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From:	General Secretariat of the Council
To:	Delegations
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Subject:	Proposal for 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 - Presidency compromise text

With a view to the meeting of the Working Party on the Environment on 11 December 2023, delegations will find in the Annex a Presidency compromise text on the above Commission proposal.

Changes to the Commission proposal are set out in **bold underlined**, while ~~strikethrough~~ indicates deletions.

**Proposal for 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**

(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,

Having regard to the opinion of the Committee of the Regions²,

Acting in accordance with the ordinary legislative procedure,

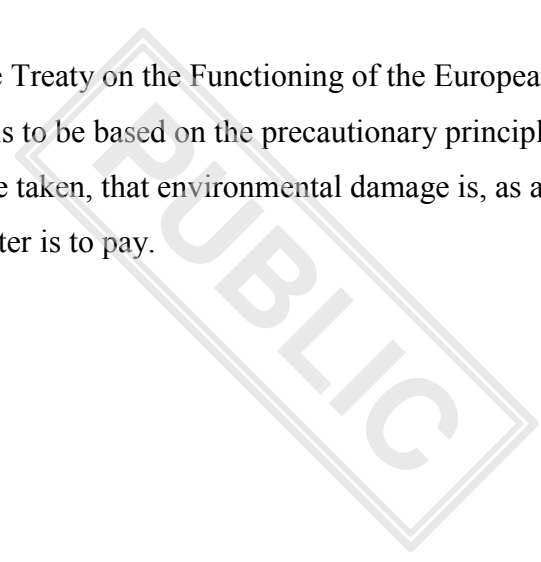
Whereas:

- (1) Chemical pollution of surface 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.

¹ OJ C , , p. .

² OJ C , , p. .

- (2) Pursuant to Article 191(2), second sentence, 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.



- (3) The European Green Deal³ is the Union's strategy to ensure, by 2050, a climate-neutral, clean and circular economy, optimising resource management while minimising pollution. The EU Chemicals Strategy for Sustainability⁴ and the Zero Pollution Action Plan⁵ specifically address pollution aspects of the European Green Deal. Other particularly relevant and complementary policies include the 2018 EU Plastics Strategy⁶, the 2021 Pharmaceuticals Strategy for Europe⁷, the Biodiversity Strategy⁸, the Farm to Fork Strategy⁹, the EU Soil Strategy for 2030¹⁰, the EU's Digital Strategy¹¹ and the EU's Data Strategy¹².

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, The European Green Deal (COM(2019) 640 final).

⁴ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Chemicals Strategy for Sustainability Towards a Toxic-Free Environment COM(2020) 667 final.

⁵ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil' COM(2021) 400 final.

⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A European Strategy for Plastics in a Circular Economy COM/2018/028 final.

⁷ Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions Pharmaceutical Strategy for Europe COM/2020/761 final.

⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Biodiversity Strategy for 2030 Bringing nature back into our lives COM(2020) 380 final.

⁹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system COM(2020) 381 final.

¹⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate, COM/2021/699 final.

¹¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Shaping Europe's digital future COM/2020/67 final.

¹² Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on A European strategy for data, COM(2020) 66 final.

- (4) Directive 2000/60/EC of the European Parliament and of the Council¹³ 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 of the European Parliament and of the Council¹⁴ lays down Union-wide environmental quality standards (EQS) for the 45 priority substances listed in Annex X to Directive 2000/60/EC and eight other pollutants that were already regulated at Union level before Annex X was introduced by Decision No 2455/2001/EC of the European Parliament and of the Council¹⁵. Directive 2006/118/EC of the European Parliament and of the Council¹⁶ 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 their indicators 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.
- (5) Substances are considered for listing in Annex X to Directive 2000/60/EC or in Annex I or 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 of the (eco)toxicology of the substances, as well as of their persistence, bioaccumulation, carcinogenicity, mutagenicity, reprotoxicity and endocrine disrupting potential.

¹³ 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).

¹⁴ 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).

¹⁵ 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).

¹⁶ Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration (OJ L 372, 27.12.2006, p. 19).

- (6) The Commission has conducted a review of the list of priority substances in Annex X to Directive 2000/60/EC in accordance with Article 16(4) of that Directive and with Article 8 of Directive 2008/105/EC, and a review of the lists of substances in Annexes I and II to Directive 2006/118/EC in accordance with Article 10 of that Directive 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 EQS for some existing and newly added substances. It 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.

- (7) 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 Regulation (EC) No 1907/2006 of the European Parliament and of the Council¹⁷, Regulation (EC) No 1107/2009 of the European Parliament and of the Council¹⁸, Regulation (EU) No 528/2012 of the European Parliament and of the Council¹⁹, Regulation (EU) 2019/6 of the European Parliament and of the Council²⁰, Directive 2001/83/EC of the European Parliament and of the Council²¹, Directive 2009/128/EC of the European Parliament and of the Council²², Directive 2010/75/EU of the European Parliament and of the Council²³ and Council Directive 91/271/EEC²⁴.

¹⁷ 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 (OJ L 396, 30.12.2006, p. 1).

¹⁸ 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).

¹⁹ 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).

²⁰ 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).

²¹ 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).

²² 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).

²³ Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17).

²⁴ Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40).

- (8) The new scientific knowledge 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 thresholds are clearly exceeded at a considerable number of locations, and pharmaceutical substances are also widely found. In surface waters, perfluorooctane sulfonic acid and its derivatives are already listed as priority substances, but other PFAS are now also recognised to pose a risk. Watch-list monitoring under Article 8b of Directive 2008/105/EC has confirmed a risk in surface waters from a number of pharmaceutical substances which should therefore be added to the priority substances list.
- (9) 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 this 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 an environmental quality standard for micro-plastics in surface and groundwaters. Micro-plastics should therefore be included in the surface and groundwater watch lists and should be monitored as soon as the Commission has identified suitable monitoring methods. In this context, account should be taken of the methodologies for monitoring and assessing the risks from micro-plastics in drinking water, developed under Directive (EU) 2020/2184 of the European Parliament and of the Council²⁵.

²⁵ 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 (recast) (OJ L 435, 23.12.2020, p. 1).

- (10) 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. Relevant antimicrobial resistance genes should also be included in the surface and ground water 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 Pharmaceutical Strategy for Europe, which also addresses this concern.
- (11) 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 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 substances listed in Annex I to Directive 2008/105/EC. That comparison will be used to assess whether effect-based monitoring methods may 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, and not only those listed in Annex I to Directive 2008/105/EC. The definition of EQS in Directive 2000/60/EC should be modified to ensure that it may, in the future, also cover trigger values that might be set for assessing the results of effect-based monitoring.

(12) The evaluation of Union water legislation²⁶ (the ‘evaluation’) concluded that the process for identifying and listing pollutants affecting surface and groundwater and setting or revising quality standards for them in the light of new scientific knowledge could be accelerated. If those tasks were to be carried out by the Commission, rather than in the framework of the ordinary legislative procedure as currently provided for in Articles 16 and 17 of Directive 2000/60/EC and Article 10 of Directive 2006/118/EC, the functioning of the surface and groundwater watch-list mechanisms, in particular in terms of timing and sequence of listing, monitoring and assessing results, could be improved, the links between the watch-list mechanism and the reviews of the lists of pollutants could be strengthened, and changes to the lists of pollutants could take account of scientific progress more swiftly. Therefore, and given the need to amend the lists of pollutants and their EQS promptly in the light of new scientific and technical knowledge, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to amend Annex I to Directive 2008/105/EC with regard to the list of priority substances and corresponding EQS set out in Part A of that Annex and to amend Annex I to Directive 2006/118/EC with regard to the list of groundwater pollutants and quality standards set out in that Annex. In this context, the Commission should take account of the results of the monitoring of substances on the surface and groundwater watch lists. As a consequence, Articles 16 and 17 of Directive 2000/60/EC and Annex X to that Directive, as well as Article 10 of Directive 2006/118/EC, should be deleted.

²⁶ Commission Staff Working Document Fitness check of the Water Framework Directive, Groundwater Directive, Environmental Quality Standards Directive and Floods Directive, SWD(2019) 439 final.

- (13) The evaluation also concluded that there is too much variation between Member States as regards the quality standards and threshold values set at national level for river basin specific pollutants and groundwater pollutants respectively. Until now, river basin specific pollutants 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. This 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 EQS and threshold values.
- (14) Furthermore, integrating river basin specific pollutants into the definition of chemical status in 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.
- (15) 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 Part B of Annex II to Directive 2006/118/EC by adapting the list of pollutants for which Member States have to consider establishing national threshold values.

