EUROPEAN
COMMISSION

Brussels, 26.10.2022
COM(2022) 540 final

2022/0344 (COD)

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)

{SEC(2022) 540 final} - {SWD(2022) 540 final} - {SWD(2022) 543 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

EU water legislation shares an overarching objective of protecting human health and the environment from the combined effects of toxic and/or persistent pollutants. This initiative concerns Directive 2000/60/EC[1] (the Water Framework Directive, or WFD) and its two 'daughter' directives, Directive 2006/118/EC[2] (the Groundwater Directive, or GWD) and Directive 2008/105/EC[3] (the Environmental Quality Standards Directive, or EQSD), which together focus on the protection of groundwater and surface waters[4]. They complement other relevant pieces of water legislation, i.e. Directive (EU) 2020/2184 (the Drinking Water Directive, or DWD)[5], Council Directive 91/271/EEC[6] (the Urban Waste Water Treatment Directive, or UWWTD), Directive 2008/56/EC[7] (the Marine Strategy Framework Directive, or MSFD), Directive 2006/7/EC[8] (the Bathing Water Directive or BD), Directive 2007/60/EC[9] (the Floods Directive, or FD) and Council Directive 91/676/EEC[10] (the Nitrates Directive, or ND).

The legislation includes lists of pollutants and quality standards, and includes requirements for their regular review[11]. Article 16(4) of the WFD requires the Commission to regularly review, at intervals of at least every 4 years, the list of priority substances that pose a risk to the aquatic environment, i.e. both surface and groundwaters. Specifically, for surface water, Article 8 of the EQSD requires the Commission to review Annex X to the WFD (the list of priority substances) while for groundwaters, Article 10 of the GWD requires the Commission to review every 6 years Annexes I and II to the GWD itself. This revision, and the impact assessment, also serve to report to the European Parliament and the Council, as referred to in Article 8 of the EQSD.

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1 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).

2 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).

3 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).

4 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).

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

7 Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (OJ L 164, 25.6.2008, p. 19).

8 Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC (OJ L 64, 4.3.2006, p. 37).

9 Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (OJ L 288, 6.11.2007, p. 27).

10 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).

11 Article 16(4) and 16(7) of Directive 2000/60/EC (WFD); Article 7 of Directive 2008/105/EC (EQSD) and Article 10 of Directive 2006/118/EC (GWD).

The need to update the lists was confirmed in the 2019 fitness check[12], which also concluded that other improvements to the legislation would increase its effectiveness, efficiency and coherence. Taking into account the overarching objective of EU water policy, the general objectives of this initiative are to:

(1) increase the protection of EU citizens and natural ecosystems in line with the Biodiversity Strategy[13] and the Zero Pollution Action Plan[14], both embedded in the European Green Deal[15];

(2) increase the effectiveness and reduce the administrative burden of the legislation, to enable the EU to repond more quickly to emerging risks.

Chemical exposure through drinking water can lead to a variety of short- and long-term health effects. Chemicals also endanger the aquatic environment, resulting in changes in dominant species and a decrease in or loss of biodiversity. Setting and controlling environmental quality standards (EQS) for chemicals in water bodies complements source and pathway legislation, by pushing for stricter production, emission or use standards where necessary, and reducing the costs of treating drinking water.

The specific objectives of this initiative are to:

1. update the lists of pollutants affecting surface and groundwater by adding and removing substances and updating existing quality standards;
2. improve the monitoring of chemical mixtures to better assess combination effects and take account of seasonal variations in pollutant concentrations;
3. harmonise, wherever relevant, how pollutants in surface and groundwater are addressed across the EU;
4. ensure that the legal framework can be more swiftly aligned with scientific findings to more promptly respond to contaminants of emerging concern;
5. improve the access to, transparency and re-use of data, to enhance compliance, reduce administrative burden and improve coherence with the wider EU legal framework dealing with chemicals.

The ultimate aim of the initiative is to set new standards for a series of chemical substances of concern to address chemical pollution in water, to facilitate enforcement based on a simplified and more coherent legal framework, to ensure dynamic and up-to-date information on water status, facilitated by the European Environment Agency ('EEA'), and create a more flexible framework for addressing pollutants of emerging concern. This would be based on wide stakeholder involvement as well as sound scientific support from the European Chemicals Agency ('ECHA') to ensure maximum synergies and coherence across EU laws on chemicals.

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12 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 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.

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

15 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.

- **Consistency with existing policy provisions in the policy area**

The proposal is fully consistent with other legislation on water. As regards the Urban Waste Water Treatment Directive (UWWTD), for which a proposal for revision is presented at the same time as this proposal, micro-pollutants are a key challenge. The need to remove them at waste water treatment facilities drives up the cost of treatment, and removal is not always possible. This proposal therefore aims to stimulate more action upstream by reducing emissions at source. Waste water treatment will be particularly important for some categories of pollutants: pharmaceuticals and substances in personal care products as they are discharged mostly in an urban environment.

By avoiding water pollution, the proposal will also benefit the potential for water reuse, including for irrigation purposes in line with the new Regulation on minimum requirements for water reuse Regulation (EU) 2020/741[16].

This proposal is also consistent with the recently revised Drinking Water Directive (DWD), which has to be transposed across all EU Member States by January 2023. By tackling surface and groundwater pollution, this proposal will protect vital drinking water sources and reduce treatment costs. The DWD and this proposal address a wide range of pollutants, in particular pesticides, pharmaceuticals and the group of per- and polyfluoroalkyl substances (PFAS). As regards PFAS it should be noted that this proposal has, unlike the revised DWD, benefitted from the most recent EFSA advice on PFAS adopted on 9 July 2020. Like the DWD, this proposal also targets microplastics not immediately but after a methodology for monitoring has been developed. This proposal will be taken into account in the ongoing evaluation of the Bathing Water Directive (BWD) and should the BWD be revised, it will be part of the baseline constructed for the BWD impact assessment.

The proposal is also consistent with the recent Commission proposals[17] to revise EU measures to address pollution from large industrial installations which, in addition to widening the scope of the Industrial Emissions Directive (IED), also seek to improve resource efficiency and ensure that permitting requirements are better controlled and more integrated, including by clarifying rules applicable to the indirect release of polluting substances into water through urban wastewater treatment plants. The proposals further aim at fostering innovation to address persistent chemical substances and substances newly identified as being of concern, including PFAS, micro-plastics and pharmaceuticals. The 'exchange of information' process under the revised IED to draw up and review best available technique reference documents will take account of the identification of substances of concern under EU water law, including substances on the 'watch lists' for surface and groundwater, as well as substances posing a significant risk to or via the aquatic environment at EU level.

- **Consistency with other Union policies**

This initiative is part of the 2022 Commission work programme and a key action in the Zero Pollution Action Plan. Like all initiatives under the European Green Deal, it aims to ensure that objectives are achieved in the most effective and least burdensome way and comply with the 'do no significant harm' principle. It fine-tunes, updates and adapts existing legislation in the context of the Green Deal. Its focus is on defining the zero pollution ambition for water pollutants and thereby the level of protection for human health and natural ecosystems. Many

[16] Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse (OJ L 177 of 5.6.2020, p. 32).

[17] COM (2022) 156 final/3 and COM/2022/157 final.

measures necessary to achieve are addressed by other, closely related, European Green Deal initiatives. These include:

- The Biodiversity Strategy and the Farm to Fork Strategy[18], which aim to reduce pesticide use, fertilizer use, nutrient losses and the sales of antimicrobials by 2030. Much of the reduction in pesticide use is to be achieved by the Commission's proposal[19] for a Regulation of the European Parliament and of the Council on the sustainable use of plant protection products and amending Regulation (EU) 2021/2115. A future review of Regulation (EC) No 1107/2009[20] concerning the placing of plant protection products (PPPs) on the market could also play a role;
- The EU Plastics Strategy[21] and the upcoming EU micro-plastics initiative, which aim to deliver on the Zero Pollution Action Plan targets to reduce waste, plastic litter at sea and micro-plastics released into the environment by 2030;
- Directive (EU) 2019/904[22] (the Single Use Plastics Directive, or SUPD), which aims to limit the use of single-use plastic products, for example by introducing waste management and clean-up obligations for producers (including extended producer responsibility schemes);
- The Circular Economy Action Plan[23], which announces in particular measures to reduce micro-plastics and an evaluation of Council Directive 86/278/EEC[24] (the Sewage Sludge Directive, or SSD), regulating the quality of sludge used in agriculture;
- The Chemicals Strategy for Sustainability[25], which recognises that chemicals are essential for the well-being of modern society, but aims to better protect citizens and the environment against their possible hazardous properties. The Strategy also sets the objective to move towards a 'one substance, one assessment' approach by improving the efficiency, effectiveness, coherence and transparency of safety assessments of chemicals across all relevant legislation. For this reason, this proposal assigns a central role to ECHA to undertake the role of scientific support to future identification of water pollutants as well as proposing relevant quality standards;The 2019 Strategic

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18 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.

19 COM(2022) 305 final.

20 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).

21 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.

22 Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (OJ L 155, 12.6.2019, p. 1).

23 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A new Circular Economy Action Plan For a cleaner and more competitive Europe, COM/2020/98 final.

24 Council Directive 86/278/EEC of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (OJ L 181, 4.7.1986, p. 6).

25 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.

Approach to Pharmaceuticals in the Environment[26] (flowing directly from the 2013 revision of the EQSD) and the Pharmaceuticals Strategy for Europe[27], which both underline the environmental and potential health impacts of pollution from pharmaceutical residues and list a range of actions designed to tackle these challenges. The upcoming revision of the legislation on human medicinal products is expected to provide appropriate follow-up. Similarly, by listing several antimicrobial drugs as well as the metal silver, this proposal is consistent with the EU's strategy in the area of antimicrobial resistance;

- The European Strategy for Data[28], which underlines that data generated by the public sector should be available for the common good, so that they can be appropriately used, for instance by researchers, other public institutions, and small and medium-sized enterprises (SMEs).
- This proposal is also consistent with with the final report of the Conference on the Future of Europe and the explicit recommendations it contains from citizens on zero pollution in general and in particular the proposals on tackling pollution. The following final proposals are specifically relevant in this context:
  - Proposal 1.4 to: 'Significantly reduce the use of chemical pesticides and fertilizers, in line with the existing targets, while still ensuring food security, and support for research to develop more sustainable and natural based alternatives';
  - Proposal 2.7 to: 'Protect water sources and combat river and ocean pollution, including through researching and fighting microplastic pollution'.:

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The legal basis for this proposal is Article 192 of the Treaty on the Functioning of the European Union (TFEU). In accordance with Articles 191 and 192(1) TFEU, the EU is required to contribute to the pursuit of preserving, protecting and improving the quality of the environment; promoting measures at international level to deal with regional or worldwide environmental problems; and combating climate change.

• Subsidiarity (for non-exclusive competence)

Surface and groundwater bodies in the EU are polluted by a range of pollutants. Pollution travels downstream and underground, and 60% of European river basin districts are international (either shared between Member States or between a Member State and a non-EU country). For this reason, cooperation between Member States is essential and action at EU level necessary to address pollution and other transboundary impacts by setting harmonised standards and establishing harmonised data collection and sharing systems. Without action at EU level, it would become prohibitively expensive, especially for downstream Member States, to address pollution.

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[26] Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee, European Union Strategic Approach to Pharmaceuticals in the Environment, COM(2019) 128 final.

[27] 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.

[28] 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.

The 2019 fitness check of EU water legislation confirmed that the WFD and its two daughter directives have triggered or reinforced action to address the transboundary pressures on water resources at river basin level, both nationally and internationally.

Specifically in relation to pollutants, the legislation distinguishes between substances considered to present a risk at EU level and substances of regional or national concern, and addresses them differently. This initiative seeks to improve how substances of regional and national concern are dealt with by the Member States.

Where EU environmental quality standards are set, the EU introduces common objectives to achieve the zero pollution ambition on the basis of scientific evidence, but leaves Member States the flexibility to decide on the most cost-effective way to achieve these objectives, taking into account relevant EU source-based legislation. In doing so (common objectives with flexibility for achieving those), it creates a link with the source-based legislation at EU level (such as the sustainable use of pesticides) and helps ensure an effective delivery of the aims set in that legislation.

- **Proportionality**

The proposal revises the existing lists of surface and groundwater pollutants and sets or updates environmental quality standards for Member States to meet, whilst relying to a large extent on other EU legislation addressing the source of pollution or regulating their emissions during production and use (such as restrictions on the use of certain substances under REACH[29] or emission limit values set out in permits of industrial installations under the IED) and leaving the choice of specific measures to the Member States. As each water body in the EU has its own specific characteristics (climate, flow, geological conditions, etc.) and is not necessarily subject to the same pressures as other water bodies, leaving the choice of measures to the Member States' water authorities is correct from a proportionality standpoint.

