	$4,6 \times 10^{-4}$	$4,6 \times 10^{-5}$	0,0026	$5,2 \times 10^{-4}$		X	X	X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(9a)	Cyclodiene pesticides: Aldrin Dieldrin Endrin Isodrin	Pesticides - organochlorine	309-00-2 60-57-1 72-20-8 465-73-6	206-215-8 200-484-5 200-775-7 207-366-2	Σ = 0,01	Σ = 0,005	not applicable	not applicable		X		
(9b)	DDT total ⁽¹¹⁾	Pesticides - organochlorine	not applicable	not applicable	0,025	0,025	not applicable	not applicable		X		
	para-para-DDT		50-29-3	200-024-3	0,01	0,01	not applicable	not applicable		X		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(10)	1,2-Dichloroethane	Industrial substances	107-06-2	203-458-1	10	10	not applicable	not applicable		X		
(11)	Dichloromethane	Industrial substances	75-09-2	200-838-9	20	20	not applicable	not applicable				
(12)	Di(2-ethylhexyl)-phthalate (DEHP)	Industrial substances	117-81-7	204-211-0	1,3	1,3	not applicable	not applicable		X		X
(13)	Diuron	Pesticides - herbicide	330-54-1	206-354-4	0,049	0,0049	0,27	0,054				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(14)	Endosulfan	Pesticides - organochlorine	115-29-7	204-079-4	0,005	0,0005	0,01	0,004		X		
(15)	Fluoranthene	Industrial substances	206-44-0	205-912-4	$7,62 \times 10^{-4}$	$7,62 \times 10^{-4}$	0,12	0,012	6,1	X	X	X
(16)	Hexachlorobenzene	Pesticides - organochlorine	118-74-1	204-273-9			0,5	0,05	8 fw fish 1 sw fish	X		X
(17)	Hexachlorobutadiene	Industrial substances (solvents)	87-68-3	201-765-5	$9,5 \times 10^{-4}$	$9,5 \times 10^{-4}$	0,6	0,06	21	X		X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(18)	Hexachlorocyclohexane	Pesticides - insecticides	608-73-1	210-168-9	0,02	0,002	0,04	0,02		X		X
(19)	Isoproturon	Pesticides - herbicide	34123-59-6	251-835-4	0,3	0,3	1,0	1,0				
(20)	Lead and its compounds	Metals	7439-92-1	231-100-4	1,2 ⁽¹²⁾	1,3	14	14		X		X
(21)	Mercury and its compounds	Metals	7439-97-6	231-106-7			0,07	0,07	11	X	X	X
(22)	Naphthalene	Industrial substances	91-20-3	202-049-5	2	2	130	130				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(23)	Nickel and its compounds	Metals	7440-02-0	231-111-4	2 ⁽¹²⁾	3,1	8,2	8,2				
(24)	Nonylphenols ⁽¹⁴⁾ (4-Nonylphenol)	Industrial substances	see footnote 14	see footnote 14	0,037	0,0018	2,1	0,17		X		
(25)	Octylphenols ⁽¹⁵⁾ (((4-(1,1',3,3'-tetramethylbutyl)-phenol)))	Industrial substances	see footnote 15	see footnote 15	0,1	0,01	not applicable	not applicable		X		
(26)	Pentachlorobenzene	Industrial substances	608-93-5	210-172-0	0,007	0,0007	not applicable	not applicable		X		X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(27)	Pentachlorophenol	Pesticides - organochlorine	87-86-5	201-778-6	0,4	0,4	1	1		X		
(28)	Polycyclic aromatic hydrocarbons (PAHs) ⁽¹⁶⁾	Combustion products	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable	Sum of Benzo(a)pyrene equivalents 0,6 ⁽¹⁷⁾	X	X	X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
	Benzo(a)pyrene		50-32-8	200-028-5			0,5	0,05	0,6			
	Benzo(b)fluoranthene		205-99-2	205-911-9			0,017	0,017	see footnote 17			
	Benzo(k)fluoranthene		207-08-9	205-916-6			0,017	0,017	see footnote 17			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
	Benzo(g,h,i)perylene		191-24-2	205-883-8			$8,2 \times 10^{-3}$	$8,2 \times 10^{-4}$	see footnote 17			
	Indeno(1,2,3-cd)pyrene		193-39-5	205-893-2			not applicable	not applicable	see footnote 17			
	Chrysene		218-01-9	205-923-4			0,07	0,007	see footnote 17			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
	Benzo(a)anthracene		56-55-3	200-280-6			0,1	0,01	see footnote 17			
	Dibenz(a,h)anthracene		53-70-3	200-181-8			0,014	0,0014	see footnote 17			
	Fluoranthene		206-44-0	205-912-4			0,12	0,012	see footnote 17			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(29)	The substance Simazine has been moved to Part C of Annex II											
(29a)	Tetrachloroethylene	Industrial substances	127-18-4	204-825-9	10	10	not applicable	not applicable				
(29b)	Trichloroethylene	Industrial substances	79-01-6	201-167-4	10	10	not applicable	not applicable		X		
(30)	Tributyltin compounds ⁽¹⁸⁾ (Tributyltin-cation)	Pesticides - biocide	36643-28-4	not applicable	0,0002	0,0002	0,0015	0,0015	1,6 ⁽¹⁹⁾	X	X	X
(31)	The substance Trichlorobenzenes has been moved to Part C of Annex II											