- (16) 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 river basin specific pollutants, the power to adopt acts in accordance with Article 290 TFEU should be delegated to the Commission to adapt Annex II to Directive 2008/105/EC with regard to the list of categories of pollutants set out in Part A of that Annex and to adapt Part C of Annex II with regard to the harmonised EQS for river basin specific pollutants or groups thereof. Those harmonised EQS should be applied by Member States in assessing the status of their surface water bodies when a risk has been identified from those pollutants.
- (17) 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 Part A of Annex I to that Directive. Those substances should therefore be considered as river basin specific pollutants and included in Part C of Annex II to Directive 2008/105/EC together with their corresponding EQS. Considering that those pollutants are no longer considered to be of Union wide concern, the EQS need only be applied where those pollutants could still be of national or regional or local concern.
- (18) In order to ensure a level playing field and allow comparability of water body status between Member States, there is a need to harmonise national threshold values for some groundwater pollutants. Therefore, a repository of harmonised threshold values for groundwater pollutants of national, regional or local concern should be introduced as a new Part D in Annex II to Directive 2006/118/EC. The harmonised thresholds set out in that repository need to be applied only in those Member States where the pollutants subject to those thresholds affect groundwater status. For the sum of the two synthetic pollutants trichloroethylene and tetrachloroethylene, there is a need to harmonise the national threshold values since not all Member States where the pollutants are relevant apply a threshold value for the sum of these pollutants and the national threshold values set are not all the same. The harmonised threshold value should be consistent with the parametric value set for the sum of those pollutants in drinking water under Directive (EU) 2020/2184.

- (19) 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 Part D of Annex II to Directive 2006/118/EC in order to adapt the repository of harmonised threshold values as regards the pollutants included and the harmonised threshold values to technical and scientific progress.
- (20) 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 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.
- (21) To ensure effective and coherent decision-making and develop synergies with the work carried out in the framework of other Union legislation on chemicals, the European Chemicals Agency ('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 thresholds, by making relevant scientific reports publicly available.

(22) The evaluation concluded that more frequent and streamlined electronic reporting is necessary to foster better implementation and enforcement of the 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 by the Member States. It is important that environmental information on the status of Union surface water and groundwater is made available to the public and to the Commission in a timely manner. Member States should therefore be required to make available to the Commission and the EEA the monitoring data collected in the framework of Directive 2000/60/EC, making use of automated reporting and data delivery mechanisms by using Application Programming Interface or equivalent mechanisms. The administrative burden is expected to be limited insofar as Member States are already required to make publicly available spatial data themes within the scope of Directive 2007/2/EC of the European Parliament and of the Council²⁷ as well as under Directive (EU) 2019/1024 of the European Parliament and of the Council²⁸. Those spatial data themes include the location and operation of environmental monitoring facilities, related measurements of emissions and the state of environmental media.

²⁷ 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).

²⁸ 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).

- (23) Better integration of data flows reported to the EEA under the 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 (EC) No 166/2006 of the European Parliament and of the Council²⁹, 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 work load in the preparations of the river basin management plans. In combination with the abolition of interim reporting on the progress of programmes of measures, which did not prove effective, this simplified reporting will allow Member States to put more effort into reporting emissions that are not covered by the legislation on industrial emissions but which are covered by the emissions reporting under Article 5 of Directive 2008/105/EC.
- (24) The Treaty of Lisbon introduced a distinction between powers delegated to the Commission to adopt non-legislative acts of general application to supplement or amend certain non-essential elements of a legislative act (delegated acts), and the powers conferred upon the Commission to adopt acts to ensure uniform conditions for implementing legally binding Union acts (implementing acts). Directives 2000/60/EC and 2006/118/EC should be aligned to the legal framework introduced by the Lisbon Treaty.
- (25) The empowerments in Article 20(1), first subparagraph, of Directive 2000/60/EC and in point 1.4.1(ix) of Annex V to that Directive which provide for the use of the regulatory procedure with scrutiny fulfil the criteria in Article 290(1) TFEU, since they concern adaptations of the Annexes to that Directive and adoption of rules supplementing it. They should therefore be converted to empowerments for the Commission to adopt delegated acts.

²⁹ Regulation (EC) No 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC (OJ L 33, 4.2.2006, p. 1).

- (26) The empowerment in Article 8 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 the Annexes to that Directive. It should therefore be converted to an empowerment for the Commission to adopt delegated acts.
- (27) It is of particular importance that the Commission carry out appropriate consultations during the preparation of delegated acts, its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016. 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.
- (28) 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 290(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). The powers conferred on the Commission should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council³⁰.

(28a) Member States experts should be involved in regular cooperation frameworks under Directive 2000/60/EC. The Common Implementation Strategy should be used to update the Watch lists, priority list and pollutants lists, and other implementing and delegated acts.

³⁰ 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).

- (29) In order to ensure uniform conditions for the implementation of Directive 2000/60/EC, implementing powers should be conferred on the Commission to adopt technical formats for reporting monitoring and water status data in accordance with Article 8(3) of Directive 2000/60/EC. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (30) 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) .../... of the European Parliament and of the Council⁺, to the EEA. Those powers should be exercised in accordance with Regulation (EU) No 182/2011.
- (31) 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 of data and services from remote sensing technologies, earth observation (Copernicus services), in-situ sensors and devices, or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing.

⁺ OP: Please insert in the text the number of the Regulation contained in document COM (2022) 157 and insert the number, date, title and OJ reference of that Directive in the footnote

- (32) 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 immediate information on such incidents is provided to other potentially affected Member States and effectively cooperate with potentially affected 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 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 previous well-established an effective cooperation, this cooperation should be taken into account.** In case European assistance is necessary, competent national authorities may send requests for assistance to the Emergency Response Coordination Centre of the Commission, which will coordinate possible offers of assistance and their deployment through the Union Civil Protection Mechanism, in accordance with Article 15 of Decision 1313/2013 of the European Parliament and of the Council³¹.
- (33) Directives 2000/60/EU, 2006/118/EC and 2008/105/EC should therefore be amended accordingly.
- (34) 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 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives,

³¹ 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).

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Amendments to Directive 2000/60/EC

Directive 2000/60/EC is amended as follows:

(1) in Article 1, **point (e)**, 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 **where needed**, 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), point (a), of this Directive, that is the chemical status achieved by a body of surface water in which concentrations of pollutants do not exceed 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* and the environmental quality standards for river basin specific pollutants set in accordance with Article 8(2), point (c), and Article 8d(1) of that Directive.

(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 is substances which present a significant risk to or via the aquatic environment in a ~~high proportion~~ **10 or more** of Member States **and in a significant proportion of representative water bodies.**’;

(c) the following points (30a) and (30b) are inserted:

‘(30a) ‘Priority hazardous substances’ means priority substances which are marked as ‘hazardous’ on the basis that they are recognised in scientific reports, in relevant Union legislation, or in relevant international agreements, as being toxic, persistent and liable to bio-accumulate or as giving rise to an equivalent level of concern, where this concern is relevant to the aquatic environment.