The 2019 fitness check of EU water legislation confirmed the added value of the WFD, EQSD and GWD. The impact assessment for this proposal confirms that the substances considered for addition to the pollutant lists with EU-wide quality standards present a risk at EU level. A small number of already listed substances were identified that are no longer considered substances of EU-wide concern, but which might still need to be addressed at national level. This proposal sets out a procedure enabling the European Commission to address inconsistences in how Member States decide on substances to regulate at national level and on the quality standards to set for them.

- **Choice of the instrument**

The initiative takes the form of a directive because this is the most appropriate legal instrument to make amendments to the existing, relevant directives.

A directive requires Member States to transpose the provisions into their national substantive and procedural legal systems and implement measures that will achieve the objectives. This approach gives Member States more freedom than a regulation, as Member States can choose the most appropriate measures to achieve the agreed result obligations.

[29] 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).

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

In 2019, a fitness check evaluation of EU water legislation was completed covering the WFD, the EQSD, the GWD and the FD. The fitness check concluded that, although the legislation is largely fit for purpose, there is room for improvement in relation to tackling chemical pollution. The fitness check found that, overall, there are three reasons why only limited progress has been made towards achieving the overall objectives of the legislation:

inadequate integration of water objectives into other relevant policies;

inadequate investment in Member States in water-related projects and programmes;

inadequate implementation efforts.

As regards implementation, several deficits were highlighted in relation to chemical pollution: the large diversity in quality standards for nationally relevant pollutants, the administrative burden associated with reporting, the lack of specificity and timeliness of reported information and the resource-intensive, time-consuming process for updating the lists of pollutants. This proposal addresses these deficits. In addition, it takes account of relevant findings from the 2019 fitness check of the most relevant chemicals legislation[30] and the commitments made in the Chemicals Strategy for Sustainability. In particular, it takes a step towards more holistic (mixture) monitoring by introducing the use of effect-based methods, and includes provisions to improve the timeliness, efficiency and coherence of hazard and risk assessment (for example by facilitating data-sharing and the application of the 'one substance, one assessment' approach).

Regulatory fitness and simplification (REFIT)

The Impact Assessment considered options for simplification and burden reduction. The removal of substances, from the list of surface water pollutants, constitutes a limited reduction of burden, as does changing the revision of the watchlist to every three years rather than two, and the revision of the lists of surface water and groundwater pollutants through delegated acts rather than through co-decision. The creation of an automatic data delivery mechanism under WFD and EQSD will reduce reporting burden on the Member States, as will the abolition of the interim report on the programme of measures under Article 15(3) of the WFD. Improving the existing guidelines for Effect-Based Methods and developing a harmonised methodology for monitoring microplastics will simplify Member States' work in these areas.

In developing the Impact Assessment, the basic characteristics of the SME-test have been applied and results noted in particular in section 6. SMEs are active in the production and use of the relevant pollutants. It should be noted that precise identification and quantification of impacts is generally not possible due to the fact that impact will depend on measures that Member States take to achieve the objectives of the legislation.

Opinion of the Regulatory Scrutiny Board

The Regulatory Scrutiny Board issued, on 24 June 2022, a positive opinion with reservations. It requested changes to rectify in particular three aspects: (1) the design of the options, which was considered to be overly complex and not bringing out clearly the key policy choices; (2)

[30] Commission Staff Working Document Fitness Check of the most relevant chemicals legislation (excluding REACH), as well as related aspects of legislation applied to downstream industries, SWD(2019) 199 final.

the impacts on SMEs and on citizens which were not considered to be analysed sufficiently, with the report not assessing how individual Member States may be affected; (3) the report was not considered to be clear about the order of magnitude of the expected impacts, not to critically assess the validity of the illustrative benefit and cost estimates and their relevance to the initiative, and the comparison of options not thought to be based on their effectiveness, efficiency and coherence.

In response, the policy options have been simplified, by reducing the number of options and aggregating options. The impacts on SMEs have been developed further throughout the text, as was information on impacts on consumers and on Member States. The interpretation of cost and benefit figures has been clarified to avoid the impression these can be interpretated as solely linked to this initiative. The text on One In, One Out has been completed. Finally the assessment of effectiveness, efficiency and coherence for the options has been added to the text.

- **Stakeholder consultations**

Extensive stakeholder consultation took place to support the preparation of this proposal. Based on the Commission's Better Regulation guidelines, both an open public consultation and an expert survey took place in 2021, with results feeding into the impact assessment for this proposal. The permanent network of Member States and stakeholders supporting the implementation of the WFD and its daughter directives was kept informed, and in particular the Working Groups on Chemicals and Groundwater were consulted extensively.

For the individual substances and groups of substances identified for listing as surface water pollutants, extensive technical dossiers were prepared by the Commission's Joint Research Centre (JRC), supported by sub-groups of Member State and stakeholder experts. Finally, as part of the review by the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER), preliminary opinions were published (while observing a four week commenting during period), with results feeding into the SCHEER opinion. For a few substances, the review is not finalised. The proposed values have therefore been marked as 'subject to confirmation in the light of the opinion requested from the SCHEER'. All final proposed values will be fully consistent with the scientific advice.

- **Collection and use of expertise**

Internal expertise was provided by the JRC, in particular for the selection of surface water pollutants and the derivation of environmental quality standards (EQS). External technical expertise, including on groundwater pollutants, was provided by experts from the Chemicals and Groundwater Working Groups. The Commission's impact assessment was supported by a study prepared by external consultants, which reviewed the economic, social and environmental impacts of a range of potential policy options, taking account of the expected impacts of existing and planned policies at EU level and inputs from stakeholders. The JRC substance dossiers, reports from the Groundwater Working Group, the consultants' study report and stakeholder workshop reports are available in CIRCABC[31].

- **Impact assessment**

The impact assessment examined the three groups of options, i.e. options relating to surface waters, options relating to groundwaters, and cross-cutting options. For surface waters, it assessed the impact of adding a range of substances (from among reviewed pharmaceuticals,

[31] wfd - Library (europa.eu)

pesticides, industrial chemicals and metals) to the list of priority substances, and thus of setting EU-wide EQS for them. For several existing priority substances, it reviewed the impact of changing their EQS (on the basis of new scientific evidence). For some other existing priority substances, it examined the impact of removing them from the list. For groundwaters, the impact assessment reviewed the impact of adding specific (groups of) substances to the list, namely PFAS, non-relevant metabolites of pesticides (nrMs) and pharmaceuticals. Lastly, the impact assessment reviewed a range of options to improve digitalisation, administrative streamlining and risk management in the area of water pollution.

The main sources of pollution for the identified substances are chemical production processes (direct emissions resulting from production of wood, pulp, steel, combustion, textiles, plastics etc.); waste water discharges including pharmaceuticals and chemicals as a wash-off of fabrics, consumer products, cleaning products, personal care products; indirect discharges resulting from pesticides, biocides and pharmaceuticals' use in agriculture; chemicals used in road construction; the deposition of mercury from fossil fuel combustion plants and of PFAS from fire-fighting foams. All these sources and pathways are subject to legislation, including the Industrial Emissions Directive 2010/75/EC (under revision), the Urban Waste Water Treatment Directive 91/271/EEC (under revision), Directive 2009/128/EC on the sustainable use of pesticides (under revision), Directive 2001/83/EC on medicinal products for human use, Regulation (EU) 2019/6 on veterinary medicinal products, the REACH Regulation No 1907/2006, Regulation (EC) No 1107/2009 on plant protection products, Regulation (EU) No 528/2012 on biocidal products; and Regulation (EC) No 1223/2009 on cosmetics. By setting maximum concentration limits for these substances, this proposal aims to reinforce the effect and implementation of EU source and pathway legislation and, where so required for the purpose of protecting health or the environment, push for the adoption of stricter source/pathway measures at Member State level.

The options were reviewed against their environmental, social and economic costs and benefits, resulting in the following package of preferred options:

Surface water	
Option 1: Addition to PS list as an individual substance with EQS set for each individually	**23 individual substances:** 17-Beta estradiol (E2); Acetamiprid; Azithromycin; Bifenthrin; Bisphenol A; Carbamazepine; Clarithromycin; Clothianidin; Deltamethrin; Diclofenac; Erythromycin; Esfenvalerate; Estrone (E1); Ethinyl estradiol (EE2); Glyphosate; Ibuprofen; Imidacloprid; Nicosulfuron; Permethrin; Thiacloprid; Thiamethoxam; Triclosan, Silver.
Option 2: Addition to PS list as a group with EQS set for "sum of"	PFAS (sum of 24 named substances)
Option 3: Amendment of existing EQS	**14 substances to more stringent:** Chlorpyrifos; Cypermethrin; Dicofol; Dioxins; Diuron; Fluoranthene; Hexabromocyclododecane (HBCDD); Hexachlorobutadiene; Mercury; Nickel; Nonyl Phenol; PAHs; PBDEs; Tributyltin **2 substances to less stringent:** Heptachlor/heptachlor epoxide; Hexachlorobenzene
Option 4: Deselection	**4 substances:** Alachlor; Carbon tetrachloride; Chlorfenvinphos; Simazine
Groundwater	
Option 1: Addition to Annex I with GW QS set for each individually	**2 pharmaceutical substances:** Carbamazepine and Sulfamethoxazole

		All nrMs with individual GW QS of 0.1 µg/l
Option 2: Addition to Annex I with GW QS set for "sum of"		PFAS (sum of 24 named substances)
Option 3: Addition to Annex II		**1 substance:** Primidone
Digitalisation, administrative streamlining and better risk management		
Option 1: Provide guidance and advice on monitoring	b	Improve existing EBM guidelines to improve the monitoring of groups/mixtures of pollutants by using EBMs.
	c	Develop a harmonised measurement standard and guidance for microplastics in water as a basis for MS reporting and a future listing under EQSD and GWD.
Option 2: Establish/amend obligatory monitoring practices	a	Include an obligation in the EQSD to use EBMs to monitor estrogens.
	b	Establish an obligatory Groundwater Watch List analogous to that of surface waters and drinking water and provide guidance on the monitoring of the listed substances.
	c	Improve the monitoring and review cycle of the Surface Water Watch List so that there is more time to process the data before revising the list.
Option 3: Harmonise reporting and classification	a	Establish an automated data delivery mechanism for the EQSD and the WFD to ensure easy access at short intervals to monitoring/status data to streamline and reduce efforts associated with current reporting, and to allow access to raw monitoring data.
	b	Introduce a repository of environmental quality standards for the RBSPs as an Annex to the EQSD, and incorporate RBSPs into the assessment of surface waters' chemical status.
Option 4: Legislative and administrative aspects	a	Use EQSD instead of WFD to define the list of priority substances, and update the lists of SW and GW pollutants by Comitology or delegated acts.
	b	Change the status of Aldrin, Dieldrin, Endrin, Isodrin, DDT, Tetrachloroethylene and Trichloroethylene from 'other pollutants' to that of priority substances.
	c	Change the status of 1,2 dichloroethane, fluoranthene, lead, octylphenol ethoxylates and pentachlorophenol to that of priority hazardous substances.

The proposed policy package ensures that legislative changes remain proportionate, with economic, social and environmental benefits larger than the corresponding costs, and that they focus on issues that are best addressed at EU level.

Quantifying the costs, and especially the benefits, of this initiative is difficult, given its interaction with (and reliance on) other policy initiatives for certain EU-wide measures. Furthermore, Member States can largely choose which measures they implement to achieve compliance: these will thus vary according to national/local circumstances.

For surface water, significant direct costs are expected for instance from adding ibuprofen, glyphosate, PFAS and bisphenol A to the priority substances list, as well as from amending the EQS for polyaromatic hydrocarbons (PAHs), mercury and nickel. This is likely to cause product development costs for industry and substitution costs for users of those substances, including in the agricultural sector.

In relation to groundwater, the most significant costs are likely to arise from adding quality standards for PFAS. Costs may be related to restricting the use of pesticides or industrial

chemicals, for example, to managing contaminated bio-solids and stepping up the treatment of waste water. The costs of the preferred digitalisation, administrative streamlining and better risk management options are of an administrative nature, would initially materialise at EU level and generally be low, with the possible exception of the automated data delivery mechanism. Costs cannot be attributed solely to this initiative, due to inevitable interactions and synergies with many other EU policies tackling the same substances. The pollution costs are mostly internalised through the IED and the UWWTD, the future ban on all PFAS except in essential uses, the implementation of the upcoming micro-plastics initiative and others. For example, the revision of the UWWTD will boost the upgrade of many UWWTPs, and introduce extended producer responsibility to cover the costs, which will significantly reduce the load of micro-pollutants entering surface and groundwaters.