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(32)	Trichloromethane	Industrial substances	67-66-3	200-663-8	2,5	2,5	not applicable	not applicable				
(33)	Trifluralin	Pesticides - herbicides	1582-09-8	216-428-8	0,03	0,03	not applicable	not applicable		X		
(34)	Dicofol	Pesticides - organochlorine	115-32-2	204-082-0	$4,45 \times 10^{-3}$	$0,185 \times 10^{-3}$	not applicable ⁽²⁰⁾	not applicable ⁽²⁰⁾	111 fw fish 4,6 sw fish	X		X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(35)	Perfluorooctane sulfonic acid (PFOS) and its derivatives	Industrial substances	1763-23-1	217-179-8	Covered by substance group 65 (Per- and polyfluoroalkyl substances (PFAS) – sum of 25)							
(36)	Quinoxifen	Pesticides – fungicide	124495-18-7	not applicable	0,15	0,015	2,7	0,54		X		X
(37)	Dioxins and dioxin-like compounds ⁽²¹⁾	Industrial byproducts	not applicable	not applicable			not applicable	not applicable	Sum of PCDDs+ PCDFs+ PCB-DLs equivalents 3,5 x 10 ⁻⁵ ⁽²²⁾	X	X	X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(38)	Aclonifen	Pesticides - herbicide	74070-46-5	277-704-1	0,12	0,012	0,12	0,012				
(39)	Bifenox	Pesticides - herbicide	42576-02-3	255-894-7	0,012	0,0012	0,04	0,004				
(40)	Cybutryne	Pesticides - biocide	28159-98-0	248-872-3	0,0025	0,0025	0,016	0,016				
(41)	Cypermethrin ⁽²³⁾	Pesticides - pyrethroid	52315-07-8	257-842-9	3×10^{-5}	3×10^{-6}	6×10^{-4}	6×10^{-5}				X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(42)	Dichlorvos	Pesticides - organophosphate	62-73-7	200-547-7	6×10^{-4}	6×10^{-5}	7×10^{-4}	7×10^{-5}				
(43)	Hexabromocyclododecane (HBCDD) ⁽²⁴⁾	Industrial substances	See footnote 24	See footnote 24	$4,6 \times 10^{-4}$	2×10^{-5}	0,5	0,05	90 fw fish 3,5 sw fish	X	X	X
(44)	Heptachlor and heptachlor epoxide	Pesticides - organochlorine	76-44-8 / 1024-57-3	200-962-3/ 213-831-0	$1,7 \times 10^{-7}$	$1,7 \times 10^{-7}$	3×10^{-4}	3×10^{-5}	0,013	X	X	X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(45)	Terbutryn	Pesticides - biocides	886-50-0	212-950-5	0,065	0,0065	0,34	0,034				
(46)	17 alpha-ethinylestradiol (EE2)	Pharmaceuticals - estrogenic hormone	57-63-6	200-342-2	$1,7 \times 10^{-5}$	$1,6 \times 10^{-6}$	not derived	not derived				
(47)	17 beta-estradiol (E2)	Pharmaceuticals - estrogenic hormone	50-28-2	200-023-8	0,00018	9×10^{-6}	not derived	not derived				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(48)	Acetamiprid	Pesticides - neonicotinoid	135410-20-7 / 160430-64-8	603-921-1	0,037	0,0037	0,16	0,016				
(49)	Azithromycin	Pharmaceuticals - macrolide antibiotic	83905-01-5	617-500-5	0,019	0,0019	0,18	0,018				X
(50)	Bifenthrin	Pesticides - pyrethroid	82657-04-3	617-373-6	$9,5 \times 10^{-5}$	$9,5 \times 10^{-6}$	0,011	0,001				X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(51)	Bisphenol-A (BPA)	Industrial substances	80-05-7	201-245-8	1,7 x 10 ⁻⁴	1,7 x 10 ⁻⁴	130	51	0,025	X		
(52)	Carbamazepine	Pharmaceuticals - anticonvulsant	298-46-4	206-062-7	2,5	0,25	1,6 × 10 ³	160				
(53)	Clarithromycin	Pharmaceuticals - macrolide antibiotic	81103-11-9	658-034-2	0,13	0,013	0,13	0,013				X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(54)	Clothianidin	Pesticides - neonicotinoid	210880-92-5	433-460-1	0,01	0,001	0,34	0,034				
(55)	Deltamethrin	Pesticides - pyrethroid	52918-63-5	258-256-6	$1,7 \times 10^{-6}$	$1,7 \times 10^{-7}$	$1,7 \times 10^{-5}$	$3,4 \times 10^{-6}$				X
(56)	Diclofenac	Pharmaceuticals – anti-inflammatory	15307-86-5 / 15307-79-6	239-348-5 / 239-346-4	0,04	0,004	250	25				X