(30b) ‘River basin specific pollutants’ means pollutants ~~that are not or no longer identified as priority substances but~~ which Member States have identified **as being discharged in significant quantities in the water body**, on the basis of the assessment of pressures and impacts on surface water bodies carried out in accordance with Annex II to this Directive, as posing a significant risk to or via the aquatic environment within their territory **and other pollutants no longer identified as priority substances.**’;

(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 or a trigger value for the adverse effect on human health or the environment of such a pollutant or group of pollutants measured using an appropriate **and scientifically validated** effect-based method.’;

* Directive 2008/105/EC of the European Parliament and of the Council 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).’;

(3) in Article 3, the following paragraph 4a is inserted:

‘4a. In the case of exceptional circumstances of natural **or human-caused** origin or force majeure, in particular extreme floods and prolonged droughts, or significant pollution incidents, which could affect ~~downstream~~-water bodies situated in other Member States, Member States shall ensure that the competent authorities ~~for downstream water bodies~~ in such Member States, **specially those where the effects of the incident may be felt**, as ~~well as the Commission~~, are immediately informed and that the necessary cooperation is set up to investigate the causes and address the consequences of the exceptional circumstances or incidents. **When there is not a well-established and effective cooperation among neighbouring countries and the issues cannot be resolved by the Member State, the Member State shall proceed as is set in article 12**’;

(4) Article 4(1) is amended as follows:

(a) in point (a), point (iv) is replaced by the following:

‘(iv) Member States shall implement the necessary measures **primarily at source with the aim** to progressively reduce pollution from priority substances and river basin specific pollutants, and to cease or phase out emissions, discharges and losses of priority hazardous substances **in accordance with article 16**.’;

(b) in point (b)(iii), the second subparagraph is replaced by the following:

‘Measures to achieve trend reversal shall be implemented in accordance with Article 5 of Directive 2006/118/EC and Annex IV to that Directive, subject to the application of paragraphs 6 and 7 of this Article and without prejudice to paragraph 8 of this Article.’;

(5) in Article 7, paragraph 2 is replaced by the following:

‘2. For each body of water identified under paragraph 1, in addition to meeting the objectives of Article 4 in accordance with the requirements of this Directive, for surface water bodies including the quality standards established at Union level **under Article 16**, 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 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)’;

(6) 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 and for establishing formats for reporting monitoring ~~and status~~ data in accordance with paragraph 4. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2).’;

(b) the following paragraphs 4 and 5 are added:

‘4. Member States shall ensure that the available **and validated** ~~individual~~ monitoring data collected in accordance with point 1.3.4 of Annex V ~~and the resulting status in accordance with Annex V~~ are made available to the public and to the European Environment Agency (EEA) ~~at least once a~~ **every three years** ~~electronically in a machine-readable format~~ in accordance with Directive 2003/4/EC of the European Parliament and of the Council*, Directive 2007/2/EC of the European Parliament and of the Council** and Directive (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.

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 ~~up-to-date, objective, reliable and comparable~~ information, ~~in particular on status~~, in accordance with Regulation (EC) No 401/2009 of the European Parliament and of the Council****.

* 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).

** 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).

*** 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).

**** 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).’;

(7) 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 thresholds established pursuant to this Directive, Member States shall ensure the establishment and implementation of the following:

(a) emission controls based on best available techniques or;

(b) relevant emission limit values or;

(c) in the case of diffuse impacts, controls including, as appropriate, best environmental practices as set out in:

- Directive 2009/128/EC of the European Parliament and of the Council*;
- Directive 2010/75/EU of the European Parliament and of the Council**;

- Council Directive 91/271/EEC***;
- Council Directive 91/676/EEC****;
- any other Union legislation relevant for addressing point source or diffuse pollution.

* 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).

** Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (OJ L 334, 17.12.2010, p. 17).

*** Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40).

**** 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).’;

- (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.’;

(8) in Article 11(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.’;

(9) 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 cannot be resolved by that Member State **because there is no well-established and effective multilateral cooperation among neighbouring countries**, it shall notify the issue to the Commission and any other Member State concerned 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 3 months after notification by another Member State in accordance with paragraph 1.

(10) 3. The Commission shall be informed of, and invited to assist in, any cooperation referred to in paragraph 2. Where appropriate, the Commission shall, taking into account the reports established pursuant to Article 13, 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 respond within a period of six months.’;

(11) in Article 15, paragraph 3 is deleted;

(12) **in** Articles 16, **paragraphs 10** and **11** ~~17~~ are deleted;

(13) In Article 18,

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

~~‘(e) a summary of any proposals, control measures and strategies to control chemical pollution or cease or phase out hazardous substances’;~~

paragraph 4 is deleted;

(14) Article 20 is replaced by the following:

‘Article 20

Technical adaptations and implementation of this Directive

‘1. 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.

2. The Commission is empowered to adopt delegated acts in accordance with Article 20a to supplement this Directive by determining the values established for the Member State monitoring system classifications in accordance with the intercalibration procedure set out in point 1.4.1 of Annex V.

3. The Commission is empowered to adopt implementing acts to set out the technical formats for the transmission of the data referred to in Article 8(4). Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 21(2). When establishing those formats, the Commission shall be assisted, where so required, by the EEA’;

(15) the following Article 20a is inserted:

‘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(1) shall be conferred on the Commission for an indeterminate period of time from [OP please insert the date = the date of entry into force of this Directive].
3. The delegation of power referred to in Article 20(1) 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 on Better Law-Making of 13 April 2016.
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(1) 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.’;

- (16) Article 21 is replaced by the following:

‘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).’;

- (17) 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 thresholds for river basin specific pollutants established pursuant to Articles 8 and 8d of that Directive shall be regarded as environmental quality standards for the purposes of Directive 2010/75/EU.’;

- (18) Annex V is amended in accordance with Annex I to this Directive;

- ~~(19) in Part A of Annex VII, point 7.7. is replaced by the following:~~

~~‘7.7. a summary of the measures taken to reduce the emissions of priority substances and to phase out the emissions of priority hazardous substances;’;~~

~~(2019)~~ Annex VIII is amended in accordance with Annex II to this Directive;

~~(2120)~~ Annex **IX and X** ~~are~~is-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), point (b), of Directive 2000/60/EC. Those measures include the following:

(a) criteria for the assessment of good groundwater chemical status;

(b) criteria for the identification and reversal of significant and sustained upward trends and for the definition of starting points for trend reversals.’;

(3) in Article 2, point (2) is replaced by the following:

‘(2) ‘threshold value’ means a groundwater quality standard established by Member States in accordance with Article 3(1), point (b), or at Union level in accordance with Article 8(3);’;

(4) Article 3 is amended as follows:

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

‘(c) threshold values established at Union level in accordance with Article 8(3) and listed in Part D of Annex II to this Directive **and adapted by Member States to their territories according to Article 3 (b).**’;

(b) paragraph 2 is replaced by the following:

‘2. Threshold values referred to in paragraph 1, point (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.’;

(c) paragraph 5 is replaced by the following:

‘5. All threshold values referred to in paragraph 1 shall be published in the 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, **in accordance to Article 15 of Water Framework Directive and the WFD Reporting Guidance,** by [~~OP please insert the date = the first day of the month following 18 months after the date of entry into force of this Directive~~], inform the ~~European Chemicals Agency (ECHA)~~ **Commission** of the national threshold values referred to in paragraph 1, point (b). ~~ECHA shall make that information publicly available.~~’;

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

‘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 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 **in order to protect human health and the environment**. 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 **as set in Article 3 (b) by [in case of CODECISION = the first day of the month following 24 months after the date of entry into force of the amending Directive adopting these threshold values] [in case of delegated act: within 24 months after their adoption]**.’;

(5) in Article 4(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), points (b) and (c), are not exceeded at any monitoring point in that body or group of bodies of groundwater; or’;

(5a) in Article 4(2), a new point (d) is inserted:

(d) the newly identified substances numbered 3 to 7 in Annex I and the adapted threshold values listed in Part D of Annex II to this Directive, with effect from ... [OP please insert the date = the first day of the month following 24 months after the date of entry into force of this Directive], with the aim of preventing deterioration in the chemical status of surface water bodies in relation to those substances and of achieving good surface water chemical status in relation to those substances by 22 December 2039 by means of programmes of measures included in the 2033 river basin management plans produced in accordance with Article 13(7) of Directive 2000/60/EC

Article 4(4) to (9) of Directive 2000/60/EC shall apply mutatis mutandis to the new substances.

(6) the following Article 6a 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, a watch list of substances for which Union-wide monitoring data are to be gathered by the Member States 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 or groups of substances ~~and shall indicate the monitoring matrices and the possible methods of analysis for each substance.~~ **The total number of individual compounds** ~~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 those substances for which the information available indicates that they may pose a significant risk at Union level to, or via, the aquatic environment and for which monitoring data are insufficient. This watch list shall include substances of emerging concern.~~

As soon as **harmonized and reliable** ~~suitable~~ monitoring methods **and evaluation standards not entailing excessive costs and adequate and scientifically agreed criteria for the assessment of the monitoring results** for micro-plastics and selected **appropriate indicators for** antimicrobial resistance **evolution and/or transmission** genes have been identified **by the Commission, ECHA shall prepare scientific reports, according to the procedure described in paragraph 1, supporting the Commission in the decision if and how micro-plastics and antimicrobial resistance indicators** ~~those substances shall~~ be included in the watch list.