The proposed initiative will contribute to reducing concentrations of acutely toxic and/or persistent chemicals in water. It will also improve the value of the aquatic ecosystems and of the services they deliver. Benefits thus include reduced impacts on human health, nature, pollinators and agriculture, as well as avoided costs of water treatment. Making the chemical monitoring data easily available, accessible and re-usable will significantly improve the coherence of safety assessment, and will be an important step in moving towards the 'one substance, one assessment' approach committed to in the EGD.

Sustainable Development Goals

The proposal has positive effects on the achievement of Sustainable Development (SDG) goals 6 (water), 12 (consumption and production) and 14 (oceans). As regards SDG 6, lower levels of pollution of drinking water sources are expected, a better chemical quality of surface and groundwater, and the proportion of water bodies with good ambient quality should increase, over time, as Member States will take and implement measures to reduce concentrations of pollutants. In relation to SDG 12, it is expected that the measures taken, both at EU level (for instance through the Sustainble Production Initiative or the forthcoming ban on all-but-essential uses of PFAS) and at Member State level will lead to the use of different, less toxic ingredients in products. Finally for SDG 14 it is important to note the directe effect on transitional water bodies and marine water bodies (1 nautical mile from the coast) that are covered by the WFD. In addition the freshwater that reaches seas and oceans through the rivers will gradually contain lower concentrations of the substances regulated through this initiative.

Climate consistency check and Energy Efficiency First Principle

The proposal is consistent with climate neutrality objective set out in the European Climate Law and the Union 2030 and 2050 targets. The most significant impact on climate mitigation efforts of the proposal is through the removal of substances in waste water treatment plants, which are energy intensive processes. Depending on the measures taken by Member States to reduce or phase out presence of substances in water, impact should be positive (when substances are addressed at source and therefore do not require removal from waste water), neutral (in case substances are replaced by substitutes that require the same removal effort in waste water treatment plants) or negative if Member States decide to predominantly rely on waste water treatment. However the latter scenario is unlikely as at-source intervention is generally cheaper and more effective. Moreover, the revision of the Urban Waste Water Treatment Directive requires climate neutrality for waste water treatment plans by 2040, excluding net negative effects of this proposal through increased treatment.

The Energy Efficiency First Principle, as put forward in the recast of the Energy Efficiency Directive, is considered in this proposal. Along the same lines as for climate consistency check, policy options can be expected, in combination with the revision of the Urban Waste Water Treatment Directive, to be at least neutral in terms of energy efficiency.

The Regulatory Scrutiny Board gave a positive opinion with reservations on 24 June 2022[32].

- **Fundamental rights**

The proposal has no implications for the protection of fundamental rights.

4. BUDGETARY IMPLICATIONS

The annexed financial statement relates to the zero pollution package, including the current proposal, the proposal for revision of the Urban Waste Water Treatment Directive and the Air Quality Directive. It shows the budgetary implications and the human and administrative resources required. The proposal will have budgetary implications for the Commission, the European Environment Agency (EEA) and the European Chemicals Agency (ECHA) in terms of human and administrative resources required.

The Commission's implementation and enforcement workload will slightly increase as a result of listing more substances and seeking to harmonise quality standards and threshold values for substances of national concern.

The Commission will furthermore benefit from the re-assignment of scientific tasks to the ECHA, which will consistently assist the Commission with the prioritisation of substances and mixtures, the setting of quality standards and threshold values, the identification of appropriate analytical methods and the assessment of relevant monitoring data. The scientific support from ECHA would require eleven full-time-equivalent staff.

The EEA will have an increased workload as a result of the increased and more frequent reporting required of Member States, and the slight increase in the number of substances listed, requiring in total four additional full-time-equivalent staff on top of the three and a half staff full-time equivalent staff already involved.

5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The River Basin Management Plans reported every six years to the Commission and the voluntary electronic reporting under the Common Implementation Strategy to the EEA will remain the key source of information to verify effective implementation of the proposal, in particular of compliance with new or revised quality standards for surface and groundwater.

The improved watch list mechanisms, which oblige Member States to monitor substances of emerging concern, will make it possible for the Commission, with the assistance of ECHA and the Member States, to identify the need for further or stricter quality standards. The more regular reporting of also actual monitoring data, and its analysis by the EEA, will enable the

[32] Ares(2022)4634431) 24 June 2022

EU Institutions, Member States and the public at large, to obtain a more accurate and up-to-date picture of the status of surface and groundwater bodies in the EU.

Thanks to synergies with the improved E-PRTR, due to be replaced by the new online electronic database, i.e. the 'Industrial Emissions Portal', the inventories of emissions, currently only reported every six years, will be replaced by a far more regular and coherent overview of total releases of pollutants per sector. This will enable the Member States to focus implementation efforts.

The Annexes of both Surface and Groundwater Directives will be reviewed regularly in the light of scientific and technical progress. The more flexible procedures for adopting quality standards for substances of concern, in combination with the central roles given to the EEA, for the analysis of more regular monitoring data, and to the ECHA, for continuous scientific support, will allow to better evaluate the accuracy of current standards and the need for new ones, to swiftly address substances of emerging concern. The involvement of both Agencies complies with the objective under the Chemicals Strategy to move towards 'one substance, one assessment' approach resulting in more efficient, effective and coherent safety assessments of chemicals across all relevant EU legislation, thereby also triggering more effective and cross-cutting implementation measures and proposals for new standards.

The analysis of more regular monitoring and status data will effectively feed into the broader Zero Pollution Monitoring and Outlook framework, to be published every 2 years from 2022. This will help evaluate the impact of reduced pollution of water bodies as a result of a wider set of harmonised quality standards being implemented across the EU.

- **Explanatory documents**

The proposal requires explanatory documents, because these are key for assessing conformity and verify that the transposing texts reflect the letter and the spirit of the Directive. This is important and necessary, as the proposal covers amendments to three directives, possibly transposed in different pieces of national legislation. Also, since the proposal primarily aims at amending existing or introducing new quality standards, a careful verification can be facilitated through explanatory documents.

- **Detailed explanation of the specific provisions of the proposal**

(1) Amendments to Directive 2000/60/EC

Articles 1, **7(2)**, **11(3)(k)**, **4(1)** and **Annexes V (points 1.4.3, 2.3.2 and 2.4.5)** and **VII (point 7.7)** are amended to take into account the proposed deletion of Articles 16 and 17 (see below).

Article 2 on definitions is amended to update the definitions of 'Good surface water chemical status', 'Priority Substances' and 'Environmental quality standards' and introduce the definitions of 'Priority hazardous substances' and 'River basin specific pollutants'. These changes are necessary to: 1) take account of the proposal to replace the current co-decision procedure for adopting EQS with delegated acts; 2) widen the scope of the notion of 'chemical status' to cover also the 'river basin specific pollutants', hitherto part of the definition of 'ecological status' under Annex V; 3) take into account the possible future effect-based trigger values as part of the definition of 'environmental quality standards'.

Article 3 on administrative coordination within river basin districts is amended to introduce an obligation, in case of exceptional circumstances of natural origin or force majeure, in particular extreme floods, prolonged droughts, or significant pollution incidents, for

competent authorities of all possibly affected water bodies including in downstream Member States, to alert each other and cooperate to minimize damage and address consequences.

Next to the above-mentioned adjustment to take account of the deletion of Article 16, **Article 4** on objectives is amended to ensure that its paragraph (a)(iv) includes an explicit obligation for Member States to progressively reduce pollution from river basin specific pollutants too, not just from priority substances.

Article 8, paragraph 3 on methods for analysing and monitoring the water status is amended to align the comitology procedure to the Lisbon Treaty by replacing the former 'regulatory procedure with scrutiny' with the 'examination procedure' set out in Article 21. In addition, a new empowerment is introduced in the same paragraph to allow for the adoption of implementing acts to set further details as regards the new obligations to make available to the EEA monitoring data, as well as to make status data available on a more regular basis, in accordance with n**ew paragraphs 4 and 5**. These amendments are fully in line with existing obligations under Directive 2007/2/EC (Inspire), which obliges Member States to make publicly available spatial data sets, including on the location and operation of environmental monitoring facilities, related emission measurements and the state of the environmental media (air, water, soil). To reduce administrative burden, data dissemination should be further streamlined too, in accordance with the EU Digital Strategy, Directive (EU) 2019/1024 on open data and the 'one substance one assessment' approach under the Sustainable Chemicals Strategy.

Article 10 on the combined approach for point and diffuse sources is amended to update the references to various directives addressing point source and diffuse pollution (further to their repeal and replacement).

Article 12 on issues that cannot be dealt with by one Member State is modified to strengthen and formalise the procedure for cooperation between Member States.

Article 15(3) on the three yearly, interim reporting of progress on programmes of measures is deleted, as the resulting administrative burden is considered disproportionate compared to the gains in terms of better implementation control and steering.

Articles 16 and 17 on the procedure by which the Commission was required to establish legislative proposals for listing and identifying EQS for surface water bodies and groundwater bodies are deleted, as they have become obsolete.

Article 18(2)(e) is amended to take into account the proposed deletion of Article 16, whereas **Article 18(4)** is amended to take into account the proposed deletion of Article 15(3).

Article 20 on technical adaptations is amended to: 1) replace with the delegated acts procedure the current regulatory procedure with scrutiny for modifying Annexes I and III; 2) replace with the examination procedure the current regulatory procedure for adopting guidelines on the implementation of Annexes II and V and for establishing formats for the transmission and processing of data.

The **new Article 20a** introduces the provisions related to the procedure for adopting delegated acts, in accordance with the Lisbon Treaty.

The amendment to **Article 21** on the Committee procedure aims at replacing the reference to the former 'comitology decision' with the currently applicable 'comitology regulation'.

Article 22 on repeals and transitional provisions is amended to update the references taking into account the proposed changes to relevant Annexes to Directives 2000/60/EC and 2008/105/EC.

Next to the above-mentioned adjustments to take account of the deletion of Article 16, **Annex V** is amended to: 1) take out the river basin specific pollutants from the definitions of ecological status and include them in the definition of chemical status, with a view to ensure that the monitoring of both priority substances and river basin specific pollutants is carried out not only where these pollutants are discharged into water, but also where they are deposited through air; 2) grant powers to the Commission to adopt the results of the intercalibration exercise by delegated acts; 3) enable Member States to make use of new monitoring techniques, including earth observation and remote sensing.

Annex VIII on an indicative list of main pollutants is amended to include micro-plastics and antimicrobial resistance genes.

Annex X is deleted, as the list contained therein is replaced by that in Part A of Annex I of Directive 2008/105/EC.

(2) Amendments to the Groundwater Directive 2006/118/EC (GWD)

The **title** is amended to clarify that this Directive only concerns the pollution and not the quantitative status of groundwaters.

Article 1 on the Directive's purpose is amended to take out the reference to Article 17 of the WFD, given that it formed the basis for adopting the GWD itself and is thus obsolete.

Article 2 on the definitions is amended to include the definition of threshold values set at EU level, next to those set at Member State level.

Article 3 on criteria for assessing groundwater chemical status is amended to take into account the new definition of 'threshold values set at EU level'.

Article 4 on the procedure for assessing groundwater chemical status is amended for the same reason as Article 3.

A **new Article 6a** is inserted to make the 'Watch List Mechanism' for groundwater bodies mandatory, consistently with the provision set by Article 8b of the EQSD. This mechanism establishes a three yearly process whereby the Commission, with input from ECHA and in close consultation with Member States, prioritises substances for monitoring in groundwater. The resulting information will feed into the six yearly revision of quality standards for inclusion in Annex I. The provision also includes an obligation for ECHA to make the scientific reports prepared in relation to the Watch List publicly available.

Article 8 on technical adaptations is amended to: 1) replace the procedure for implementing acts with that for delegated acts for adapting to scientific and technical progress Parts A and C of Annex II as well as Annexes III and IV; 2) grant the Commission delegated powers for listing new groundwater pollutants in Annex I and for establishing new EU-wide quality standards for these, as well as for listing, in part B of Annex II, pollutants for which Member States have to consider setting national threshold values; 3) grant the Commission delegated powers to set, where necessary and even for pollutants or groups of pollutants which are not of EU-wide concern, threshold values at EU level, to enhance the level of human health and environmental protection and achieve a more harmonised implementation; 4) clarify the central role of ECHA in this framework, and the obligation for ECHA to make scientific reports in relation to potential amendments publicly available.

A **new Article 8a** is inserted to introduce the provisions related to the procedure for the adoption of delegated acts, in accordance with the Lisbon Treaty.

Article 9 on the Committee procedure is amended to replace the former 'comitology decision' with the more recent 'comitology regulation'.

Article 10 on the review of Annexes I and II by means of the co-decision procedure is deleted, to take account of the new procedure for delegated acts set out in Articles 8 and 8a.