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(57)	Erythromycin	Pharmaceuticals - macrolide antibiotic	114-07-8	204-040-1	0,5	0,05	1	0,1				X
(58)	Esfenvalerate	Pesticides - pyrethroid	66230-04-4	613-911-9	$1,7 \times 10^{-5}$	$1,7 \times 10^{-6}$	0,0085	0,00085				X
(59)	Estrone (E1)	Pharmaceuticals - estrogenic hormone	53-16-7	200-164-5	$3,6 \times 10^{-4}$	$1,8 \times 10^{-5}$	not derived	not derived				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(60)	Glyphosate	Pesticides - herbicide	1071-83-6	213-997-4	0,1 ⁽²⁵⁾ 86,7 ⁽²⁶⁾	8,67	not applicable ⁽²⁵⁾ 398,6 ⁽²⁶⁾	39,86				
(61)	Ibuprofen	Pharmaceuticals – anti-inflammatory	15687-27-1	239-784-6	0,14	0,014						X
(62)	Imidacloprid	Pesticides - neonicotinoid	138261-41-3 / 105827-78-9	428-040-8	0,0068	$6,8 \times 10^{-4}$	0,057	0,0057				
(63)	Nicosulfuron	Pesticides - herbicide	111991-09-4	601-148-4	0,0087	$8,7 \times 10^{-4}$	0,23	0,023				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(64)	Permethrin	Pesticides - pyrethroid	52645-53-1	258-067-9	$2,7 \times 10^{-4}$	$2,7 \times 10^{-5}$	0,0025	$2,5 \times 10^{-4}$				X
(65)	Per- and polyfluoroalkyl substances (PFAS) – sum of 25 ⁽²⁷⁾ ⁽³⁰⁾	Industrial substances	not applicable	not applicable	Sum of PFOA equivalents 0,0044 ⁽²⁸⁾	Sum of PFOA equivalents 0,0044 ⁽²⁸⁾	not applicable	not applicable	Sum of PFOA equivalents 0,077 ⁽²⁸⁾	X	X	X
(66)	Silver	Metals	7440-22-4	231-131-3	0,01	0,006 (10‰ salinity) 0,17 (30‰ salinity)	0,022	not derived				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(67)	Thiacloprid	Pesticides - neonicotinoid	111988-49-9	601-147-9	0,01	0,001	0,05	0,005				
(68)	Thiamethoxam	Pesticides - neonicotinoid	153719-23-4	428-650-4	0,04	0,004	0,77	0,077				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment [µg /kg dry weight] where so indicated	Identified as a priority hazardous substance	Identified as an Ubiquitous Persistent, Bioaccumulative and Toxic (uPBT) substance	Identified as a substance that tends to accumulate in sediment and/or biota
(69)	Triclosan	Pesticides - biocides	3380-34-5	222-182-2	0,02	0,002	0,02	0,002				
(70)	Sum of active substances in the pesticides ⁽²⁹⁾ listed in this table ⁽³⁰⁾ ⁽³¹⁾	Pesticides	not applicable	not applicable	0,2 ⁽³¹⁾							