ECHA shall prepare scientific reports to assist the Commission in selecting the substances for the watch list, 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 ;
- (b) the watch lists established in accordance with Directive 2008/105/EC and Directive (EU) 2020/2184 of the European Parliament and of the Council**;
- (c) requirements to address soil pollution, including related monitoring data **and taking into account the EU Soil Strategy**;
- (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 to human health and the aquatic environment of a particular substance or group of substances, including information gathered in accordance with Regulation (EC) No 1907/2006 of the European Parliament and of the Council***, Regulation (EC) No 1107/2009 of the European Parliament and of the Council****, Regulation (EU) No 528/2012 of the European Parliament and of the Council*****, Regulation (EU) 2019/6 of the European Parliament and of the Council*****, Directive 2001/83/EC of the European Parliament and of the Council***** and Directive 2009/128/EC of the European Parliament and of the Council*****, **as well as Regulation (EU) No 2022/2379 of the European Parliament and of the Council*******;

- (f) research projects and scientific publications, including information on trends and predictions based on modelling or other predictive assessments and data and information from remote sensing technologies, earth observation (Copernicus services), in-situ sensors and devices, or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing;
- (g) recommendations from stakeholders.

ECHA shall every three years prepare a report summarizing the findings of the scientific reports established under the fourth subparagraph and shall make that report publicly available. The first report shall be made available by X [OP please insert the date = the first day of the twenty first month after the date of entry into force of this Directive].

2. A first watch list shall be established by .. [OP please insert the date = the first day of the month following 24 months after the date of entry into force of this Directive]. The watch list shall be updated every 36 months thereafter.

When updating the watch list, the Commission shall remove any substance or group of substances from the existing watch list, for which it considers it possible to assess its risk for the aquatic environment without additional monitoring data. When the watch list is updated, an individual substance or group of substances 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 updated watch list shall also include one or more additional substances for which the Commission considers, having regard to the scientific reports of ECHA, that there could be a risk to the aquatic environment.

3. Member States shall monitor each substance or group of substances in the watch list at selected representative monitoring stations over a 24-month period. The monitoring period shall commence within ~~six~~12 months of the establishment of the watch list.

Each Member State shall select at least one monitoring station, plus the number of stations equal to its total area in km² of groundwater bodies divided by 60 000 (rounded to the nearest integer).

In selecting the representative monitoring stations, the monitoring frequency and the seasonal timing for each substance or group of substances, Member States shall take into account the use patterns and possible occurrence of the substance or group of substances. The frequency of monitoring shall be no 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 or group of substances from existing monitoring programmes or studies, it may decide not to undertake additional monitoring under the watch list mechanism for that substance or group of substances, provided that the substance or group of substances 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.

4. Member States shall make available the results of the monitoring referred to in paragraph 3 of this Article 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. They shall also make available information on the representativeness of the monitoring stations and on the monitoring strategy.

5. ECHA shall review the monitoring results at the end of the 24-month period referred to in paragraph 3 and assess which substances or groups of substances need to be monitored for another 24-month period and therefore are to be kept in the watch list and which substances or groups of substances can be removed from the watch list.

Where the Commission, having regard to the assessment by ECHA referred to in the first subparagraph, 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.

* Directive 2008/105/EC of the European Parliament and of the Council 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).

** 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).

*** 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 (OJ L 396, 30.12.2006, p. 1).

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

***** 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).

***** Regulation (EU) 2019/6 of the European Parliament and of the Council of 11 December 2018 on veterinary medicinal products (OJ L 4, 7.1.2019, p. 43).

***** 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).

***** 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).

*******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 L315, 7.12.2022, p.1).**

(7) Article 8 is replaced by the following:

‘Article 8

Review of Annexes I to IV

1. The Commission shall review, for the first time by ... [OP: please insert the date = six years after the date of entry into force of this Directive] and every six years thereafter, the list of pollutants set out in Annex I and the quality standards for those pollutants set out in that Annex, as well as the list of pollutants and indicators set out in Part B of Annex II.
2. The Commission is empowered to adopt delegated acts, in accordance with Article 8a, to amend Annex I to adapt it to technical and scientific progress by adding or removing groundwater pollutants and quality standards for those pollutants set out in that Annex and to amend Part B in order to adapt it to technical and scientific progress by adding pollutants or indicators for which Member States have to consider establishing national thresholds.
3. The Commission is empowered to adopt delegated acts, in accordance with Article 8a, to amend Part D of Annex II in order to adapt it to scientific and technical progress by adding or amending harmonised threshold values for one or more pollutants listed in Part B of that Annex.

4. When adopting delegated acts as referred to in paragraphs 2 and 3, the Commission shall take the scientific reports prepared by ECHA pursuant to paragraph 6 of this Article 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 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 opinion of the Committee for Risk Assessment and the Committee for Socio-Economic Analysis of ECHA;
 - (b) the results of the monitoring programmes established in accordance with Article 8 of Directive 2000/60/EC;
 - (c) the monitoring data collected in accordance with Article 6a(4) 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 information resulting from remote sensing technologies, earth observation (Copernicus services), in-situ sensors and devices and/or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing;
 - (g) comments and information from relevant stakeholders.
6. ECHA shall, every six years, prepare and make publicly available a report, summarizing the findings of the review referred to in paragraphs 2 and 3. The first report shall be submitted to the Commission on ... [OP: Please insert the date = five years after the date of entry into force of this Directive].

(8) the following Article 8a 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(1) and (2) shall be conferred on the Commission for an indeterminate period of time from [OP please insert the date = the date of entry into force of this Directive].
3. The delegation of power referred to in Article 8(1) and (2) may be revoked at any time by the European Parliament and 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-Marking.
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(1) or (2) 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).’;

- (10) Article 10 is deleted;
- (11) Annex I is replaced by the text 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), points (b) and (c).’;

(14) in Annex IV, part B, point 1, the introductory sentence is replaced by the following:

‘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), points (b) and (c), unless:’.

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) Article 3 is amended as follows:

(a) in paragraph 1a, first subparagraph, the following points (iii) **and (iv) are** ~~is~~-added:

‘(iii) the substances numbered 5, 9, 13, 15, 17, 21, 23, 24, 28, 30, 34, 37, 41, 44 in Part A of Annex I, for which revised EQS are set, ~~and the newly identified substances numbered 46 to 70 in Part A of Annex I,~~ with effect from ... [OP please insert the date = the first day of the month following **24** ~~18~~ months after the date of entry into force of this Directive], with the aim of preventing deterioration in the chemical status of surface water bodies **in relation to those substances** and of achieving good surface water chemical status in relation to those substances **by 22 December 2033 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/CE.**’;

(iv) the newly identified substances numbered 46 to 69 in Part A of Annex I, with effect from ... [OP please insert the date = the first day of the month following 5 years after the date of entry into force of this Directive], with the aim of preventing deterioration in the chemical status of surface water bodies in relation to those substances and of achieving good surface water chemical status in relation to those substances by 22 December 2039 by means of programmes of measures included in the 2033 river basin management plans produced in accordance with Article 13(7) of Directive 2000/60/CE.;

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

(b) 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.’;

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

‘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 and/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.’;

(d) paragraph 7 is deleted;

(e) paragraph 8 is replaced by the following:

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

- (3) Article 5 is amended as follows:

Article 5

Reporting of emissions, discharges and losses

- (a) paragraph 1 is replaced by the following:

‘1. On the basis of the information collected in accordance with Articles 5 and 8 of Directive 2000/60/EC, and other available data, **including data collected under Regulation (EU) .../... of the European Parliament and of the Council on reporting of environmental data from industrial installations and establishing an Industrial Emissions Portal**, Member States shall **ensure that all emissions, discharges and losses, including diffuse emissions, discharges and losses** establish an inventory, including maps, if available, of emissions, discharges and losses of all priority substances listed in Part A of Annex I to this Directive and all pollutants listed in Part A of Annex II to this Directive for each river basin district or part of a river basin district lying within their territory, ~~including their concentrations in sediment and biota, as appropriate~~ **are reported electronically to the Industrial Emissions Portal, regardless of whether the reporting of this information is an obligation under that Regulation.**

- (b) paragraphs 2 and 3 are deleted;

- (c) paragraph 4 is replaced by the following:

‘4. Member States shall update their inventories as part of the reviews of the analyses specified in Article 5(2) of Directive 2000/60/EC and shall ensure that the emissions not reported to the Industrial Emissions Portal established under Regulation (EU) .../...+, are published in their river basin management plans as updated in accordance with Article 13(7) of that Directive.