Annex I on EU wide quality standards for groundwater pollutants is amended to insert new groundwater pollutants and related quality standards for some per- and poly-fluorinated alkyl substances (PFAS), pharmaceuticals and non-relevant metabolites of pesticides (nrMs).

Annex II on national threshold values for groundwater pollutants is amended to: 1) insert the pharmaceutical substance primidone in the list of synthetic substances for which Member States shall consider setting national threshold values; 2) clarify that its Parts B and C only relate to the mechanism for setting thresholds at national level; 3) ensure that Member States inform ECHA so as to enable the latter to make that information publicly available and 4) add a new Part D to include harmonised threshold values for the group of substances 'sum of Trichloroethylene and Tetrachloroethylene'.

Annex III on the assessment of groundwater chemical status **and Annex IV** on the identification and reversal of significant and sustained upward trends are amended to take into account the new concept of 'threshold values set at EU level'.

(3) Amendments to the Environmental Quality Standards Directive 2008/105/EC (EQSD)

The title is amended to clarify that the Directive concerns the pollution of surface waters.

Article 3 on environmental quality standards is amended to clarify the dates of application for the new and revised EQS. The obligations for monitoring in biota in paragraph 2 and for long-term trend assessments in paragraph 6 are simplified too, by clarifying their scope in the Annex. Its paragraph 7 is deleted to take into into account the proposed replacement of the co-decision procedure with that for delegated acts for changing the list of priority substances.

Article 5 on inventories of emissions is amended to simplify the reporting obligation and streamline it, where possible, with that under the EU legislation to address emissions from large industrial installations (currently under revision) and to allow for simplified reporting to the Industrial Emissions Portal, with details to be set via a future implementing act. Reporting in the framework of the River Basin Management Plans will therefore only continue to apply to diffuse emissions.

Article 7a on the coordination between various pieces of EU chemicals law is amended to include a reference to EU pharmaceuticals law, and take into into account the proposed replacement of the co-decision procedure with that for delegated acts for updating or setting new EQS.

Article 8 is amended to: 1) grant delegated powers to the European Commission to revise every six years Annex I in order to consider listing new priority substances and related EQS, based on input by ECHA; 2) grant delegated powers to the Commission to regularly revise the list of categories of river basin specific pollutants which are now included in Part B of the new Annex II (this Annex II replaces for this purpose point 1.2.6 and Annex VIII of the WFD, which will be modified accordingly to take out the river basin specific pollutants from the definition of ecological status and make them part of the regime applicable to chemical status); 3) grant delegated powers to the Commission to adopt, where necessary, EU-wide EQS for river basin specific pollutants and list these in Part C of Annex II (the proposal lists in that Part C four priority substances which were previously included in Annex I but have been 'de-listed' because no longer considered to be of EU wide concern); 4) clarify the central role to be played by the ECHA in devising EQS, in close cooperation with Member States and stakeholders, and its obligation to make scientific reports related to the amendment of the Annexes publicly available.

Article 8a is amended to: 1) simplify the way in which Member States may present chemical status for ubiquitous PBTs separately from the overall chemical status; 2) allow Member States to carry out less intensive monitoring for some substances; 3) require Member States to carry out effect-based monitoring to assess the presence of estrogenic hormones in water bodies, in view of possible future setting of effect-based trigger values.

Article 8b is amended to: 1) improve the monitoring and review cycle of the Watch List mechanism, setting a three year instead of the current two year cycle. This will give more time to process the data before revising the list, jointly with the proposed extension of the monitoring cycle from 12 to 24 months to allow better consideration of different frequencies for pollutants with seasonal emission patterns (e.g. pesticides/biocides); 2) allow including micro-plastics and selected antimicrobial resistance genes in the next Watch List, subject to suitable monitoring and analysis methods being identified, with input from ECHA.

The **new Article 8d** includes the obligation for Member States to set EQS for the river basin specific pollutants listed in Part A of the new Annex II. This replaces the obligation currently formulated in point 1.2.6 of Annex V to the WFD, in tune with the proposal to secure that river basin specific pollutants become part of assessing the chemical, rather than the ecological, status of surface water bodies. The provision also aims at ensuring that, where EU-wide EQS have been established for certain river basin specific pollutants, these shall take precedence over the EQS established at national level. Finally the amendment obliges Member States to inform ECHA to enable the latter to publicize any intention in respect of listing pollutants and/or setting EQS, to increase transparency and synergies.

Article 10 which clarifies that Annex X to the WFD is to be replaced by the text set out in Annex II to Directive 2008/105/EC, is deleted because Annex II to Directive 2008/105/EC did not exist and because Annex X is deleted further to the inclusion, in Directive 2008/105/EC, of a procedure for delegated acts for adapting the list of priority substances and setting corresponding EQS.

The title of Annex I is modified to take out the notion of 'other pollutants' which has become obsolete, as it referred to substances that were covered by other legislation prior to the adoption of the EQSD; there is no longer a need to distinguish between priority substances and those 'other pollutants'. Part A, which lists the substances and their EQS, is replaced with a new Annex listing now additional 23 substances to the list of priority substances: pharmaceuticals, industrial substances, pesticides and metals. The Annex also indicates the substances that are hazardous, those that are ubiquitous PBTs as well as those that require long-term trend assessment.

A **new Annex II** is inserted, setting out in Part A an indicative list of river basin specific pollutants for which Member States must consider setting EQS and apply these where they are causing concern. Part B includes the general principles and refers to guidance for doing so, whereas Part C includes a repository of harmonised EQS for river basin specific pollutants. The latter will be adapted via future delegated acts through which the Commission will establish harmonised EQS for certain other river basin specific pollutants where this would prove necessary to ensure a sufficient and harmonised protection of the environment, even for pollutants which are not or not yet of EU-wide concern.

2022/0344 (COD)

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 Committee[1],

Having regard to the opinion of the Committee of the Regions[2],

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.

(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 Deal[3] 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 Sustainability[4] and the Zero

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1 OJ C , , p. .

2 OJ C , , p. .

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.

Pollution Action Plan[5] specifically address pollution aspects of the European Green Deal. Other particularly relevant and complementary policies include the 2018 EU Plastics Strategy[6], the 2021 Pharmaceuticals Strategy for Europe[7], the Biodiversity Strategy[8], the Farm to Fork Strategy[9], the EU Soil Strategy for 2030[10], the EU's Digital Strategy[11] and the EU's Data Strategy[12].

(4) Directive 2000/60/EC of the European Parliament and of the Council[13] 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 Council[14] 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 Council[15]. Directive 2006/118/EC of the European Parliament and of the Council[16] 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

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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.

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).

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.

(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 Council[17], Regulation (EC) No 1107/2009 of the European Parliament and of the Council[18], Regulation (EU) No 528/2012 of the European Parliament and of the Council[19], Regulation (EU) 2019/6 of the European Parliament and of the Council[20], Directive 2001/83/EC of the European Parliament and of the Council[21], Directive

[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).

2009/128/EC of the European Parliament and of the Council[22], Directive 2010/75/EU of the European Parliament and of the Council[23] and Council Directive 91/271/EEC[24].

(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 Council[25].

(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

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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).

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).

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 legislation[26] (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 Commisison 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.

(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

[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.

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 Council[27] as well as under Directive (EU) 2019/1024 of the European Parliament and of the Council[28]. Those spatial data themes include the location and operation of environmental monitoring facilities, related measurements of emissions and the state of environmental media.

(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 Council[29], will make the inventory reporting in accordance with Article 5 of Directive

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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).

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).

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.

(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 ensuringuniform 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 Council[30].

[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.

(32) Considering the increases in unforeseeable weather events, in particular extreme floods and prolonged droughts, and in significant pollution incidentsresulting 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. 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 Council[31].

(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,

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[+] 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

[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, the fourth indent is replaced by the following:

'— achieving the objectives of relevant international agreements, including those which aim to prevent and eliminate pollution of the marine environment, by Union action to cease or phase out discharges, emissions and losses of priority hazardous substances, with the ultimate aim of achieving concentrations in the marine environment near background values for naturally occurring substances and close to zero for man-made synthetic substances.';

(2) Article 2 is amended as follows:

(a) point (24) is replaced by the following:

'(24) 'Good surface water chemical status' means the chemical status required to meet the environmental objectives for surface waters set out in Article 4(1), 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 of Member States.';

(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, 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.';

(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 effect-based method.';

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* 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 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, 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.';

(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 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.';

(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, 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*.

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* 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 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 year 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****.

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* Directive 2003/4/EC of the European Parliament and of the Council of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC (OJ L 41, 14.2.2003, p. 26).

** 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;

(b) relevant emission limit values;

(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 difuse pollution.

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* 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) 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, 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.';

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

(12) Articles 16 and 17 are deleted;

(13) Article 18 is amended as follows:

(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;';

(b) 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.

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* 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;';

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

(21) Annex X 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 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.';

(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, 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) 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. If relevant threshold values are established or amended at Union level, Member States shall adapt the list of threshold values applied in their territories to those values. ';

(5) 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';

(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. 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 suitable monitoring methods for micro-plastics and selected antimicrobial resistance genes have been identified, 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;

(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********;

(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 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.

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* 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).

(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.';

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* 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 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 point (iii) 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 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 and of achieving good surface water chemical status in relation to those substances.';

(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:

(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, Member States shall 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.

The first subparagraph shall not apply to emissions, discharges and losses reported to the Commission electronically in accordance with Regulation (EU) .../… of the European Parliament and of the Council[+]. ’;

(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 values in the updated inventories shall be the year before the year in which the analyses referred to in the first subparagraph are to be completed.

[+] OP: Please insert in the text the number of the Regulation contained in document COM (2022) 157
++ OP: Please insert in the text the number of the Regulation contained in document COM (2022) 157
+++ OP: Please insert in the text the number of the Regulation contained in document COM (2022) 157

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 referred to in the first subparagraph.

For point source emissions not reported in accordance with Regulation (EU) ../… +++, 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.

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* 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;

(e) 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].

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* Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the prevention and control of groundwater pollution (OJ L 372, 27.12.2006, p. 19).

** 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 stricter EQS has been set in the latest review in accordance with Article 8.

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 shall, from … [OP please insert the date = the first day of the month following 18 months after the 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 7-Beta estradiol (E2), Estrone (E1) and Alpha-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 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.

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* 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 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. Those monitoring matrices and methods shall not entail excessive costs for the competent authorities. The substances to be included in the watch list shall be selected from amongst the substances for which the information available indicates that they 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 suitable monitoring methods for micro-plastics and selected antimicrobial resistance genes have been identified, 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) 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, except for substances that are sensitive to climatic or seasonal variabilities, 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.’

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* 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	*For the Council*
The President	*The President*

LEGISLATIVE FINANCIAL STATEMENT for the ZERO POLLUTION PACKAGE

FRAMEWORK OF THE PROPOSAL/INITIATIVE

Title of the proposal/initiative

Zero pollution package:

This financial legislative statement includes the following proposals:

- **Integrated water management**: 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;

- **Review of the urban wastewater treatment directive**: Proposal for a Directive of the European Parliament and of the Council on urban waste water treatment (Recast of Directive 91271/EEC);

- **Revision of EU ambient air quality legislation**: Proposal for a Directive of the European Parliament and of the Council amending Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air and Directive 2008/50/EC on ambient air quality and cleaner air for Europe;

Policy area(s) concerned

09 - Environment & Climate Change

The proposal/initiative relates to:

☒ **a new action**

☐ **a new action following a pilot project/preparatory action**[1]

☒ **the extension of an existing action**

☐ **a merger or redirection of one or more actions towards another/a new action**

Objective(s)

General objectives

1) Increase the protection of EU citizens and natural ecosystems in line with the Biodiversity Strategy and the Zero Pollution ambition embedded in the European Green Deal;

2) Increase the effectiveness and reduce the administrative burden of the legislation, hence facilitating a quicker response to emerging risks;

3) Protecting the environment and public health from the adverse effects of hazardous chemicals and air pollution.

Specific objectives

Integrated Water Management:

[1] As referred to in Article 58(2)(a) or (b) of the Financial Regulation.

1) Update the lists of pollutants affecting surface and groundwater by adding and removing substances and revising the quality standards for some already-listed substances;

2) Improve the transparency, access to, and re-use of data, thereby facilitating implementation in the Member States, as well as reducing the administrative burden and improving the efficiency and coherence of the wider legal framework dealing with chemicals;

3) Provide a legal framework that can be more swiftly and easily aligned with scientific findings and more promptly respond to contaminants of emerging concern;

4) Improve the monitoring of chemical mixtures to better assess combination effects, and the monitoring of seasonal variations in pollutant concentrations;

5) Harmonise how pollutants in surface and groundwater are addressed across the EU where to date no quality standards or threshold values have been established at EU-level;

6) Create the conditions for increasing water reuse and better managing sludge and waste, in close synergy with the new Water Reuse Regulation, the Sewage Sludge Directive and the EU waste acquis;

Urban wastewater treatment directive:

1) Contribute to identifying and then preventing pollution reaching wastewater treatment plants;

2) Further reduce nutrient (N and P), micro-pollutants and micro-plastics pollution as well as 'remaining sources' of pollution (storm water overflows, urban runoff, smaller agglomerations and IAS);

3) Move towards energy neutrality of wastewater sector;

4) Create the conditions for increasing water reuse and better managing sludge and waste, in close synergy with the new Water Reuse Regulation, the Sewage Sludge Directive and the EU waste acquis;

5) Improve access to sanitation particularly for vulnerable and marginalised people;

6) Strengthen, modernise, simplify and adapt monitoring and reporting obligations.

