

Pollutants in EU waters

Update of chemical substances listed for control

OVERVIEW

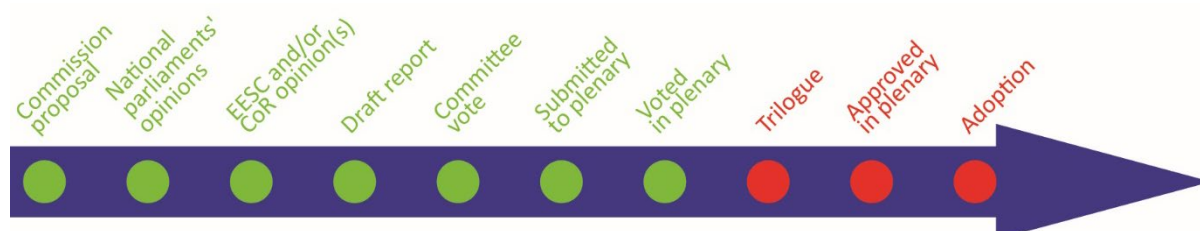
As required by EU water legislation, and in line with the European Green Deal's zero pollution ambition, on 26 October 2022 the European Commission tabled a proposal to revise the lists of surface water and groundwater pollutants that need to be monitored and controlled for the purpose of protecting EU freshwater bodies and the associated environmental quality standards. The proposal also seeks to remedy shortcomings identified in the current framework as regards chemical pollution in waters, and notably to enable swifter adaptation to scientific knowledge.

Stakeholders expressed mixed views on the proposal. Non-governmental organisations have been pushing for more ambition, for instance on chemical mixtures, pesticides, deadlines, and producers' responsibility for covering monitoring costs. Industry representatives have meanwhile expressed some concerns, notably about the achievability and scientific grounding of certain new standards.

While Parliament, in its negotiating mandate, seeks to enhance protection of water resources, strengthening standards and asking for additional parameters, the Council position aims to secure maximum flexibility for Member States. Trilogue negotiations are expected to start in early 2025.

Proposal for a directive of the European Parliament and 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

<i>Committee responsible:</i>	Environment, Public Health and Food Safety (ENVI)	COM(2022) 540 26.10.2022
<i>Rapporteur:</i>	Javi López (S&D, Spain)	2022/0344(COD)
<i>Shadow rapporteurs:</i>	Hildegard Bentele (EPP, Germany) Jorge Buxadé Villalba (PFE, Spain) Pietro Fiocchi (ECR, Italy) Michal Wiezik (Renew, Slovakia) Kai Tegethoff (Greens/EFA, Germany) Per Clausen (The Left, Denmark)	Ordinary legislative procedure (COD) (Parliament and Council on equal footing – formerly 'co-decision')
<i>Next steps expected:</i>	Opening of trilogues	



Introduction

[Clean water](#) is essential for healthy ecosystems, as well as for many human uses, including drinking, bathing, and agriculture. Freshwater bodies can be contaminated by a wide range of chemical pollutants. These pollutants are emitted from a variety of sources, including industry, agriculture, transport, mining and waste disposal, as well as from people's homes. Chemical pollution of surface and groundwater endangers 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. It also poses a threat to human health. [Human exposure](#) to hazardous chemicals can occur via ingestion of contaminated water or seafood, or via bathing.

While the risks posed by certain chemicals have long been recognised, new risks from others, either alone or in combination, continue to emerge.¹ EU water legislation requires a regular review of the lists of surface water and groundwater pollutants that need to be monitored and controlled. As announced in the [zero pollution action plan for air, water and soil](#) under the European Green Deal, on 26 October 2022 the European Commission tabled a [legislative proposal](#) to revise the lists of pollutants, while addressing the [shortcomings identified](#) in the current framework, to better tackle the chemical pollution of EU waters. The proposal notably seeks to ensure swifter alignment of the rules with scientific findings, in order to react more quickly to contaminants of emerging concern, and to improve the assessment of mixtures of chemical substances in water.

Existing situation

Legal framework

The EU [Water Framework Directive](#) (WFD) is the main EU legal instrument for water protection. The WFD requires all surface water² and groundwater bodies to achieve 'good' status by 2027 at the latest. For a surface or groundwater body to be classified as 'overall good', both chemical status and either ecological or quantitative status, respectively, must be at least good.