The reference period for the ~~establishment of~~ **reported**-values in the updated inventories shall be the year before the year in which the analyses **specified under Article 5(2) of Directive 2000/60/EC** ~~referred to in the first subparagraph~~ are to be completed.

For priority substances or pollutants covered by Regulation (EC) No 1107/2009, the entries may be calculated as the average of the three years before the completion of the analysis **specified under Article 5(2) of Directive 2000/60/EC** referred to in the first subparagraph.

~~For point source emissions not reported in accordance with Regulation (EU) No 2019/631, because they do not fall under the scope of that Regulation or because they are below the annual reporting thresholds set out in that Regulation, the reporting obligation set out in the first subparagraph of this Article shall be fulfilled by electronic reporting to the Industrial Emissions Portal established under that Regulation.~~

The Commission shall, assisted by the European Environment Agency, adopt an implementing act establishing the format, level of granularity and frequency of the reporting referred to in the fourth subparagraph. That implementing act shall be adopted in accordance with the examination procedure referred to in Article 9(2).’;

(d) paragraph 5 is deleted;

(4) In Article 7a(1), the first subparagraph is replaced by the following:

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

* 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).

** 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).

*** 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).;

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

Article 8

Review of Annexes I and II

‘1. The Commission shall review, for the first time by ... [OP: Please insert the date = six years after the date of entry into force of this Directive] and every six years thereafter, the list of priority substances and the corresponding EQS for those substances set out in Part A of Annex I and the list of pollutants set out in Part A of Annex II.

2. The Commission is empowered to adopt delegated acts, having regard to the scientific reports prepared by the European Chemicals Agency (ECHA) pursuant to paragraph 6 of this Article, in accordance with Article 9a to amend Annex I in order to adapt it to scientific and technological progress by:

- (a) adding or removing substances from the list of priority substances;
- (b) designating or undesignating selected substances as priority hazardous substances and/or as ubiquitous Persistent Bio-accumulative and Toxic substances (uPBTs) and/or as substances that tend to accumulate in sediment and/or biota in that list;

(c) setting corresponding EQS for surface water, sediment or biota, as appropriate.

3. The Commission is empowered to adopt delegated acts, having regard to the scientific reports prepared by ECHA pursuant to paragraph 6 of this Article, in accordance with Article 9a to amend Annex II in order to adapt it to scientific and technological progress by:

- (a) adding or removing pollutants from the list of categories pollutants set out in Part A of Annex II;
- (b) updating the methodology set out in Part B of Annex II;
- (c) listing in Part C of Annex II to this Directive those river basin specific pollutants for which it has established that EQS set at Union level are to be applied, where relevant, to ensure a harmonised and science-based implementation of the objectives set out in Article 4 of Directive 2000/60/EC, and by listing the corresponding EQS for those pollutants in Part C of Annex II to this Directive.

4. 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;
- (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 an EQS for the river basin specific pollutants under consideration.

5. Priority substances which have, as a result of the review referred to in paragraph 1, been removed from the list of priority substances because they are no longer posing a Union-wide risk, shall be included in Part C of Annex II, listing the river basin specific pollutants and related harmonised EQS which are to be implemented where the pollutants are of national or regional concern, in accordance with Article 8d.

6. For the purpose of assisting the Commission with regard to the review of Annexes I and II, ECHA shall prepare scientific reports. Those scientific reports shall take account of the following:

- (a) the opinions of the Committee for Risk Assessment and the Committee for Socio-Economic Analysis of ECHA;
- (b) the results of the monitoring programmes established in accordance with Article 8 of Directive 2000/60/EC;
- (c) the monitoring data collected in accordance with Article 8b(4) of this Directive;
- (d) the outcome of the reviews of the Annexes to Directive 2006/118/EC of the European Parliament and of the Council* and Directive (EU) 2020/2184 of the European Parliament and of the Council**;
- (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 (Copernicus services), in-situ sensors and devices, and/or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing;
- (eg) comments and information from relevant stakeholders.

7. ECHA shall every six years prepare and make publicly available a report summarizing the findings of the scientific reports established under paragraph 6. The first report shall be submitted to the Commission on ... [OP: Please insert the date = five years after the date of entry into force of this Directive].

* 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).

** 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).’;

(6) Article 8a is replaced by the following:

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 Article 4(1), point (a), of that Directive, Member States may provide additional maps that present the chemical status information for one or more of the following substances separately from the information for the rest of the substances identified in Part A of Annex I to this Directive:

- (a) substances identified in Part A of Annex I as substances behaving like ubiquitous PBTs;

- (b) substances newly identified in the latest review in accordance with Article 8;
- (c) substances for which a **revised**~~stricter~~ EQS has been set in the latest review in accordance with Article 8.
- (d) substances identified as river basin specific pollutants according to Art. 8d(1)**

Member States may present the extent of any deviation from the EQS value for the substances referred to in the first subparagraph, points (a), (b) and (c), in the river basin management plans produced in accordance with Article 13 of Directive 2000/60/EC.

Member States providing additional maps as referred to in the first subparagraph shall seek to ensure their inter-comparability at river basin and Union level and shall make the data available in accordance with Directive 2003/4/EC, Directive 2007/2/EC of the European Parliament and of the Council* and Directive (EU) 2019/1024 of the European Parliament and of the Council**.

2. Member States may monitor substances identified in Part A of Annex I 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 Article 3(6), second subparagraph, of this Directive, monitoring should take place every three years, unless technical knowledge and expert judgment justify another interval.

3. Member States **may, on a voluntary basis** shall, from ... [OP please insert the date = the first day of the month following 18 months after the **publication of the technical guidelines referred to in paragraph 4** date of entry into force of this Directive], for a period of two years, monitor the presence of estrogenic substances in water bodies, using effect-based monitoring methods. They shall conduct the monitoring at least four times during each of the two years at locations where the three estrogenic hormones **17-Beta** estradiol (E2), Estrone (E1) and **17-a** Alpha-~~Ethinyl~~-**ethinyl** estradiol (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 to that Directive.

Member States **shall select a number of sites in representative surface water bodies in order to obtain comparative results at a range of concentrations.** ~~may use the network of monitoring sites identified for the surveillance monitoring of representative surface water bodies in accordance with point 1.3.1 of Annex V to Directive 2000/60/EC.~~

4. To ensure a coherent approach between Member States, the Commission shall establish methods for chemical analysis of the estrogenic substances and technical guidelines regarding effect-based monitoring methods by [OP please insert the date = the first day of the month following 12 months after the date of entry into force of this Directive]. The guidelines shall cover monitoring strategies including selection of sampling sites and technical specifications for harmonized analytical and effect based methods and proposed trigger values if possible.

* 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).

** 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).';

(7) Article 8b is replaced by the following:

'Article 8b

Watch list

1. The Commission is empowered to adopt implementing acts to establish, having regard to scientific reports prepared by ECHA, 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 prioritisation exercises** 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 or groups of substances at any one time, and shall indicate the monitoring matrices and the possible methods of analysis for each substance. ~~These~~ **The total number of individual compounds,** -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 may 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.

As soon as **harmonized and reliable** ~~suitable~~ monitoring methods **and evaluation standards not entailing excessive costs and adequate and scientifically agreed criteria for the assessment of the monitoring results,** for micro-plastics and **appropriate indicators for** ~~selected antimicrobial resistance~~ **evolution and/or transmission** ~~genes~~ have been identified **by the Commission, ECHA shall prepare scientific reports, according to the procedure described in paragraph 1, supporting the Commission in the decision if and how micro-plastics and antimicrobial resistance indicators,** ~~these substances~~ shall be included in the watch list.

ECHA shall prepare scientific reports to assist the Commission in selecting the substances for the watch list, taking into account the following information:

- (a) the results of the most recent regular review of Annex I to this Directive;
- (b) recommendations from the stakeholders referred to in Article 8 of Directive 2008/105/EC;
- (c) 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;
- (d) information on production volumes, use patterns, intrinsic properties (including, where relevant, particle size), concentrations in the environment and adverse effects to human health and the aquatic environment of a substance, including information gathered in accordance with Regulation (EC) No 1907/2006, Regulation (EC) No 1107/2009, Regulation (EU) No 528/2012, Regulation (EU) 2019/6, Directive 2001/83/EC and Directive 2009/128/EC;
- (e) research projects and scientific publications, including information on trends and predictions based on modelling or other predictive assessments and data and information from remote sensing technologies, earth observation (Copernicus services), in-situ sensors and devices, or citizen science data, leveraging the opportunities offered by artificial intelligence, advanced data analysis and processing.