Air quality legislation:

1)Revise EU air quality standards to align them more closely with WHO recommendations, to the extent possible take into account the latest scientific advice, feasibility, costs, and benefits – and ensure legislation can respond in an appropriate and effective manner to future changes in underlying evidence base;

2) Assure air quality plans are an effective means of identifying, planning and mitigating an exceedance situation – and include clearer provisions on stakeholder participation, access to justice, penalties and compensation linked to clean air in EU legislation;

3) Further strengthen provisions on air quality monitoring, air quality modelling and air quality plans to help local authorities achieve cleaner air;

4) Provide information to citizens around health impacts of air pollution issues;

5) Simplify existing provisions where feasible to improve the effectiveness and efficiency of air quality management.

Expected result(s) and impact

Integrated Water Management:

The proposed Directive will lead specifically to an update of the lists of polluting groundwater and surface water substances. It will also address several of the shortcomings related to chemicals in water highlighted by the 2019 Fitness Check of Water Legislation.

It will lead to lower levels of pollution in Europe's freshwater, coastal water, transitional water and groundwater.

It will provide more up to date and relevant information on the state of water, more reliable information on emerging pollutants in groundwater, the ability to ensure regular updates of the lists of substances on the basis of streamlined monitoring information and integrated science based knowledge, and it will result in monitoring of pollution resulting from micro-plastics and anti microbial resistance genes.

It will also create the conditions for increasing water reuse and better managing sludge and waste, in close synergy with the new Water Reuse Regulation, the Sewage Sludge Directive and the EU waste acquis;

Urban wastewater treatment directive:

The quality of the EU rivers, lakes and seas is expected to be preserved and improved. Emissions of pollutants from remaining urban sources (including small agglomerations, polluted rain waters, smaller decentralised facilities) as well as emissions of nitrogen and phosphorus will further decrease, with more stringent limit values where eutrophication remain an issue.

New investments will also be achieved to reduce the pollution from micro-pollutants. These investments are expected to be covered by a new system of extended producer responsibility making those placing products generating micro-pollutants financially responsible for the additional treatment needed to preserve the quality of the EU receiving waters.

The sector is expected to become energy neutral (meaning that the fossil energy used would be compensated by the renewable energy produced by the sector).

The revision will be a crucial driver for the development of a globally competitive EU water industry. Further modernising the EU standards, for instance with new requirements on micro-pollutants or energy use would further stimulate innovation and ultimately economies of scale.

Air quality legislation:

The proposed revised Directive contributes to the zero pollution ambition embedded in the European Green Deal, to align EU air quality standards more closely with

recommendations by the World Health Organization, and to a sustained improvement of air quality across the European Union.

The proposed revised Directive will also strengthen provisions on monitoring, modelling and air quality plans to help local authorities achieve cleaner air. Adressing these shortcomings will result in lower levels and exposure to air pollution in ambient air, improved governance and enforcement of air quality plan, better monitoring and modelling by improving its reliability and comparability and by expanding the pollutants to be monitored, improved access to air quality data and information with a particular focus on enhancing the use of digital tools and the possibility to keep EU air quality standards under regular review.

EU citizens will see health benefits from improved air quality. Businesses, economic actors including in agriculture and more generally employers will benefit from the reduction of negative health and (though less significant) non-health impacts associated with poor air quality.

Meanwhile, public authorities will be affected by revised EU air quality standards and strengthened provisions for air quality monitoring largely depending on their current air quality situation: the revised rules may imply an increase in the competent authorities' administrative burden for improved air quality monitoring.

Indicators of performance

Integrated Water Management:

The increase of the number of substances monitored under the Directive, as a result of the introduction of a mandatory watch list for the purpose of monitoring groundwater pollutants of concern, as well as the increased frequency of reporting of monitoring and status data, will allow for a more granular tracking of progress and achievements.

Core indicators of success will include the number of Member States for which complete monitoring time series for relevant substances are available (in particular for groundwater substances), the number of substances or pollutants for which good status is achieved, as well as the degree of harmonisation of threshold values set by Member States for River Basins Specific Pollutants.

The inclusion of micro-plastics and antimicrobial resistance genes in the watch lists, subject to identifying appropriate monitoring and assessment methodologies guidelines, will allow for the monitoring of progress in dealing with these emerging types of pollution and subsequent identification of quality standards as appropriate. Moreover, the procedures are simplified to ensure a faster reaction on the emergence of new water pollution issues.

Urban wastewater treatment directive:

- Compliance rate and distance to target per MS and per treatment level will provide an excellent overview on the implementation of the Directive;
- Number of facilities equipped with additional treatment for N/P and micro-pollutants; and the related reduction of N/P releases and toxic load at MS and EU levels;

- Energy use by MS and the related GHG emissions;
- Number of agglomerations covered by integrated management plans for storm-water overflows and urban run-off and their compliance with the EU objective;
- Measures taken by MS to improve access to sanitation and better control IAS and a summary of the main health indicators surveyed in the MS;
- Other data notably on the water quality of the receiving waters (rivers, lakes and seas) coming from the Water and the Marine Framework Directives will be used to concretely measure the impacts of the UWWTD. More details on possible parameters to be reported for assessing compliance and measure the success of the Directive are provided in Annex 10 of the IA;
- Inclusion of wastewater surveillance through monitoring allowing defining new indicators on relevant scientific, analytical and epidemiological data.

Air quality legislation:

EU Member States have established an air quality monitoring network with some 16 000 sampling points for specific pollutants (often grouped at more than 4 000 monitoring locations) based on common criteria defined by the current Ambient Air Quality Directives. The modification suggested to the assessment regimes, monitoring and modelling of air quality will provide additional comparable and objective information that allows to regularly monitor and evaluate the development of air quality across the EU, including at lower pollution levels, which increasingly are seen as having health impacts also. It will also require Member States to increase the monitoring to pollutants of emerging concern, to keep under observation several air pollutants for which to date no harmonised EU-wide air quality monitoring exist.

Air quality data reported by Member States is made available to the public as a digital service by the European Environment Agency, including via the European Air Quality Index based on near-real time data. The availability of this data, and more precise requirements for information to be included in air quality plans, will also allow to keep the effectiveness of specific (often local) air quality measures under constant review. Clearer specific requirements on public information will make it easier and faster for citizens to access the outcomes of monitoring and evaluation of air quality data and related policy action.

This will allow for a more granular tracking of progress and achievements, by which the core indicator of success is the achievement by all Member States of the established EU air quality standards, including progress towards reaching these.

Grounds for the proposals / initiatives

Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

Integrated Water Management:

The EEA will be the 'one stop shop' for processing and making available on a more regular basis (then currently the case) all monitoring and water status data coming from the Member States and this information will feed into the tasks of ECHA, which will be the 'one stop shop' for the provision of scientific support essential for

the further development of standards to protect the aquatic environment. Some new tasks are resulting from the need to better and more systematically address groundwater pollution and to ensure more harmonised and better protection in respect of pollutants not of EU wide concern.

In more detail, it will require:

- One-off tasks linked to the setting up, by the EEA, of the system to directly access data generated under this proposal from Member States and to the identification or development, by ECHA, of several guidance documents and methodologies for monitoring and analysis of micro plastics and antimicrobial resistance genes; as well as the inclusion of national environmental quality standards for pollutants at River Basin District level in a repository of health based limit values managed by ECHA;

- Recurrent tasks, linked to the increased frequency and digitalisation / automated delivery mechanism of monitoring and status data to the EEA, the maintenance of the repository of standards for pollutants at River Basin District level by ECHA and the continuous scientific support by ECHA in the framework of the development/adaptation, every three years, of the surface and groundwater watch lists (for the purpose of monitoring and assessing pollutants of concern); and of the development/adaptation, every six years, of lists of substances/pollutants and corresponding EU wide EQS, every six years, for both surface water and groundwater, as well as for the identification, every six years, of EU wide standards for (surface and groundwater) pollutants currently regulated at River Basin District level where so required for the purpose of environmental protection and harmonised implementation.

Timeline

Q1 2023 – Q4 2023: inter institutional negotiation of the proposal

Q1/2 2024: entry into force.

Q2 2024 – Q4 2025: Development of the system to directly access data generated under this proposal from Member States, led by EEA and to be set out in an implementing act

Q2 2024 – Q4 2025: Development of the technical specifications (format, granularity, frequency) for the purpose of emission reporting (point source emissions not covered by the Regulation of the Industrial Emissions Portal, as well as diffuse emissions) to the EEA (Industrial Emissions Portal), led by the EEA and to be adopted by implementing act

Q1 2024 – Q4 2025: Identification and/or development of guidance documents and methodologies for measuring and analysing concentrations of micro-plastics and antimicrobial resistance genes in surface and groundwater bodies (to be identified/listed in the implementing act adopting the Watch lists), led by ECHA

Q2 2024 – Q3 2027: Development of 6th Freshwater Watch list and 1st Groundwater Watch list, and analyse and report on 5th Freshwater Watch list, led by ECHA and to be adopted by implementing act.

Q1 2026 onwards: annual retrieval of chemical pollution data by EEA and scientific support by ECHA to Watch list mechanism and to the preparation of delegated acts to adopt new EU wide environmental quality standards for additional substances (both for groundwater and surface water)

Q1 2024 onwards: scientific support by ECHA for the review and update, every six years, of the lists of priority substances and corresponding EQS in Annex I to Directive 2008/105/EC; of pollutants and corresponding EU wide quality standards in Annex I to Directive 2006/118/EC; of the lists of pollutants in part A of Annex II to Directive 2008/105/EC and possible development of EU wide standards for (some) pollutants on that list, as well as of the list of pollutants in Annex II to Directive 2006/118/EC; all lists and EQS to be set out in delegated acts.

Urban wastewater treatment directive:

The implementation planning for the main actions included in the preferred option are summarised in the table below:

	2025	2030	2035	2040
SWOs and Urban Runoff (rain waters)	Monitoring in place	Integrated Plans for agglo. > 100.k p.e. + areas at risk identified	Integrated Plans in place for agglo. at risk between 10 and 100k p.e.	Indicative EU target in force for all agglomerations > 10.000 p.e.
Individual Appropriate Systems	Regular inspection in all MS + Reporting for MS with high IAS	EU standards for IAS		
Small scale Agglomerations	New thresholds of 1.000 p.e.	All agglo.> 1.000 p.e. compliant		
Nitrogen and Phosphorus	Identification of areas at risk (agglomerations 10 to 100k p.e.)	Interim target for N/P removal in facilities > 100.000 p.e. + New standards	N/P removal in all facilities above 100k p.e. + Interim target for areas at risk	N/P removal in place in all areas at risk (between 10 and 100k p.e.)
Micro-pollutants	Setting up Extended Producer Responsibility Schemes	Areas at risk identified (10 to 100k p.e.) + Interim target for facilities above 100.k p.e.	All facilities > 100k p.e. equipped + interim targets for areas 'at risk'	All facilities at risk equipped with advanced treatment
Energy	Energy audits for facilities above 100k p.e.	Audits for all facilities above 10k p.e. Interim target	Interim target for energy neutrality	Energy neutrality met and related GHG reduction met

By 2025 additional monitoring activities would be in place: this concerns non-domestic releases, health related parameters, key performance operator indicators together with actions to improve transparency.

National and EU databases including all the elements necessary to check compliance will be in place, and 'vulnerable and marginalised people' will be identified together with actions to improve access to sanitation.

This financial statement will secure funding for the EEA to provide a number of new activities foreseen in the UWWTD proposal.

These activities are of a different nature:

- **Create and adapt the databases referred to in article 20 on monitoring of the legislative proposal**;

- **Allocate an expert on UWWTD to follow the file and make reports when needed**

- One-off activities linked to preparation and negotiation of delegated/implemented acts

- Tasks related to the data treatment and analysis.

Timeline:

Q4 2022 - Q4 2023: negotiating the proposal. Due to a high ambitious proposal and the introduction of an Extended Producer Responsibility scheme, negotiations may require more resources and time than average

Q2 2024: kicking-off and working out.