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- (¹) CAS: Chemical Abstracts Service.
- (²) EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).
- (³) This parameter is the EQS expressed as an annual average value (AA-EQS). Unless otherwise specified, it applies to the total concentration of all substances and isomers.
- (⁴) Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.
- (⁵) This parameter is the EQS expressed as a maximum allowable concentration (MAC EQS). Unless otherwise specified, it applies to the total concentration of all substances and isomers. 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.
- (⁶) If an EQS for biota or sediment is given, it, rather than the water EQS, shall be applied, without prejudice to Article 3(3) of this Directive allowing an alternative biota taxon, or another matrix, to be monitored instead, as long as the EQS applied provides an equivalent level of protection. Unless otherwise specified, it applies to the total concentration of all substances and isomers. Unless otherwise indicated, the biota EQS relate to fish. “fw fish” indicates the biota EQS for freshwater fish monitored in inland waters; “sw fish” indicates the biota EQS for saltwater fish monitored in other surface waters. For substances numbered 15 (Fluoranthene), 28 (PAHs), and 51 (Bisphenol-A) the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status, monitoring of Fluoranthene PAHs, and Bisphenol-A 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 point 4.1.5 of Annex I to Commission Regulation (EU) 2023/915⁺.

- (⁷) For the group of priority substances covered by brominated diphenylethers (No 5), the EQS refer to the sum of the concentrations of congener numbers 28, 47, 99, 100, 153 and 154.
- (⁸) Tetra, Penta, Hexa, Hepta, Octa and Decabromodiphenylether (CAS numbers 40088-47-9, 32534-81-9, 36483-60-0, 68928-80-3, 32536-52-0, 1163-19-5, respectively).
- (⁹) 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).
- (¹⁰) No indicative parameter is provided for this group of substances. The indicative parameter(s) shall be defined through the analytical method.
- (¹¹) DDT total comprises the sum of the isomers 1,1,1 trichloro 2,2 bis (p chlorophenyl) ethane (CAS 50 29 3, EU 200 024 3); 1,1,1 trichloro 2 (o chlorophenyl) 2 (p chlorophenyl) ethane (CAS 789 02 6, EU 212 332 5); 1,1-dichloro 2,2 bis (p chlorophenyl) ethylene (CAS 72 55 9, EU 200 784 6); and 1,1 dichloro 2,2 bis (p chlorophenyl) ethane (CAS 72 54 8, EU 200 783 0).
- (¹²) These EQS refer to bioavailable concentrations of the substances.