ECHA shall every three years prepare a report summarizing the findings of the scientific reports established under the fourth subparagraph and shall make that report publicly available. The first ECHA report shall be made available by ... [OP: please insert the date = first day of the twenty first month after the date of entry into force of this Directive].

2. The watch list shall be updated by X [OP please insert date = the last day of the twentythird month after the date of entry into force of this Directive], and every 36 months thereafter. When updating the watch list, the Commission shall remove any substance from the existing watch list for which it considers it possible to assess its risk for the aquatic environment without additional monitoring data. When the watch list is updated, an individual substance or group of substances 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 new substances for which the Commission considers, on the basis of the scientific reports of ECHA, that there is a risk for the aquatic environment.

3. Member States shall monitor each substance or group of substances in the watch list 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.

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 seasonal timing for each substance or group of substances, Member States shall take into account the use patterns and possible occurrence of the substance or group of substances. The frequency of monitoring shall be no less than twice per year. **When higher frequencies are required, as**, ~~except~~ for substances that are sensitive to climatic or seasonal variabilities, **the increase in frequency shall be technically justified**, ~~for which the monitoring shall be carried out more frequently, as set out~~ in the implementing act establishing the watch list adopted pursuant to paragraph 1.

Where a Member State is able to generate and provide the Commission with sufficient, comparable, representative and recent monitoring data for a particular substance or group of substances from existing monitoring programmes or studies, it may decide not to undertake additional monitoring under the watch list mechanism for that substance or group of substances, provided that the substance or group of substances 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 Directive 2009/90/EC*.

4. Member States shall make available the results of the monitoring referred to in paragraph 3 of this Article 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. They shall also make available information on the representativeness of the monitoring stations and on the monitoring strategy.

5. ECHA shall review the monitoring results at the end of the 24-month period referred to in paragraph 3 and assess which substances or groups of substances need to be monitored for another 24-month period and therefore are to be kept in the watch list and which substances or groups of substances can be removed from the watch list.

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

* 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).’;

- (8) the following Article 8d 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 those pollutants pose 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/EU, in accordance with the procedure set out in Part B of Annex II to this Directive.

~~Member States shall, by [OP please insert the date – the first day of the month following 18 months after the date of entry into force of this Directive], inform ECHA of the EQS referred to in the first subparagraph. ECHA shall make that information publicly available.~~

2. Where EQS for river basin specific pollutants have been set at Union level and listed in Part C of Annex II, in accordance with Article 8, those EQS shall take precedence over EQS for river basin specific pollutants established at national level in accordance with paragraph 1. 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 pose a risk.

3. Compliance with the applicable national EQS or EQS set at Union level, where relevant, is required for a water body to be in good chemical status, in accordance with the definition set out in Article 2(24) of Directive 2000/60/EC.’;

- (9) Article 10 is deleted;
- (10) Annex I is amended in accordance with Annex V to this Directive;
- (11) Annex II, as set out in Annex VI to this Directive, is added.

Article 4

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [OP please insert the date = the first day of the month following 18 months after the date of entry into force of this Directive].

2. They shall forthwith communicate to the Commission the text of those provisions. When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive

Article 5

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

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament

The President

For the Council

The President

ANNEX I

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

(1) points 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

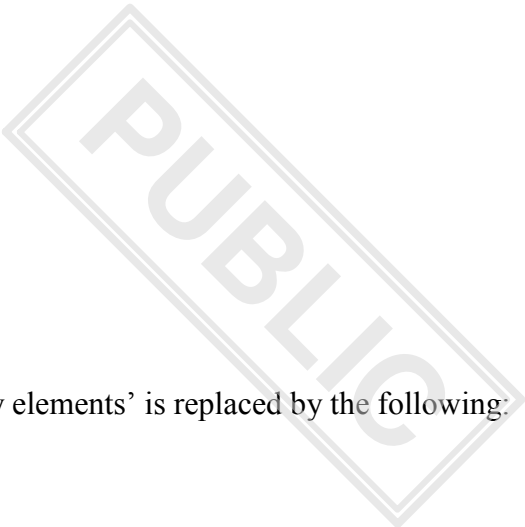
Transparency

Thermal conditions

Oxygenation conditions

Salinity

Nutrient conditions.’;



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

‘General physico-chemical quality elements

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

(3) in point 1.2.2, the table ‘Physio-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 range normally associated with undisturbed conditions.</p>	<p>Temperature, oxygen balance, pH, acid neutralising capacity, transparency and salinity do not reach levels outside the range 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 point 1.2.3, the table ‘Physio-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 range 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 point 1.2.4, the table ‘Physio-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 point 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) point 1.2.6 is deleted;

(8) in point 1.3, the following fourth and fifth 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 points **for the monitoring of the water level**.

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 sampling methods subject to the same conditions.’;

(9) in point 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 list pollutants which are discharged or otherwise deposited into the river basin or sub-basin;
- (e) other pollutants discharged or otherwise deposited in significant quantities in the river basin or sub-basin.

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) point 1.3.2. is amended as follows:

‘(a) in the third paragraph, ’Selection of monitoring sites’, the first sentence 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 list substances are discharged or otherwise deposited or into which river basin specific pollutants are discharged or otherwise deposited in significant quantities.’;

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

(12) point 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 delegated act in accordance with Article 20.’;

(13) in point 1.4.2, point (iii) is deleted;

(14) in point 1.4.3, the first paragraph, the first sentence is replaced by the following:

‘A body of water shall be recorded as achieving good chemical status where it is compliant with all the environmental quality standards set out in Part A of Annex I to Directive 2008/105/EC and the environmental quality standards established pursuant to Articles 8 and 8d of that Directive.’;

(15) in **point 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 the Directive 2008/105/EC:

- a) **Substances identified as ubiquitous persistent, bioaccumulative and toxic (uPBTs)**
- b) **Newly identified substances**
- c) **Substances for which revised and stricter EQS are established**

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

Member States may use the same representation maps for new River basin specific pollutants.

(16) in point 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.’;

(17) point 2.3.2. is replaced by the following:

‘2.3.2. Definition of good groundwater chemical status

Elements	Good status
General	<p>The chemical composition of the groundwater body is such that the concentrations of pollutants:</p> <ul style="list-style-type: none"> — as specified below, 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), point (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’;

(18) in point 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.’;

(19) point 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 thresholds have been set pursuant to Article 3(1), point (b), of Directive 2006/118/EC;

(c) chemical parameters for which Union wide thresholds 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 point 2.5, Member States shall provide a map of groundwater chemical status, colour-coded as follows:

Good: green

Poor: red

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 the Directive 2006/118/EC;

- a) **Newly identified substances**
- b) **Substances for which revised and stricter QS or threshold values are established**

Member States may also present the extent of any deviation from the QS or threshold value for the substances referred to in points (a) to (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 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 of Directive 2000/60/EC is amended as follows:

(1) point 10 is replaced by the following:

‘10. Materials in suspension, including micro/nanoplastics.’;

(2) point 13 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

GROUNDWATER QUALITY STANDARDS (QS)

Note 1: The QS for the pollutants listed under entries 3 to 7 shall apply **accordingly to Article 4(2), point (d)** from ... [OP: please insert the date = the first day of the month following ~~24~~18 months after the entry into force of this amending Directive], with the aim of achieving good water chemical status at the latest by 22 December 2033~~9~~.

(1))	(2)	(3)	(4)	(5)	(6)
[E ntr y] N°	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	<u>Sum of PFAS</u>	Industrial	See table	See table note	0,0044- <u>0,1</u> (⁷)

(1)	(2)	(3)	(4)	(5)	(6)
	Per and poly-fluorinated alkyl substances (PFAS) – sum of 24 ⁽⁶⁾	substances	note 6	6	
4	Carbamazepine	Pharmaceuticals	298-46-4	not applicable	0,25
5	Sulfamethoxazole	Pharmaceuticals	723-46-6	not applicable	0,01
6	Pharmaceutical active substances – total ⁽⁸⁾	Pharmaceuticals	not applicable	not applicable	0,25
7	Non-relevant metabolites of pesticides (nrMs)	Pesticides	not applicable	not applicable	0,1 ⁽⁹⁾ or 1 ⁽¹⁰⁾ or 2,5 or 5 ⁽¹¹⁾ (individual)
					0,5 ⁽⁹⁾ or 5 ⁽¹⁰⁾ or 12,5 ⁽¹¹⁾ (total) ⁽¹²⁾

(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 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and in Article 3 of 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, respectively.