Air quality legislation:

Tasks related to the reporting and exchange of information of air quality data. Additional efforts are needed to expand the infrastructure for and support the continuous reporting to also include air pollutants of emerging concerns as well as average exposure reduction obligations covering pollutants $PM_{2.5}$ and NO_2, to further expand the reporting infrastructure for up-to-date information from additional sampling points and modelling data as well as for air quality plans. (EEA support).

Tasks related to the assessment of ambient air quality: As the scientific understanding of air quality challenges, including the adverse health impacts at low concentration levels and by additional air pollutants of emerging concerns grows, additional support is needed to ensure policy action is underpinned by sound assessments of air quality data reported (including additional data that strengthened air quality monitoring and modelling will deliver). Furthermore, assessment of the links between air pollution, climate change, human and ecosystem health will need to be strengthened. (EEA support).

Tasks related to the scientific and technical support to air quality monitoring and modelling: As strengthened air quality monitoring and modelling is implemented, continued support will be required. Such support, fully complementary to work on air quality reporting and air quality assessments, focusses on the technical aspects of monitoring and modelling by competent authorities and includes the management and chairing of two key expert networks: the network of the national reference laboratories (AQUILA) and the forum of air quality modelling in Europe (FAIRMODE). The JRC has over the past decade supported these aspects of implementation of clean air legislation in Europe - including via a series of Administrative Arrangements. Note that JRC's input is also essential for the development of guidance documents that support the implementation of the revised Directives, and for the establishing of

standards related to air quality monitoring and modelling in collaboration with the European Committee for Standardization (CEN).

Timeline:

Q1 2023 to Q2 2024 (est.): inter institutional negotiation of the proposal

Q2 2024 (est.): entry into force

Q1 2023 to Q4 2025: development of additional guidance documents in the areas of monitoring, modelling and air quality plans (**DG ENV** with **JRC**)

Q1 2023 to Q4 2025: development of standards in close cooperation with the European Committee for Standardization in the areas of monitoring, indicative measurements and modelling quality objectives (**JRC** with **DG ENV**)

Q3 2024 onwards: regular assessments by the **EEA** on progress in meeting the average exposure reduction obligations covering pollutants $PM_{2.5}$ and NO_2.

Q3 2024 onwards: regular assessment by the **EEA** of air pollutants of emerging concern, and on the links between air pollution, climate change, and health

Q3 2024 to Q4 2025: revision of the Commission's implementing rules as regards the reciprocal exchange of information and reporting on ambient air (**DG ENV**)

Q1 2026 (est.): revised reporting obligations for Member States (to the **EEA**) start (i.e. depends on transposition timelines – important to have infrastructure ready)

Q3 2024 to Q4 2026: adjustments to the air quality data repository managed by the **EEA**, to include additional data made available through national data reporting

Q4 2028 (est.): first round of reporting of revised air quality plans to address risks of exceedances of revised air quality standards in 2030 (reporting to the **EEA**).

Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention which is additional to the value that would have been otherwise created by Member States alone.

Integrated Water Management:

Surface and groundwater bodies in the EU are polluted by a range of different pollutants. As pollution travels downstream and 60% of European River Basin Districts are international, cooperation between Member States is essential and action at EU level necessary to address pollution and other transboundary impacts through the setting of harmonised standards and harmonised data collection and sharing systems between Member States. It is also important to increase transparency of data on chemicals and enable their use and re-use by the Commission and its agencies, in particular EEA and ECHA to increase scientific knowledge enabling further targeted action and enforcement.

Without action at EU level, it would become prohibitively expensive, especially for downstream Member States, to address pollution.

Harmonised standards will result in overall better environmental and human health protection, cost-effective and proportionate action by Member States and a level playing field for activities having to address potential impacts on water bodies across the EU.

The more regular sharing of monitoring and status data by means of automated data sharing mechanisms will enable more frequent and targeted controls and better preparedness to address potential issues of emerging concern. Access to streamlined data information bases will improve coherence of assessments and implementation across legislation.

The EEA will centralise data, process these and make them available for re-use for the purpose of policy making and implementation. ECHA will provide scientific support on the basis of an increasingly robust scientific database, thanks to centralising of cross-cutting scientific information in the field of chemicals and more streamlined monitoring and status data being made available by the EEA. Both agencies will play a pivotal role in the further implementation of water legislation, with synergies and up-to-date scientific data enabling for swifter adaptation to new areas of concern as well as better identification and prioritisation of most cost effective measures to address pollution.

On the other hand, the proposal will reduce the overall administrative burden by taking out those reporting obligations, which have not shown effective, i.e. which have not delivered the expected improved implementation. Other reporting obligations are simplified and better coherence is ensured with reporting under other instruments.

Finally the proposal aims at introducing more effective procedures for adapting the lists of substances and related environmental quality standards to scientific progress, whilst ensuring that these procedures will benefit from solid scientific data, based on streamlined reporting and close cooperation with the agencies.

Urban wastewater treatment directive:

EU action remains essential to ensure that all EU citizens can draw benefits from improved water quality of rivers, lakes, ground-waters and seas. As 60% of the EU water bodies are transboundary, it is necessary to ensure the same level of protection everywhere and at the same rhythm, to avoid the risk that efforts made by some MS are jeopardised by the lack of progress of others. The REFIT evaluation has shown that in most MS the Directive was the unique driver for investing in the required infrastructures.

The Directive would be fully aligned with all other key European Green Deal objectives, including the overarching climate-neutrality goal, while being fully consistent with several ongoing/planned legislative proposals such as the reviews of the Environmental Quality Standard Directive, the Bathing Water Directive, the Marine Strategy Framework Directive and the Evaluation of the Sewage Sludge Directive. It will also directly contribute to a better implementation of the SDG 6 on access to adequate and equitable sanitation.

Air quality legislation:

The objectives of the initiative cannot be sufficiently achieved at Member State level alone. This is due, firstly, to the transboundary nature of air pollution, as emissions from one Member State can contribute to ambient air pollution in other Member States. EU-wide action is necessary to ensure that all Member States take measures in order to reduce the risks to the population in each Member State.

Secondly, the Treaty requires to aim for a high level of protection taking into account the diversity of situations across the EU. The existing Directives and the proposed directive establish common air quality standards but leave the choice of means to the Member States, so that these can be adapted to local, regional and national circumstances.

Thirdly, equal treatment must be ensured as regards the economic implications of air pollution throughout all Member States and the ambient air quality experience by citizens across the Union.

Revised air quality standards and clearer rules for air quality monitoring will ensure a higher level of protection to EU citizens and better ambient air for the environment.

This will improve the information available of air quality challenges, and improve health (and thus decrease healthcare expenditures), decrease crop yield losses due to ozone, reduce absence from work due to illness (including of dependent children). Improving air quality is therefore expected to bring productivity and economic gains.

Improvements in the monitoring and modelling, in the way air quality plans are prepared and implemented, and in the sharing of information gathered by Member States will improve coherence of assessments and implementation across legislation.

Changes in relation to access to justice and penalties will improve public enforcement and therefore the attainment of results across the European Union.

Finally, the proposal aims at introducing more effective procedures for revising the air quality standards to scientific progress, whilst ensuring that these procedures will benefit from solid scientific data, based on streamlined reporting and close cooperation with the European Environmental Agency, also to make air quality information (incl. up-to-date data) available to decision-makers and a wider public.

Lessons learned from similar experiences in the past

Integrated Water Management:

The 2019 Fitness Check of EU water legislation confirmed that the Water Framework Directive and its two 'daughter' directives have triggered or reinforced action at European level to address the transboundary pressures on water resources at river basin level, both nationally and internationally. The setting of EU wide standards for pollutants can therefore be considered effective.

However the evaluation also concluded that there is a need to widen the scope to address pollutants of emerging concern and better protect human health and ecosystems including addressing several administrative and implementation issues.

Urban wastewater treatment directive:

The REFIT evaluation of the Directive's effectiveness showed that it has been successful in reducing loads of the targeted pollutants from urban point sources (domestic/urban waste water and similar industrial pollution). There are still shortcomings in addressing remaining load of untreated urban wastewater. There is also a need to align the Directive with new political priorities and societal emerging concerns.

Morever, monitoring requirements set in Article 15 of the Directive have proven effective to drive compliance. However, technological advances allow today for

more efficient and accurate monitoring of both existing and emerging pollutants. Information gathered from MS in the context of the impact assessment shows that there are large divergences among MS in terms of monitoring. Most MS are already collecting more frequent and broader information on more pollutants than what is required by the Directive. Yet, the knowledge on the quality and quantity of waste waters is insufficient in many in-stances. Several cases of over dimensioning of facilities but also storage capacities, leading to excessive costs and inefficient water collection and treatment, could have been avoided with a better understanding of the actual load to be treated.

Reporting requirements set by the Directive could be improved and modernised to ensure a better enforcement of the Directive.

Air quality legislation:

Lessons learned from the fitness check of air quality legislation published in November 2019 – SWD(2019)427 *final*.

This fitness check concluded that the Ambient Air Quality Directives have been partially effective in improving air quality and achieving air quality standards, but that not all their objectives have been met to date: the Directives had guided the establishment of a representative high-quality monitoring of air quality, set clear air quality standards, and facilitated the exchange of reliable, objective, comparable information on air quality, including to a wider public. However, they had been less successful in ensuring that sufficient action is taken to meet air quality standards and keep exceedances as short as possible, although on the other hand there has been a downward trend in air pollution and a reduction in the number and magnitude of exceedances.

Lessons from the fitness check on monitoring and eeporting in environment policy (SWD(2017) 230 *final*) in relation to air quality legislation have also been taken into account. In particular, this fitness check concluded that for air quality, the reporting utilises a state-of-the-art electronic reporting approach by which air quality information is made available in a standardised, machine readable and INSPIRE compliant form. The approach is explicitly geared towards streamlining the amount of information made available by Member States, to maximise the usefulness of such information and to reduce the administrative burden – but also leave scope for further streamlining at EU and national level (especially of new reporting requirements).

Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

This action is consistent with other EU policies and ongoing initiatives stemming from the European Green Deal.

The initiative falls under Heading 3 (Natural Resources and the Environment), Title 9 (Environment and Climate Action) of the Multiannual Financial Framework. As detailed below, the implementation of this piece of legislation will require additional human resources and also some supporting expenditure in the EEA an ECHA. The corresponding increase of the subsidy to the agencies will be offset from the EU programme for the environment and climate action (LIFE) 2021–2027.

Integrated Water Management:

Scientific support by ECHA, formerly carried out by JRC, SCHEER Committee, contractors

The scientific support is currently provided in a rather non-systematic manner, but based on a series of administrative arrangements with the JRC which are subject to frequent reviews and prolongations, renewable contracts with an independent expert on groundwater, contractors involved in the impact assessment, own resources (both JRC and DG ENV); there is a lot of reliance on contributions from Member States, in particular in the field of the Groundwater directive. The SCHEER which is managed by DG SANTE has provided numerous scientific opinions (e.g. under the EQSD, SCHEER adopted more than 50 opinions in the period 2011-2022). This does not allow for sufficiently coordinated, systematic, coherent and timely proposals. As regards ECHA, it currently does not have a legal mandate to perform any task related to the WFD.

The proposal aims to rationalise and improve the scientific process by replacing these non-systematic forms of support by a one 'stop shop' for all scientific support, i.e. ECHA. Under the Sustainable Chemicals Strategy and the 'one substance one assessment', ECHA will also be made responsible for all scientific aspects of all other chemicals legislation. This will guarantee scientific robustness and enable synergies between sources of information across legislation.

The contribution to ECHA will be compensated in full by a reduction of the LIFE budget. These resources are currently spent on the more patchy framework for the provision of scientific support (contractors, JRC Administrative Arrangements, SCHEER opinion).

Support on centralising and processing monitoring and status data – additional resources for EEA to ensure more regular information on water status – better implementation – identification of new needs

The EEA (3,5 FTE) currently hosts and manages an extensive database of water related information reported by the Member States electronically every six years; that database hosts the formal River Basin Management Plans which must be reported in accordance with Articles 13 and 15 of Directive 2000/60/EC, as well as additional information reported electronically on a voluntary basis, in accordance with guidance developed by the EC in cooperation with the Member States.

The database however does not include or link to actual monitoring data and status is only expressed in terms of 'pass /fail' good status, which does not provide much insight in the magnitude of exceedances and thus hampers focusing policy responses on pollution hotspots. In addition, as the information is only reported every six years, it is quickly outdated and not really useful to prioritise measures or address implementation issues (e.g. allegations in written questions, petitions and complaints cannot effectively be verified on the basis of outdated information).

The proposal therefore seeks to introduce an obligation for annual reporting, to the EEA, of monitoring and status data. This will yield valuable information to investigate the nexus between better water quality and improved human health by using data from the water quality monitoring and evaluation. Expected initial additional efforts needed to streamline reporting will, in the long-term, be compensated by reduced administrative burdens, resulting from the increased

'digitalisation' and mandatory 'system to system reporting' (automated data delivery mechanism).