- (¹⁴) 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).
- (¹⁵) 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).
- (¹⁶) Benzo(a)pyrene (CAS 50-32-8) (RPF 1), benzo(b)fluoranthene (CAS 205-99-2) (RPF 0,1), benzo(k)fluoranthene (CAS 207-08-9) (RPF 0,1), benzo(g,h,i)perylene (CAS 191-24-2) (RPF 0), indeno(1,2,3-cd)pyrene (CAS 193-39-5) (RPF 0,1), chrysene (CAS 218-01-9) (RPF 0,01), benzo(a)anthracene (CAS 56-55-3) (RPF 0,1), dibenz(a,h)anthracene (CAS 53-70-3) (RPF 1) and fluoranthene (CAS 206-44-0) (RPF 0,01). Fluoranthene also appears separately in row 15. The PAHs anthracene and naphthalene are listed only separately because no RPF is available.
- (¹⁷) For the group of polyaromatic hydrocarbons (PAHs) (No 28), the biota EQS refers to the sum of the concentrations of eight of the nine PAHs listed in footnote 16 expressed as benzo(a)pyrene equivalents based on the carcinogenic potencies of the substances relative to that of benzo(a)pyrene, i.e. the RPFs in footnote 16. Benzo(g,h,i)perylene does not need to be measured in biota for the purposes of determining compliance with the overall biota EQS. The biota EQS for fluoranthene in row 15 must also be complied with.
- (¹⁸) Tributyltin compounds including tributyltin-cation (CAS 36643-28-4).
- (¹⁹) Sediment EQS.
- (²⁰) There is insufficient information available to set a MAC-EQS for these substances.

- (²¹) This refers to the following compounds:
 7 polychlorinated dibenzo-p-dioxins (PCDDs): 2,3,7,8-T4CDD (CAS 1746-01-6, EU 217-122-7), 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-DLs): 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).
- (²²) For the group of Dioxins and dioxin-like compounds (No 37), the biota EQS refers to the sum of the concentrations of the substances listed in footnote 21 expressed as toxic equivalents based on the World Health Organisation 2005 Toxic Equivalence Factors.
- (²³) CAS 52315-07-8 refers to an isomer mixture of cypermethrin, alpha-cypermethrin (CAS 67375-30-8, EU 257-842-9), beta-cypermethrin (CAS 65731-84-2, EU 265-898-0), theta-cypermethrin (CAS 71691-59-1) and zeta-cypermethrin (CAS 1315501-18-8, EU 257-842-9).
- (²⁴) This refers to 1,3,5,7,9,11-Hexabromocyclododecane (CAS 25637-99-4, EU 247-148-4), 1,2,5,6,9,10-Hexabromocyclododecane (CAS 3194-55-6, EU 221-695-9), α -Hexabromocyclododecane (CAS 134237-50-6), β -Hexabromocyclododecane (CAS 134237-51-7) and γ -Hexabromocyclododecane (CAS 134237-52-8).