A pesticide metabolite shall be deemed relevant if there is reason to consider that it has intrinsic properties comparable to those of the parent substance in terms of its pesticide target activity or that either itself or its transformation products generate a health risk for consumers and 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 following compounds, listed with their CAS number:; **(375-22-4) Perfluorobutanoic acid (PFBA); (375-73-5) Perfluorobutanesulfonic acid (PFBS); (2706-90-3) Perfluoropentanoic acid (PFPeA); (2706-91-4) Perfluoropentanesulfonic acid (PFPeS); (307-24-4) Perfluorohexanoic acid (PFHxA); (355-46-4) Perfluorohexane sulfonic acid (PFHxS); (375-85-9) Perfluoroheptanoic acid (PFHpA); (375-92-8) Perfluoroheptanesulfonic acid (PFHpS); (1763-23-1) Perfluorooctanesulfonic acid (PFOS); (335-67-1); Perfluorooctanoic acid (PFOA); (375-95-1) Perfluorononanoic acid (PFNA); (68259-12-1) Perfluorononane sulfonic acid (PFNS); (335-76-2) Perfluorodecanoic acid (PFDA); (335-77-3) Perfluorodecane sulfonic acid (PFDS); (2058-94-8) Perfluoroundecanoic acid (PFUnA or PFUnDA); (749786-16-1) Perfluoroundecane sulfonic acid (PFUnDS); (307-55-1) Perfluorododecanoic acid (PFDoDA or PFDoA); (79780-39-5) Perfluorododecane sulfonic acid (PFDoS); (72629-94-8) Perfluorotridecanoic acid (PFTrDA); (791563-89-8) Perfluorotridecane sulfonic acid (PFTris).**

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), Ammonium perfluoro (2 methyl 3 oxahexanoate) (HFPO DA or Gen X) (CAS 62037 80 3) (RPF 0,06), Propanoic Acid / Ammonium 2,2,3 trifluoro 3 (1,1,2,2,3,3-hexafluoro 3 (trifluoromethoxy)propoxy)propanoate (ADONA) (CAS 958445 44 8) (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 Acetic acid / 2,2 difluoro 2 ((2,2,4,5 tetrafluoro 5-(trifluoromethoxy) 1,3 dioxolan 4 yl)oxy) (C6O4) (CAS 1190931 41 9) (RPF 0,06).

(⁷) **The parameter and the quality standard shall be updated according to further amendments to 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.**

The QS refers to the sum of the 24 PFAS listed in footnote 6 expressed as PFOA equivalents based on the potencies of the substances relative to that of PFOA, i.e. the RPFs in footnote 6.

(⁸) ‘Total’ means the sum of all individual pharmaceuticals detected and quantified in the monitoring procedure, including relevant metabolites and degradation products.

- ~~(⁹) Applicable to ‘data poor’ nrMs, i.e. nrMs for which no reliable experimental data on chronic or acute effects of the nrM are available on the taxonomic group confidently predicted to be the most sensitive.~~
- ~~(¹⁰) Applicable to ‘data fair’ nrMs, i.e. nrMs for which reliable experimental data on chronic or acute effects of the nrM are available on the taxonomic group confidently predicted to be the most sensitive, but where the data are insufficient to qualify the substances as ‘data rich’.~~
- ~~(¹¹) Applicable to ‘data rich’ nrMs, i.e. nrMs for which reliable experimental data, or equally reliable data obtained by alternative scientifically validated methods, are available on chronic or acute effects of the nrM on at least one species each of algae, of invertebrates, and of fish, allowing the most sensitive taxonomic group to be confidently confirmed, and for which a QS can be calculated using a deterministic approach based on reliable chronic experimental toxicity data on that taxonomic group; Member States may apply for this purpose the latest guidance established in the framework of the Common Implementation Strategy for Directive 2000/60/EC (Guidance document No. 27, as updated). The QS of 2,5 for individual nrMs shall apply unless the QS calculated by the deterministic approach is higher, in which case a QS of 5 shall apply.~~
- (¹²) ‘Total’ means the sum of all individual nrMs in each data category detected and quantified in the monitoring procedure. **The Commission shall publish the list of nrMs to be monitored by Member States based on reliable data on their toxicity, ecotoxicity and occurrence.**

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 Water Framework Directive and the WFD Reporting Guidance, Member States shall ensure that competent authorities inform the ~~European Chemicals Agency ECHA~~ **Commission** of threshold values for pollutants and indicators of pollution. ~~ECHA shall publish that information without delay.’;~~

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

‘2. Man-made synthetic substances

Primidone

Trichloroethylene

Tetrachloroethylene’

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

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

(4) the following Part D is added:

‘Part D

Repository of harmonised threshold values for groundwater pollutants of national, regional or local concern

(1)	(2)	(3)	(4)	(5)	(6)
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[Entry] N°	Name of substance	Category of substances	CAS number ⁽¹⁾	EU number ⁽²⁾	Threshold value [µg/l unless otherwise indicated]
1	Trichloroethylene and Tetrachloroethylene (sum of two)	Industrial substances	79-01-6 and 127-18-4	201-167-4 and 204-825-9	10 (total) ⁽³⁾

⁽¹⁾ CAS: Chemical Abstracts Service.

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

⁽³⁾ 'Total' means the sum of concentrations of Trichloroethylene and Tetrachloroethylene

ANNEX V



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

(20) the title is replaced by the following:

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

(21) Part A is replaced by the following:

‘PART A: ENVIRONMENTAL QUALITY STANDARDS

Note 1: Where an EQS is listed between [], this value is subject to confirmation in the light of the opinion requested from the Scientific Committee on Health, Environmental and Emerging Risks.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
[Entry] N°	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
(3)	Atrazine	Herbicides	1912-24-9	217-617-8	0,6	0,6	2,0	2,0				
(4)	Benzene	Industrial substances	71-43-2	200-753-7	10	8	50	50				
(5)	Brominated diphenylethers	Industrial substances	not applicable	not applicable			0,14 ⁽⁷⁾	0,014 ⁽⁷⁾	[0,00028] ⁽⁷⁾	X ⁽⁸⁾	X	X

(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) 0,6 (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											
(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)	Organophosphate pesticides	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

(9a)	Cyclodiene pesticides: Aldrin Dieldrin Endrin Isodrin	Organochlorine pesticides	309-00-2 60-57-1 72-20-8 465-73-6	206-215-8 200-484-5 200-775-7 207-366-2	$\Sigma = 0,01$	$\Sigma = 0,005$	not applicable	not applicable		X		
(9b)	DDT total ⁽¹¹⁾	Organochlorine pesticides	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		
(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	Herbicides	330-54-1	206-354-4	0,049	0,0049	0,27	0,054				

(14)	Endosulfan	Organochlorine pesticides	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	Organochlorine pesticides	118-74-1	204-273-9			0,5	0,05	20	X		X
(17)	Hexachlorobutadiene	Industrial substances (solvents)	87-68-3	201-765-5	9×10^{-4}		0,6	0,6	21	X		X
(18)	Hexachlorocyclohexane	Insecticides	608-73-1	210-168-9	0,02	0,002	0,04	0,02		X		X
(19)	Isoproturon	Herbicides	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	[10] ⁽¹³⁾	X	X	X
(22)	Naphthalene	Industrial substances	91-20-3	202-049-5	2	2	130	130				
(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	84852-15-3	284-325-5	0,037	0,0018	2,1	0,17		X		
(25)	Octylphenols ⁽¹⁵⁾ ((4-(1,1',3,3'-tetramethylbutyl)-phenol))	Industrial substances	140-66-9	205-426-2	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
(27)	Pentachlorophenol	Organochlorine pesticides	87-86-5	201-778-6	0,4	0,4	1	1		X		
(28)	Polyaromatic 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
	Benzo(a)pyrene		50-32-8	200-028-5			0,27	0,027	[0,6]			
	Benzo(b)fluoranthene		205-99-2	205-911-9			0,017	0,017	<i>see footnote 17</i>			
	Benzo(k)fluoranthene		207-08-9	205-916-6			0,017	0,017	<i>see footnote 17</i>			