Urban wastewater treatment directive:

The implementation of the Directive will require extensive data processing and analysis. Relying on the expertise of EEA has many advantages: systems aligned with other reporting to EEA (WFD, EPRTR); efficiency of processes; reduced risk of error introduction through use of different systems; development of content expertise and assessments based on detailed understanding of the data, since we know how data are derived.

In the absence of staff and operational expenditure, such developments will need to be funded by consultancy in DG ENV.

Air quality legislation:

Tasks related to the reporting and exchange of information of air quality data. The expansion of the infrastructure for and support the continuous reporting to include additional information on air quality can build on the existing ambient air quality portal and data repository managed by the EEA to secure efficiency gains through coherence with other environmental reporting streams. Setting up and maintaining an entirely new reporting infrastructure for the additional requirements established by the revised Directive (e.g. at the JRC or hosted by external consultants) would require a costly new development and entail the risk of inconsistencies with the existing reporting infrastructure. The most effective approach would thus be to strengthen the EEA's resource for an expansion and subsequent maintenance of the existing ambient air quality portal and data repository – either through additional staff or internal redeployment. This would provide the best relationship between the resources employed and the achievement of objectives and the related tasks.

Tasks related to the assessment of ambient air quality. Air quality assessments are currently provided by the EEA on an annual basis, making use of the air quality data reported via the air quality portal and data repository, as well as of additional scientific knowledge of the impacts of air pollution on health and environment. With the strengthened provisions on air quality monitoring and modelling, additional information will become available including on pollutants of emerging concerns and on the links between air pollution, climate change, human and ecosystem health. The assessment of such data and information should be based on a regular and scientific robust basis, and in sync with the existing air quality assessments already provided by the EEA. It is thus preferable, also to secure a coherence of analysis, to integrate these tasks into the EEA rather than to outsource this to different external consultants. This will require additional specific competences and likely require additional staff. This would provide the best relationship between the resources employed and the achievement of objectives and the related tasks.

Tasks related to the scientific and technical support to air quality monitoring and modelling. Over the past decade, JRC has supported all tasks to the scientific and technical support to air quality monitoring and modelling – which require economic independence from providers of the equipment for quality monitoring and modelling. Specific task required include:

Support and guide the development of enhanced approaches related to air pollution monitoring and use of air quality modelling; Support methodological improvements related to the spatial representativeness of air quality monitoring, harmonised air quality assessments, and source allocation; Support on the elaboration of practical guidance for the implementation of the Ambient Air Quality Directive on air quality monitoring and modelling; Organise and chair key support networks to further implementation of air policy at the national, regional, and urban level (e.g. AQUILA and FAIRMODE); Support development of standards related to air quality monitoring and modelling in collaboration with the European Committee for Standardization (CEN).
JRC support would be best secured by assuring this is in the JRC work programme, and additional financial support to the tune of 100.000 EUR per year is provided. Continued JRC support would provide the best relationship between the resources employed and the achievement of objectives and the related tasks.

Duration and financial impact of the proposal/initiative

☐ **limited duration**

☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

☐ Financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

☒ **unlimited duration**

Implementation with a start-up period from 2024 (for Urban Waste Water Treatment), from 2024 to 2025 (Integrated water management) from 2024 to 2027 (for Air quality legislation),

followed by full-scale operation.

Management mode(s) planned[2]

☒ **Direct management** by the Commission

☒ by its departments, including by its staff in the Union delegations;

☐ by the executive agencies

☐ **Shared management** with the Member States

☒ **Indirect management** by entrusting budget implementation tasks to:

☐ third countries or the bodies they have designated;

☐ international organisations and their agencies (to be specified);

☐ the EIB and the European Investment Fund;

☒ bodies referred to in Articles 70 and 71 of the Financial Regulation;

☐ public law bodies;

☐ bodies governed by private law with a public service mission to the extent that they provide adequate financial guarantees;

☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that provide adequate financial guarantees;

☐ persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.

[2] Details of management modes and references to the Financial Regulation may be found on the BudgWeb site: https://myintracomm.ec.europa.eu/budgweb/EN/man/budgmanag/Pages/budgmanag.aspx

MANAGEMENT MEASURES

Monitoring and reporting rules

Specify frequency and conditions.

The initiatives involve procurement, administrative arrangement with the JRC, increase of the contribution to the ECHA and to the EEA and impact on the COM HR). Standard rules for this type of expenditure apply.

Management and control system(s)

Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

N/A – cf. above.

Information concerning the risks identified and the internal control system(s) set up to mitigate them

N/A – cf. above.

Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

N/A – cf. above.

Measures to prevent fraud and irregularities

Specify existing or envisaged prevention and protection measures, e.g. from the Anti-Fraud Strategy.

N/A – cf. above.

ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.[1]	from EFTA countries[2]	from candidate countries[3]	from third countries	within the meaning of Article 21(2)(b) of the Financial Regulation
3	09 02 02 Circular Economy and quality of life	Diff.	YES	NO	/NO	NO
3	09 10 01 European Chemicals Agency – environmental directives and international conventions	Diff.	YES	NO	NO	NO
3	09 10 02 European Environment Agency	Diff.	YES	YES	NO	NO
7	20 01 02 01 – Remuneration and allowances	Non-diff.	NO	NO	NO	NO

New budget lines requested

N/A

[1] Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.

[2] EFTA: European Free Trade Association.

[3] Candidate countries and, where applicable, potential candidates from the Western Balkans.

Estimated financial impact of the proposal on appropriations

Summary of estimated impact on operational appropriations

☐ The proposal/initiative does not require the use of operational appropriations

☒ The proposal/initiative requires the use of operational appropriations, as explained below:

EUR million (to three decimal places)

Heading of multiannual financial framework	**3**	Natural resources and environment

DG: ENV			**2023**	**2024**	**2025**	**2026**	**2027 and beyond**	**TOTAL**
○ Operational appropriations								
09 02 02 Circular Economy and quality of life	Commitments	(1)	0,100	0,100	0,100	0,100	0,100	**0,500**
	Payments	(2)	0,100	0,100	0,100	0,100	0,100	**0,500**
TOTAL appropriations for DG ENV	Commitments	=(1)	0,100	0,100	0,100	0,100	0,100	**0,500**
	Payments	=(2)	0,100	0,100	0,100	0,100	0,100	**0,500**

The amount reported above in 09.02.02 budget line will be needed to finance an administrative arrangement with the JRC and an additional financial support to the tune of 100 000 EUR per year for following tasks:

Support and guide the development of enhanced approaches related to air pollution monitoring and use of air quality modelling;
Support methodological improvements related to the spatial representativeness of air quality monitoring, harmonised air quality assessments, and source allocation;
Support on the elaboration of practical guidance for the implementation of the Ambient Air Quality Directive on air quality monitoring and modelling;
Organise and chair key support networks to further implementation of air policy at the national, regional, and urban level (e.g. AQUILA and FAIRMODE);
Support development of standards related to air quality monitoring and modelling in collaboration with the European Committee for Standardization (CEN).

Agency: ECHA – Environmental Directives			2024	2025	2026	2027	TOTAL
Title 1: Staff expenditure	Commitments	(1a)	0,734	1,498	1,528	1,559	**5,319**
	Payments	(2a)	0,734	1,498	1,528	1,559	**5,319**
Title 2: Infrastructure	Commitments	(1b)	0,189	0,193	0,201	0, 201	**0.779**
	Payments	(2b)	0,189	0,193	0,201	0, 201	**0.779**
Title 3: Operational expenditure	Commitments	(1c)	0,673	0,686	0,702	0,718	**2,779**
	Payments	(2c)	0,673	0,686	0,702	0,718	**2,779**
TOTAL appropriations for agency ECHA	Commitments	=1a+1b +1c	1,596	2,377	2,427	2,477	**8,878**
	Payments	=2a+2b+2c	1,596	2,377	2,427	2,477	**8,878**

ECHA costs include the cost for an additional 11 FTE, split between 7TA and 4 CAs, for the purpose of:

- scientific support currently carried out by the JRC and DG ENV contractors and SANTE SCHEER committee (currently 6,35 FTE per year; under ECHA proposal this would amount to approximately 5,15 FTE; this means an effective redeployment of resources)
- scientific support resulting from new obligations under the proposal:
  - for setting an EU wide Environmental quality standards for pollutants of 'national/regional' concern (1 FTE per year for GW, 1 FTE for SW)
  - for updating GW Annex I (1 FTE per year)
  - for support on groundwater watch list (0,6 FTE per year)
  - for identifying/developing methodologies for monitoring and analysing micro-plastics, antimicrobial resistance genes, (approximately 0,5 FTE plus approximately 1 for IT support plus 1,5 FTE for governance)

Agency: EEA			2024	2025	2026	2027	TOTAL
Title 1: Staff expenditure	Commitments	(1a)	0,697	1,423	1,451	1,480	5,052
	Payments	(2a)	0,697	1,423	1,451	1,480	5,052
Title 2: Infrastructure	Commitments	(1b)					
	Payments	(2b)					
Title 3: Operational expenditure	Commitments	(1c)	0,490	0,620	0,420	0,420	**1,950**
	Payments	(2c)	0,490	0,620	0,420	0,420	**1,950**
TOTAL appropriations for agency EEA	Commitments	=1a+1b +1c	**1,187**	**2,043**	**1,871**	**1,900**	**7,002**
	Payments	=2a+2b +2c	**1,187**	**2,043**	**1,871**	**1,900**	**7,002**

EEA costs include costs for 8 additional FTE (5 TA and 3 CA), as well as operational expenditure, for the purpose of:

Addressing the additional obligation for annual reporting, to the EEA, of monitoring and status data through 'system to system reporting' (automated data delivery mechanism): 4 FTEs (of which 3 will be additional/new TAs and 1 TA will be from EEA re-deployment) plus 130K of consultant's support for year 1, then 80 K in year 2 and onwards. Development of a standardised database on water reuse (in the framework of the implementation of Regulation **(EU) 2020/741** on water reuse) and management of related dataflows and preparation of EU wide overviews. The EEA will have to ensure control quality to ensure that Member States are reporting regularly in a harmonised and comparable way (2 additional CAs). In total, **the additional resources to be allocated to the EEA for the Integrated water reporting and work on the water re-use will be 5 additional FTEs, split as 3 TAs and 2 CAs.**

An UWWTD expert (**1 additional CA**) and IT support to set up and adapt databases in relation to Article 20 of the proposed recast of the urban wastewater treatment directive. It will also support the development of new compliance indicators e.g. on energy, micro-pollutants, as currently indicated under the new legislative proposal of the Directive. It will also be used to revise and update the UWWTD country profiles which now take the place of national reports https://water.europa.eu/freshwater/countries/uwwtIt and to revise existing dataflows, so that they can accommodate the new reporting requirements. Further streamlining with related dataflows (e.g. EPRTR and WISE) will be undertaken. The need for IT support amounts to 760 K in total, with 240 K for year 1, 260 K on year 2, and then 130 K onwards.

Tasks related to the reporting and exchange of information of air quality data will require resources for an expansion and subsequent maintenance of the existing ambient air quality portal and data repository. Tasks related to the assessment of ambient air quality will require resources to expand air quality assessments currently provided on an annual basis, especially as regards pollutants of emerging concerns and on the links between air pollution, climate change, human and ecosystem health. This will require additional specific competences and thus **additional long-term expert staff (2 FTEs, both of them TAs)**.

			2023	2024	2025	2026	2027	TOTAL
○ TOTAL operational appropriations	Commitments	(4)						
	Payments	(5)						
○ TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)						
TOTAL appropriations under HEADING 3 of the multiannual financial framework	Commitments	=4+6	0,100	2,774	4,297	4,170	4,245	**15,587**
	Payments	=5+6	0,100	2,774	4,297	4,170	4,245	**15,587**

Heading of multiannual financial framework	**7**	'Administrative expenditure'

This section should be filled in using the 'budget data of an administrative nature' to be firstly introduced in the Annex to the Legislative Financial Statement (Annex V to the internal rules), which is uploaded to DECIDE for interservice consultation purposes.

EUR million (to three decimal places)

		2024	2025	2026	2027 and beyond	TOTAL
DG: ENV						
□ Human resources		0,314	0,314	0,314	0,314	**1,256**
□ Other administrative expenditure						

TOTAL DG ENV	Appropriations	0,314	0,314	0,314	0,314	**1,256**

DG ENV additional staff (1 AD for Integrated Water Management and 1 AD for Air Quality) will:

Prepare and lead the adoption of new Commission implementing acts, establishing surface and groundwater watch lists of pollutants of emerging concern for their monitoring in view of assessing the need to set EU standards;

Prepare and lead the adoption of new Commission delegated acts, every six years, to review and update the list of pollutants and corresponding EU wide standards which need to be addressed for the purpose of protecting human health and the environment;

Sustain a dialogue on water management with Member States, EEA and ECHA including in the framework of relevant expert groups and committees;

Prepare and lead the adoption of new Commission implementing acts and delegated acts linked to the implementation of the new Air Quality Directive.