- (²⁵) For freshwater used for the abstraction and preparation of drinking water.
- (²⁶) For freshwater not used for the abstraction and preparation of drinking water.
- (²⁷) This refers to the following compounds, listed with their CAS number, EU number and Relative Potency Factor (RPF):
 Perfluorooctanoic acid (PFOA) (CAS 335-67-1, EU 206-397-9) (RPF 1), Perfluorooctane sulfonic acid (PFOS) (CAS 1763-23-1, EU 217-179-8) (RPF 2), Perfluorohexane sulfonic acid (PFHxS) (CAS 355-46-4, EU 206-587-1) (RPF 0,6), Perfluorononanoic acid (PFNA) (CAS 375-95-1, EU 206-801-3) (RPF 10), Perfluorobutane sulfonic acid (PFBS) (CAS 375-73-5, EU 206-793-1) (RPF 0,001), Perfluorohexanoic acid (PFHxA) (CAS 307-24-4, EU 206-196-6) (RPF 0,01), Perfluorobutanoic acid (PFBA) (CAS 375-22-4, EU 206-786-3) (RPF 0,05), Perfluoropentanoic acid (PFPeA) (CAS 2706-90-3, EU 220-300-7) (RPF 0,03), Perfluoropentane sulfonic acid (PFPeS) (CAS 2706-91-4, EU 220-301-2) (RPF 0,3005), Perfluorodecanoic acid (PFDA) (CAS 335-76-2, EU 206-400-3) (RPF 7), Perfluorododecanoic acid (PFDoDA or PFDoA) (CAS 307-55-1, EU 206-203-2) (RPF 3), Perfluoroundecanoic acid (PFUnDA or PFUnA) (CAS 2058-94-8, EU 218-165-4) (RPF 4), Perfluoroheptanoic acid (PFHpA) (CAS 375-85-9, EU 206-798-9) (RPF 0,505), Perfluorotridecanoic acid (PFTrDA) (CAS 72629-94-8, EU 276-745-2) (RPF 1,65), Perfluoroheptane sulfonic acid (PFHpS) (CAS 375-92-8, EU 206-800-8) (RPF 1,3), Perfluorodecane sulfonic acid (PFDS) (CAS 335-77-3, EU 206-401-9) (RPF 2), Perfluorotetradecanoic acid (PFTeDA) (CAS 376-06-7, EU 206-803-4) (RPF 0,3), Perfluorohexadecanoic acid (PFHxDA) (CAS 67905-19-5, EU 267-638-1) (RPF 0,02), Perfluorooctadecanoic acid (PFODA) (CAS 16517-11-6, EU 240-582-5) (RPF 0,02), 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid (HFPO-DA) (CAS 13252-13-6) (RPF 0,06), 2,2,3-trifluoro-3-(1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy)propanoic acid (CAS 919005-14-4) (RPF 0,03), 2- (Perfluorohexyl)ethyl alcohol (6:2 FTOH) (CAS 647-42-7, EU 211-477-1) (RPF 0,02), 2- (Perfluorooctyl)ethanol (8:2 FTOH) (CAS 678-39-7, EU 211-648-0) (RPF 0,04) and 2,2-difluoro-2-((2,2,4,5-tetrafluoro-5-(trifluoromethoxy)-1,3-dioxolan-4-yl)oxy) acetic acid (C6O4) (CAS 1190931-41-9) (RPF 0,06), Trifluoroacetic acid (TFA) (CAS 76-05-1, EU 200-929-3) (RPF 0.002).

- (²⁸) For the group of PFAS (No 65), the EQS refer to the sum of the concentrations of the 25 PFAS listed in footnote 27 expressed as PFOA-equivalents based on the potencies of the substances relative to that of PFOA, i.e. the RPFs in footnote 27. The critical EQS is the biota EQS (relating to fish consumption) and must therefore be complied with. The AA-EQS are not equivalently protective.
- (²⁹) “Pesticides” means plant protection products as referred to in Article 2 of Regulation (EC) No 1107/2009 and biocidal products as defined in Article 3 of Regulation (EU) No 528/2012.
- (³⁰) The minimum performance criteria laid down in Directive 2009/90/EC apply to each individual substance within the group of substances but taking account of the need to quantify the contribution of each substance to the total concentration for comparison with the EQS.
- (³¹) With the following exceptions: the four pesticides to be monitored in biota or sediment, i.e. the substances numbered 16, 30, 34 and 44, and glyphosate.

⁺ Commission Regulation (EU) 2023/915 of 25 April 2023 on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006 (OJ L 119, 5.5.2023, p. 103, ELI: <http://data.europa.eu/eli/reg/2023/915/oj>).’;

(3) Part B is amended as follows:

(a) in point 1, the first paragraph is replaced by the following:

‘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.’;

(b) in point 2, the first paragraph is replaced by the following:

‘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.’.

ANNEX VII

The following Annex is added to Directive 2008/105/EC:

‘ANNEX II

ENVIRONMENTAL QUALITY STANDARDS FOR RIVER BASIN SPECIFIC POLLUTANTS

PART A: INDICATIVE LIST OF CATEGORIES OF RIVER BASIN SPECIFIC POLLUTANTS

1. Organohalogen compounds and substances which may form such compounds in the aquatic environment.
2. Organophosphorous compounds.
3. Organotin compounds.
4. Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment.