The WFD list of priority substances (Annex X) identifies the water pollutants that pose the greatest concern and risk to and via the aquatic environment across the EU, which Member States must monitor in surface waters. Among the 45 chemical pollutants currently categorised as priority substances, including industrial chemicals, pesticides and metals, 21 are designated as priority hazardous substances, due to their persistence, bioaccumulation and toxicity. Under the WFD, measures must be taken to reduce the emissions, discharges and losses of priority substances into water, and to phase out those of priority hazardous substances, within 20 years of their designation. The [Environmental Quality Standards Directive](#) (EQSD) lays down EU-wide environmental quality standards for the 45 priority substances listed in Annex X of the WFD as well as eight other pollutants that were already regulated at EU level before Annex X was introduced in [2001](#). Two types of environmental quality standards are set for priority substances in the EQSD: annual average concentrations and maximum allowable concentrations. The former protects against long-term chronic pollution problems, and the latter against short-term acute pollution. Good surface water chemical status means that the concentrations of all priority substances do not exceed the environmental quality standards. The WFD further requires Member States to set and meet quality standards for substances playing a role locally or regionally but not EU-wide ('river basin specific pollutants'), the monitoring of which contributes to ecological status assessment.

For groundwaters, pollutants of EU-wide concern and their quality standards are listed in Annex I to the [Groundwater Directive](#) (GWD). Annex I currently includes nitrates and active substances in pesticides, including their metabolites,³ degradation, and reaction products. For the substances listed in Annex II to the GWD (comprising 12 pollutants or pollution indicators), Member States have to consider setting national threshold values. Good groundwater chemical status is reached when concentrations of specified substances do not exceed the standards set, and when concentrations

do not prevent associated surface water bodies from achieving good status or cause significant damage to terrestrial ecosystems directly dependent on the groundwater body.

The quality standards and the list of priority substances are regularly subject to review. Substances are considered for listing in Annex X to the WFD or in Annex I or Annex II to the GWD on the basis of an assessment of the risk they pose to humans and the aquatic environment. That assessment relies on knowledge of the environmental concentrations of the substances, of their (eco)toxicology and of their persistence, bioaccumulation, carcinogenicity, mutagenicity, reprotoxicity and endocrine disrupting potential. To support the identification of priority substances for regulation, a surface water watch list⁴ was established in [2013](#). The mechanism is designed to obtain high-quality EU-wide monitoring data on emerging pollutants and substances that may pose a significant risk, but for which available monitoring data are insufficient to draw conclusions on the actual risk posed. Member States have to monitor the substances on the list at least once per year for up to four years. The watch list must be reviewed every two years, and was last updated in [2022](#). A [voluntary watch list mechanism](#) for pollutants in groundwater was introduced as part of the [common implementation strategy](#) of the WFD. Under the mechanism, Member States agreed to collect data voluntarily on pollutants of potential EU-wide concern to support the identification of (emerging) pollutants for which groundwater quality standards or threshold values should be set.

A range of other EU instruments supports the achievement of the WFD objectives regarding pollution. They include the [Nitrates Directive](#), which seeks to protect waters against pollution caused by nitrates from agricultural sources, and the [Urban Wastewater Treatment Directive](#) (UWWTD), designed to protect the aquatic environment from the negative effects of urban wastewater effluents. The recent recast of the UWWTD includes [new requirements](#) to perform advanced wastewater treatment for the removal of micro-pollutants (i.e. substances that can pollute water even at low concentrations); and to monitor [microplastics](#). While not specifically targeted at water protection, other acts seek to control chemicals at source. Examples include the [Industrial Emissions Directive](#) (IED – recently [revised](#)), the [REACH Regulation](#), the [Plant Protection Product Regulation](#) and the [Biocidal Product Regulation](#), intended to identify chemicals of concern and potential environmental impacts earlier in the life-cycle during manufacture and use. The [Sustainable Use of Pesticides Directive](#) was designed to reduce the risks and impacts of pesticide use on human health and the environment and is also very relevant for tackling chemicals in water.

Chemical status of EU waters

Status assessments are performed every six years. [Data available](#) from WFD reporting at the time when the Commission tabled its legislative proposal indicated that, in 2015, 38 % of surface water bodies were in good chemical status, 46 % did not achieve good status and 16 % were in unknown status. In most EU countries, a few priority substances accounted for poor chemical status, the most common being mercury and brominated flame retardants. At the same time, 75 % of groundwater bodies were in good chemical status, 24 % did not achieve good status, and the status of 1 % was unknown. There were, for both surface water and groundwater status assessments, substantial differences between Member States.

The European Environment Agency's recent assessment on [Europe's state of water 2024](#), based on data reporting by 19 Member States, shows that, in 2021, 29 % of surface water bodies in Europe achieved a good chemical status. Again, long-lived pollutants such as mercury and brominated flame retardants can partly explain lack of progress. Meanwhile, 77 % of the groundwater area was reported to be in good chemical status. Major pollutants causing failure are nitrates and pesticides.