Support the team in the implementation of the revised Air Quality Directive, especially for new provisions requiring reinforced engagement with competent authorities.

Prepare and lead the development of technical guidance stemming from the revision, in the field of monitoring, modelling, and air quality plans.

The appropriations required for human resources will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation, which may be granted to the managing DG under the annual allocation procedure and in light of budgetary constraints.

TOTAL appropriations under HEADING 7 of the multiannual financial framework	(Total commitments = Total payments)	0,314	0,314	0,314	0,314	**1,256**

EUR million (to three decimal places)

	2023	**2024**	**2025**	**2026**	**2027 and**	**TOTAL**

							beyond	
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	0,100	3,197	4,834	4,712	4,791		17,653
	Payments	0,100	3,197	4,834	4,712	4,791		17,653

Estimated output funded with operational appropriations

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			Year **N**		Year **N+1**		Year **N+2**		Year **N+3**		Enter as many years as necessary to show the duration of the impact (see point 1.6)						**TOTAL**	
	OUTPUTS																	
	Type[1]	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	Total No	Total cost
SPECIFIC OBJECTIVE No 1[2]…																		
- Output																		
- Output																		
- Output																		
Subtotal for specific objective No 1																		
SPECIFIC OBJECTIVE No 2 ...																		
- Output																		
Subtotal for specific objective No 2																		

[1] Outputs are products and services to be supplied (e.g.: number of student exchanges financed, number of km of roads built, etc.).

[2] As described in point 1.4.2. 'Specific objective(s)…'

TOTALS																

Estimated impact on ECHA, EEA and COM administrative appropriations

Estimated impact on ECHA's human resources

☐ The proposal/initiative does not require the use of appropriations of an administrative nature

☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	2024	**2025**	**2026**	**2027**	**TOTAL**
Temporary agents (AD Grades) Env Directives	0,535	1,091	1,112	1,135	**3,872**
Temporary agents (AST grades)					
Contract staff	0,200	0,407	0,416	0,424	**1,447**
Seconded National Experts					
TOTAL	**0,734**	**1,498**	**1,528**	**1,559**	**5,319**

Staff requirements (FTE):

	2024	**2025**	**2026**	**2027**	**TOTAL**
Temporary agents (AD Grades) Env Directives	7	7	7	7	
Temporary agents (AST grades)					
Contract staff REACH/CLP	4	4	4	4	
Seconded National Experts					
TOTAL	**11**	**11**	**11**	**11**	

Estimated impact on EEA's human resources

☐ The proposal/initiative does not require the use of appropriations of an administrative nature

☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	2024	**2025**	**2026**	**2027**	**TOTAL**
Temporary agents (AD Grades)	0,526	1,074	1,095	1,117	**3,813**
Temporary agents (AST grades)					
Contract staff	0,171	0,349	0,356	0,363	**1,239**
Seconded National Experts					
TOTAL	**0,697**	**1,423**	**1,451**	**1,480**	**5,052**

Staff requirements (FTE):

	2024	**2025**	**2026**	**2027**	**TOTAL**
Temporary agents (AD Grades)	5	5	5	5	
Temporary agents (AST grades)					
Contract staff	3	3	3	3	
Seconded National Experts					
TOTAL	**8**	**8**	**8**	**8**	

Estimated requirements on administrative appropriations in the Commission

Summary of estimated impact on administrative appropriations

☐ The proposal/initiative does not require the use of appropriations of an administrative nature

☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	2023	2024	2025	2026	2027 and beyond	TOTAL
HEADING 7 of the multiannual financial framework						
Human resources		0,314	0,314	0,314	0,314	**1,256**
Other administrative expenditure						
Subtotal HEADING 7 of the multiannual financial framework		0,314	0,314	0,314	0,314	**1,256**
Outside HEADING 7[1] of the multiannual financial framework	N/A	N/A	N/A	N/A	N/A	N/A
Human resources						
Other expenditure of an administrative nature						
Subtotal outside HEADING 7 of the multiannual financial framework	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL		0,314	0,314	0,314	0,314	**1,256**

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Estimated requirements of human resources

☐ The proposal/initiative does not require the use of human resources.

[1] Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

☒ The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

		2023	2024	2025	2026	2027 and beyond
20 01 02 01 (Headquarters and Commission's Representation Offices)		2	2	2	2	2
20 01 02 03 (Delegations)						
01 01 01 01 (Indirect research)						
01 01 01 11 (Direct research)						
Other budget lines (specify)						
20 02 01 (AC, END, INT from the 'global envelope')						
20 02 03 (AC, AL, END, INT and JPD in the delegations)						
XX 01 xx **yy zz** [2]	- at Headquarters					
	- in Delegations					
01 01 01 02 (AC, END, INT - Indirect research)						
01 01 01 12 (AC, END, INT - Direct research)						
Other budget lines (specify)						
TOTAL		2	2	2	2	2

XX is the policy area or budget title concerned.

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	Prepare and lead the adoption of new Commission implementing acts, establishing surface and groundwater watch lists of pollutants of emerging concern for their monitoring in view of assessing the need to set EU standards; Prepare and lead the adoption of new Commission delegated acts, every six years, to review and update the list of pollutants and corresponding EU wide standards which need to be addressed for the purpose of protecting human health and the environment; Sustain a dialogue on water management with Member States, EEA and ECHA including in the framework of relevant expert groups and committees; Prepare and lead the adoption of new Commission implementing acts and delegated acts linked to the implementation of the new Air Quality Directive.

[2] Sub-ceiling for external staff covered by operational appropriations (former 'BA' lines).

	Support the team in the implementation of the revised Air Quality Directive, especially for new provisions requiring reinforced engagement with competent authorities. Prepare and lead the development of technical guidance stemming from the revision, in the field of monitoring, modelling, and air quality plans.
External staff	

Compatibility with the current multiannual financial framework

The proposal/initiative:

☒ can be fully financed through redeployment within the relevant heading of the Multiannual Financial Framework (MFF).

The LIFE envelope (budget line 09.02.02) will be used to offset the increase of the ECHA and EEA subsidy.

☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation.

☐ requires a revision of the MFF.

Third-party contributions

The proposal/initiative:

☒ does not provide for co-financing by third parties

☐ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year **N**[1]	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			Total
Specify the co-financing body								
TOTAL appropriations co-financed								

[1] Year N is the year in which implementation of the proposal/initiative starts. Please replace "N" by the expected first year of implementation (for instance: 2021). The same for the following years.

Estimated impact on revenue

☒ The proposal/initiative has no financial impact on revenue.

☐ The proposal/initiative has the following financial impact:

☐ on own resources

☐ on other revenue

please indicate, if the revenue is assigned to expenditure lines ☐

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative[2]						
		Year **N**	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)		
Article …….								

For assigned revenue, specify the budget expenditure line(s) affected.

[…]

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

[…]

[2] As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20 % for collection costs.

EUROPEAN
COMMISSION

Brussels, 26.10.2022
COM(2022) 540 final

ANNEXES 1 to 6

ANNEXES

to the

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

{SEC(2022) 540 final} - {SWD(2022) 540 final} - {SWD(2022) 543 final}

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	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, transparency 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, 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. 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.';

(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	The general physico-chemical elements correspond totally or nearly totally to undisturbed conditions. Nutrient concentrations remain within the range normally associated with undisturbed conditions. Temperature, oxygen balance and transparency do not show signs of anthropogenic disturbance and remain within the	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. Nutrient concentrations do not exceed the levels established so as to ensure the functioning of the ecosystem and the achievement of the values	Conditions consistent with the achievement of the values specified above for the biological quality elements.';

	range normally associated with undisturbed conditions.	specified above for the biological quality elements.	

(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	The general physico-chemical elements correspond totally or nearly totally to undisturbed conditions. Nutrient concentrations remain within the range normally associated with undisturbed conditions. Temperature, oxygen balance and transparency do not show signs of anthropogenic disturbance and remain within the ranges normally associated with undisturbed conditions.	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. 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.';

(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.

Member States may apply passive sampling methods to monitor chemical pollutants, where appropriate, in particular for screening purposes, 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 coverthe 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 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.’;

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

‘2.3.2. Definition of good groundwater chemical status

Elements	**Good status**
General	The chemical composition of the groundwater body is such that the concentrations of pollutants: — 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’;

(17) 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.’;

(18) 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 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 from … [OP: please insert the date = the first day of the month following 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.

(1)	(2)	(3)	(4)	(5)	(6)
[Entry] Nº	Name of substance	Category of substances	CAS number ([1])	EU number ([2])	Quality Standard ([3]) [µg/l unless otherwise indicated]
1	Nitrates	Nutrients	not applicable	not applicable	50 mg/l
2	Active substances in pesticides, including their relevant metabolites, degradation and reaction products ([4])	Pesticides	not applicable	not applicable	0,1 (individual)
					0,5 (total) ([5])
3	Per- and poly-fluorinated alkyl substances (PFAS) - sum of 24 ([6])	Industrial substances	See table note 6	See table note 6	0,0044 ([7])
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	not applicable	not applicable	0,1 ([9]) or 1 ([10]) or 2,5 or 5 ([11]) (individual)

(1)	(2)	(3)	(4)	(5)	(6)
	pesticides (nrMs)				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.

([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, 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 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.

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:

'Member States shall ensure that competent authorities inform the European Chemicals Agency ECHA 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)
[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:

(1) the title is replaced by the following:

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

(2) Part A is replaced by the following:

‘PART A: ENVIRONMENTAL QUALITY STANDARDS

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) 0,9 (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	Σ = 0,01	Σ = 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	see footnote 17			
	Benzo(k)fluoranthene		207-08-9	205-916-6			0,017	0,017	see footnote 17			
	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]) (Tributyltin-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 × 10^{-3}]	[0,185 × 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)	Quinoxyfen	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			not applicable	not applicable	Sum of PCDDs+ PCDFs+ PCB-DLs equivalents [3,5 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	[$4,6 \times 10^{-4}$]	[2×10^{-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)	Pharmaceuticals (Estrogenic hormones)	50-28-2	200-023-8	0,00018	9×10^{-6}	not derived	not derived				
(48)	Acetamiprid	Neonicotinoid pesticides	135410-20-7 / 160430-64-8	603-921-1	0,037	0,0037	0,16	0,016				
(49)	Azithromycin	Pharmaceuticals (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	Pharmaceuticals	298-46-4	206-062-7	2,5	0,25	$1,6 \times 10^{3}$	160				
(53)	Clarithromycin	Pharmaceuticals (Macrolide antibiotics)	81103-11-9	658-034-2	0,13	0,013	0,13	0,013				X
(54)	Clothianidin	Neonicotinoid 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	Pharmaceuticals	15307-86-5 / 15307-79-6	239-348-5 / 239-346-4	0,04	0,004	250	25				X

(57)	Erythromycin	Pharmaceuticals (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)	Pharmaceuticals (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	Pharmaceuticals	15687-27-1	239-784-6	0,22	0,022						X
(62)	Imidacloprid	Neonicotinoid 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	$2,7\times 10^{-4}$	2.7×10^{-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	Neonicotinoid pesticides	111988-49-9	601-147-9	0,01	0,001	0,05	0,005				
(68)	Thiamethoxam	Neonicotinoid 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])						

([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 (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), 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 1107/2009and 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.';

(3) Part B is amended as follows:

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

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

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

'For any given surface water body, applying the MAC-EQS means that the measured concentration at any representative monitoring point within the water body does not exceed the standard.'.

ANNEX VI

‘ANNEX II

ENVIRONMENTAL QUALITY STANDARDS FOR RIVER BASIN SPECIFIC POLLUTANTS

PART A: 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. Microorganisms, genes or genetic material reflecting the presence of microorganisms resistant to antimicrobial agents, in particular microorganisms pathogenic to humans or livestock.

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

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

(a) identification of the receptors and compartments or matrices at risk from the substance of concern;

(b) collation and quality assessment of data on the properties of the substance of concern, including its (eco)toxicity, in particular from reports on laboratory, mesocosm and field studies which cover both chronic and acute effects in both fresh and saltwater environments;

(c) extrapolation of (eco)toxicity data to no-effect or similar concentrations using deterministic or probabilistic methods, and selection and application of appropriate assessment factors to address uncertainties and derive EQS;

(d) comparison of EQS for different receptors and compartments, and selection of critical EQS, i.e. the EQS that provides protection to the most sensitive receptor in the most relevant compartment or matrix.

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

[Entry] 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 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.'.