	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			
	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			
(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⁾ (<i>Tributyltin</i> -cation)	Biocides	36643-28-4	not applicable	0,0002	0,0002	0,0015	0,0015	[1,3] ⁽¹⁹⁾	X	X	X
(31)	Trichlorobenzenes	Industrial substances (solvents)	12002-48-1	234-413-4	0,4	0,4	not applicable	not applicable				

(32)	Trichloromethane	Industrial substances	67-66-3	200-663-8	2,5	2,5	not applicable	not applicable				
(33)	Trifluralin	Herbicides	1582-09-8	216-428-8	0,03	0,03	not applicable	not applicable		X		
(34)	Dicofol	Organochlorine pesticides	115-32-2	204-082-0	$[4,45 \times 10^{-3}]$	$[0,185 \times 10^{-3}]$	not applicable ⁽²⁰⁾	not applicable ⁽²⁰⁾	[5.45]	X		X
(35)	Perfluorooctane sulfonic acid and its derivatives (PFOS)	Industrial substances	1763-23-1	217-179-8	Coverd by substance group 65 (Per- and poly-fluorinated alkyl substances (PFAS) – sum of 24)							
(36)	Quinoxifen	Plant protection products	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			<i>not applicable</i>	<i>not applicable</i>	Sum of PCDDs+ PCDFs+ PCB-DLs equivalents $[3,5 \cdot 10^{-5}]$ ⁽²²⁾	X	X	X
(38)	Aclonifen	Herbicides	74070-46-5	277-704-1	0,12	0,012	0,12	0,012				

(39)	Bifenox	Herbicides	42576-02-3	255-894-7	0,012	0,0012	0,04	0,004				
(40)	Cybutryne	Biocides	28159-98-0	248-872-3	0,0025	0,0025	0,016	0,016				
(41)	Cypermethrin (23)	Pyrethroid pesticides	52315-07-8	257-842-9	3×10^{-5}	3×10^{-6}	6×10^{-4}	6×10^{-5}				X
(42)	Dichlorvos	Organophosphate pesticides	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	$[4,6 \times 10^{-4}]$	$[2 \times 10^{-5}]$	0,5	0,05	[3,5]	X	X	X
(44)	Heptachlor and heptachlor epoxide	Organochlorine pesticides	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
(45)	Terbutryn	Herbicides	886-50-0	212-950-5	0,065	0,0065	0,34	0,034				
(46)	17 alpha-ethinylestradiol (EE2)	Pharmaceuticals (Estrogenic hormones)	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)	Pharmaceutic als (Estrogenic hormones)	50-28-2	200-023- 8	0,00018	9×10^{-6}	not derived	not derived				
(48)	Acetamiprid	Neonicotinoi d pesticides	135410- 20-7 / 160430- 64-8	603-921- 1	0,037	0,0037	0,16	0,016				
(49)	Azithromycin	Pharmaceutic als (Macrolide antibiotics)	83905-01- 5	617-500- 5	0,019	0,0019	0,18	0,018				X
(50)	Bifenthrin	Pyrethroid pesticides	82657-04- 3	617-373- 6	$9,5 \times 10^{-5}$	$9,5 \times 10^{-6}$	0,011	0,001				X
(51)	Bisphenol-A (BPA)	Industrial substances	80-05-7	201-245- 8	$3,4 \times 10^{-5}$	$3,4 \times 10^{-5}$	130	51	0,005	X		
(52)	Carbamazepine	Pharmaceutic als	298-46-4	206-062- 7	2,5	0,25	$1,6 \times 10^3$	160				
(53)	Clarithromycin	Pharmaceutic als (Macrolide antibiotics)	81103-11- 9	658-034- 2	0,13	0,013	0,13	0,013				X

(54)	Clothianidin	Neonicotinoi d pesticides	210880- 92-5	433-460- 1	0,01	0,001	0,34	0,034				
(55)	Deltamethrin	Pyrethroid pesticides	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	Pharmaceutic als	15307-86- 5 / 15307- 79-6	239-348- 5 / 239- 346-4	0,04	0,004	250	25				X
(57)	Erythromycin	Pharmaceutic als (Macrolide antibiotics)	114-07-8	204-040- 1	0,5	0,05	1	0,1				X
(58)	Esfenvalerate	Pyrethroid pesticides	66230-04- 4	613-911- 9	$1,7 \times 10^{-5}$	$1,7 \times 10^{-6}$	0,0085	0,00085				X
(59)	Estrone (E1)	Pharmaceutic als (Estrogenic hormones)	53-16-7	200-164- 5	$3,6 \times 10^{-4}$	$1,8 \times 10^{-5}$	not derived	not derived				
(60)	Glyphosate	Herbicides	1071-83-6	213-997- 4	0,1 ⁽²⁵⁾ 86,7 ⁽²⁶⁾	8,67	398,6	39,86				
(61)	Ibuprofen	Pharmaceutic als	15687-27- 1	239-784- 6	0,22	0,022						X

(62)	Imidacloprid	Neonicotinoi d pesticides	138261- 41-3 / 105827- 78-9	428-040- 8	0,0068	$6,8 \times 10^{-4}$	0,057	0,0057				
(63)	Nicosulfuron	Herbicides	111991- 09-4	601-148- 4	0,0087	$8,7 \times 10^{-4}$	0,23	0,023				
(64)	Permethrin	Pyrethroid pesticides	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 poly- fluorinated alkyl substances (PFAS) – sum of 24 ⁽²⁷⁾	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				
(67)	Thiacloprid	Neonicotinoi d pesticides	111988- 49-9	601-147- 9	0,01	0,001	0,05	0,005				
(68)	Thiamethoxam	Neonicotinoi d pesticides	153719- 23-4	428-650- 4	0,04	0,004	0,77	0,077				
(69)	Triclosan	Biocides	3380-34-5	222-182- 2	0,02	0,002	0,02	0,002				

(70)	Total of active substances in pesticides, including their relevant metabolites, degradation and reaction products (²⁹)	Plant protection products and biocides			0,5 (³⁰)	0,5 (³⁰)						
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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 an EQS biota is given, it, rather than the water EQS, shall be applied, without prejudice to the provision in 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. 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 and 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 Commission Regulation (EU) No 1259/2011* Annex Section 5.3.

(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) must 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.
- (¹³) The EQS for biota refers to methyl mercury.
- (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), and dibenz(a,h)anthracene (CAS 53-70-3) (RPF 1). The PAHs anthracene, fluoranthene and naphthalene are listed separately.
- (¹⁷)For the group of polyaromatic hydrocarbons (PAHs) (No 28), the biota EQS refers to the sum of the concentrations of seven of the eight PAHs listed in footnote 17 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 EQS biota.
- (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 20 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 52315-07-8, 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 (PFTTrDA) (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), and Ammonium perfluoro (2-methyl-3-oxahexanoate) (HFPO-DA or Gen X) (CAS 62037-80-3) (RPF 0,06), Propanoic Acid / Ammonium 2,2,3-trifluoro-3-(1,1,2,2,3,3-hexafluoro-3-(trifluoromethoxy)propoxy)propanoate (ADONA) (CAS 958445-44-8) (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 Acetic acid / 2,2-difluoro-2-((2,2,4,5-tetrafluoro-5-(trifluoromethoxy)-1,3-dioxolan-4-yl)oxy)- (C6O4) (CAS 1190931-41-9) (RPF 0,06)

(²⁸) For the group of PFAS (No 65), the EQS refer to the sum of the concentrations of the 24 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.

⁽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⁾ ‘Total’ means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.’;

(22) 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 VI

'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. Substances which contribute to eutrophication (in particular, nitrates and phosphates).~~

~~12. Substances which have an unfavourable influence on the oxygen balance and can be measured using parameters such as BOD, COD, etc.~~

~~13~~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

[En-try] N°	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 ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Inland surface waters ⁽⁴⁾ [µg/l]	MAC-EQS ⁽⁵⁾ Other surface waters ⁽⁴⁾ [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⁾	Pesticide	470-90-6	207-432-0	0,1	0,1	0,3	0,3		
4	Simazine ⁽⁷⁾	Pesticide	122-34-9	204-535-2	1	1	4	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⁾ 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 the provision in 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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