Parliament's starting position

In its 2020 [resolution](#) on the implementation of EU water legislation, the Parliament called on the Commission to take all necessary measures in order to achieve good chemical status and to take decisive EU-wide action when Member States fail to meet the environmental quality standards for priority substances that fall within the scope of EU legislation. It stressed that substances relevant

to production of drinking water, such as [per- and polyfluoroalkyl substances](#) (PFAS) and relevant pharmaceuticals, should be added to the list of priority substances. In its view, pollutants of emerging concern and mixed toxicity could and should be addressed within the framework of the WFD and its specific 'daughter' directives. Parliament advocated a more extensive use of the watch list to monitor potential water pollutants and determine the risk they pose to the aquatic environment. It also called on the Commission to speed up its work on the development of methods for assessing and managing chemical mixtures and to complement its work by introducing a mixture assessment factor. The Commission was also urged to streamline and improve monitoring systems for water quality and environmental pollutants, notably by collecting data on the main sources of emission of dangerous substances (including radioactive and pesticide residues and metabolites, biocides, pharmaceutical residues, chemicals of concern, such as PFAS, and microplastics) as well as other pollutants of emerging concern in EU bodies of water, and to apply the latest and most effective available techniques.

Council starting position

In its [conclusions](#) on the Chemicals strategy for sustainability, the Council stressed that it was crucial to apply existing regulatory instruments, including chemicals legislation and the Water Framework Directive, and relevant funds in a synergistic manner, in order to stimulate the production and use of chemicals, materials and products that are safe and sustainable already at the design stage. The Council acknowledged that all routes contribute to chemical exposure, including emissions to air, water and soil, and from mixtures, materials, and products, during their production, use, and waste phases. It therefore asked the Commission to propose, in the zero pollution action plan, an integrated approach to tackle all exposure routes. It also called on the Commission to develop a comprehensive chemicals monitoring framework as part of a wider [zero pollution monitoring and outlook](#) framework to oversee the driving forces and impacts of chemical pollution on human health and the environment, to complement monitoring of the presence of chemicals in ecosystems, and to measure the effectiveness of chemicals legislation.

Preparation of the proposal

EU water legislation was subject to a [fitness check](#) in 2019. While the analysis found evidence that the WFD, the EQSD and GWD helped reduce the chemical pollution of the EU's waters, it also identified three areas for improvement. First, variability in river basin-specific pollutants is wider than can be explained by location-specific conditions, and there are significant differences between the environmental quality standards set by different Member States for the same substances. Similarly, there is considerable variation in the number of substances considered as posing a risk to groundwater bodies (from less than 10 in one Member State to more than 90 in others) and in the ranges of threshold values. Second, updating the list of priority substances (adding or removing substances and the corresponding quality standards) is a lengthy process, partly because of the time needed to collect the necessary scientific evidence, and partly because of the ordinary legislative procedure. Finally, the EQSD and GWD assess the risk to people and the environment mainly on the basis of single substances, not taking into account the combined effects of mixtures, and cover only a fraction of the substances occurring in the environment.

The [impact assessment](#) (IA) accompanying the Commission proposal was supported by [internal and external technical expertise](#). In particular, the Commission's Joint Research Centre provided support for the selection of surface water pollutants and the derivation of environmental quality standards, and experts from the [Chemicals](#) and [Groundwater](#) Working Groups for groundwater pollutants. The IA was also informed by stakeholder consultation activities, including collection of feedback on the [inception IA](#) (23 October–20 November 2020, 19 replies); an open [public consultation](#) (26 July – 1 November 2021, 152 replies); targeted stakeholder surveys, workshops and interviews. The draft IA received a [positive opinion](#) with reservations from the Regulatory Scrutiny Board on 24 June 2022. The IA analysed three groups of options, i.e. options concerning surface waters, options concerning

ground waters, and crosscutting options. For surface waters, it considered adding a range of substances (from among reviewed pharmaceuticals, pesticides, industrial chemicals and metals) to the list of priority substances, and setting EU-wide standards for them; changing the standards of several listed substances based on new scientific evidence; and removing some others from the list. For ground waters, the IA examined the possibility of adding specific (groups of) substances to the list, namely PFAS, non-relevant metabolites⁵ of pesticides (nrMs) and pharmaceuticals. Lastly, it looked into a range of options to improve digitalisation, administrative streamlining and risk management in the area of water pollution.

The [initial appraisal](#) of the impact assessment issued by EPRS notes that it includes a dynamic baseline and a satisfactory range of options. It is transparent in reporting the limitations of assessing the costs and benefits, but because of these limitations and the policy options' technical complexity, neither the real policy alternatives nor their impacts are apparent. Moreover, the impacts on consumers and SMEs are not elaborated on, and the achievement of the objective of increased legislative effectiveness and reduced administrative burden is not fully substantiated. The stakeholder consultation results could have been more detailed.