5. Persistent hydrocarbons and persistent and bioaccumulable organic toxic substances.
6. Cyanides.
7. Metals and their compounds.
8. Arsenic and its compounds.
9. Biocides and plant protection products.
10. Materials in suspension, including micro/nanoplastics
11. Microorganisms, genes or genetic material reflecting the presence of microorganisms resistant to antimicrobial agents, in particular microorganisms pathogenic to humans or livestock.

PART B: THE PROCEDURE FOR DERIVING
ENVIRONMENTAL QUALITY STANDARDS
FOR RIVER BASIN SPECIFIC POLLUTANTS

Methods used for the establishment of EQS for river basin specific pollutants shall include the following steps:

- (a) identification of the receptors and compartments or matrices at risk from the substance of concern;
- (b) collation and quality assessment of data on the properties of the substance of concern, including its (eco)toxicity, in particular from reports on laboratory, mesocosm and field studies which cover both chronic and acute effects in both fresh and saltwater environments;
- (c) extrapolation of (eco)toxicity data to no-effect or similar concentrations using deterministic or probabilistic methods, and selection and application of appropriate assessment factors to address uncertainties and derive EQS;
- (d) comparison of EQS for different receptors and compartments, and selection of critical EQS, i.e. the EQS that provides protection to the most sensitive receptor in the most relevant compartment or matrix.

PART C: REPOSITORY OF HARMONISED ENVIRONMENTAL QUALITY STANDARDS
FOR RIVER BASIN SPECIFIC POLLUTANTS

Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment where so indicated [µg/kg dry weight]
1	Alachlor ⁽⁷⁾	Pesticides	15972-60-8	240-110-8	0,3	0,3	0,7	0,7	
2	Carbon tetrachloride ⁽⁷⁾	Industrial substances	56-23-5	200-262-8	12	12	not applicable	not applicable	
3	Chlorfenvinphos ⁽⁷⁾	Pesticides	470-90-6	207-432-0	0,1	0,1	0,3	0,3	
4	Simazine ⁽⁷⁾	Pesticides	122-34-9	204-535-2	1	1	4	4	

Entry No	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	AA-EQS ⁽³⁾ Inland surface waters ⁽⁴⁾ [µg/l]	AA-EQS ⁽³⁾ Other surface waters [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters [µg/l]	EQS Biota ⁽⁶⁾ [µg/kg wet weight] or EQS Sediment where so indicated [µg/kg dry weight]
5	Trichlorobenzenes ⁽⁷⁾	Industrial substances - solvent	12002-48-1	234-413-4	0,4	0,4	not applicable	not applicable	
6	Atrazine ⁽⁷⁾	Pesticides - herbicides	1912-24-9	217-617-8	0,6	0,6	2,0	2,0	

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- (¹) CAS: Chemical Abstracts Service.
- (²) EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).
- (³) This parameter is the EQS expressed as an annual average value (AA-EQS). Unless otherwise specified, it applies to the total concentration of all substances and isomers.
- (⁴) Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.
- (⁵) 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.
- (⁶) If a biota EQS is given, it, rather than the water EQS, shall be applied, without prejudice to Article 3(3) of this Directive allowing an alternative biota taxon, or another matrix, to be monitored instead, as long as the EQS applied provides an equivalent level of protection. Unless otherwise indicated, the biota EQS relate to fish.
- (⁷) Substance previously listed as a priority substance in Annex X to Directive 2000/60/EC or Annex I to Directive 2008/105/EC.’.
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ANNEX VIII

The following Annex is added in Directive 2008/105/EC

‘ANNEX III

SUBSTANCES SUBJECT TO REVIEW FOR POSSIBLE IDENTIFICATION AS PRIORITY SUBSTANCES

Name of substance	CAS number ⁽¹⁾	EU number ⁽²⁾
Sum of Bisphenols	not applicable	not applicable
Sum(s) of selected pesticides by mode of action	not applicable	not applicable
Sum(s) of selected pharmaceuticals by mode of action	not applicable	not applicable

⁽¹⁾ CAS: Chemical Abstracts Service.

⁽²⁾ EU number: European Inventory of Existing Commercial Substances (EINECS) or European List of Notified Chemical Substances (ELINCS).’