The changes the proposal would bring

The [proposed directive](#), to be transposed into national law within 18 months of entry into force, amends the WFD and its two daughter directives, the EQSD and the GWD.

Pollutants and quality standards

Surface waters

The proposal would add 23 **individual substances** to the list of priority substances⁶ and set corresponding individual environmental quality standards. Those substances include pharmaceuticals (macrolide antibiotics, estrogenic hormones, carbamazepine, diclofenac, ibuprofen); industrial chemicals (bisphenol A); metals (silver); and pesticides (triclosan, nicosulfuron, glyphosate, neonicotinoids, pyrethroids). A quality standard would also be set for the total⁷ of active substances in pesticides. Moreover, **24 PFAS** would be added as a group to the list of priority substances, and made subject to a quality standard based on the sum of substance concentrations. Some substances that no longer pose an EU-wide risk would be **deselected** from the list (the pesticides alachlor, chlorfenvinphos, simazine; and carbon tetrachloride, an industrial chemical). The proposal would **revise environmental quality standards** for existing priority substances, i.e. make them more stringent (for 14 substances) or less stringent (for 2 substances).

For more coherence, **river basin-specific pollutants**, currently considered under 'ecological status', would be incorporated into the assessment of surface waters' chemical status. The proposal would introduce, in a new annex II to the EQSD, a list of categories of river basin-specific pollutants for which Member States must consider setting quality standards; the procedure to derive such standards; and a repository of EU harmonised standards for river basin-specific pollutants, including the 'delisted' priority substances no longer posing an EU-wide risk. The proposed directive would introduce an explicit **obligation** for Member States to progressively reduce pollution from river basin-specific pollutants, as is already the case for priority substances. The Commission would be able to adopt delegated acts to set, where necessary, **harmonised quality standards** for river basin-specific pollutants and list them in the repository. Such harmonised standards, to be applied if the relevant substances are identified as being of national concern, would take precedence over standards set at national level.

Ground waters

New groundwater pollutants with related quality standards added to Annex I (EU-wide standards) include PFAS (group of 24, as for surface water), the pharmaceuticals carbamazepine and sulfamethoxazole (with individual environmental quality standards – EQS), and non-relevant

metabolites of pesticides (individual and total). The proposal would also set a standard for the total of pharmaceutical active substances.

The pharmaceutical primidone would be added to the list of synthetic substances for which Member States have to consider setting national threshold values (Annex II to the GWD).

As for river basin specific pollutants, the Commission would have the power to adopt delegated acts to set, where necessary, **harmonised threshold values** for groundwater pollutants of national, regional or local concern, and list them in the repository added to Annex II GWD. The proposed directive already introduces in the repository a harmonised threshold value for the sum of the two synthetic pollutants trichloroethylene and tetrachloroethylene, consistent with the parametric value set in [drinking water](#) under the [Drinking Water Directive](#).

Update of lists and standards

Pollutant lists and standards would be updated through delegated acts rather than through co-decision. More specifically, the Commission would have the power to adopt **delegated acts** to amend: the lists of priority substances and groundwater pollutants and their relevant quality standards; the list of categories of river basin specific pollutants; and the list of groundwater pollutants for which Member States have to consider establishing national threshold values.

The **European Chemicals Agency** (ECHA) would provide scientific support in the six-yearly review of the surface water and groundwater pollutant lists, i.e. in prioritising the substances to be included and in devising appropriate quality standards. ECHA's relevant scientific reports would be made publicly available.

Monitoring

Effect-based methods

The proposal would require Member States to apply **effect-based methods** (see box) to assess the cumulative effects of estrogenic hormones in surface waters over a period of at least two years, in view of possible future setting of effect-based trigger values (i.e. thresholds) for the adverse effect on human health or the environment. The monitoring (which would make it possible to capture the impact of estrogenic substances with similar effects beyond the three estrogenic hormones listed in Annex I to the EQSD) should be conducted at least four times during each of the two years at locations where the three listed hormones are being monitored using conventional chemical analytical techniques.

Effect-based methods (EBMs)

As noted previously, the aquatic environment has to cope with [mixtures of many chemicals](#). This reality is [at odds](#) with the single-substance approach of current chemicals assessment under EU water legislation. EBMs ([bioanalytical methods](#) using the response of whole organisms (*in vivo*) or cellular [bioassays](#) (*in vitro*) to detect and quantify the effects of groups of chemicals on toxicological [endpoints](#) of concern) can be a useful complement to chemical monitoring by providing an integrated measure of the 'chemical health' of the aquatic environment. The EU research project [SOLUTIONS](#) identified various benefits from [EBM use](#). In particular, EBMs may help: detect the effects of mixtures of compounds in waters and demonstrate their potential to affect aquatic organisms and human health; minimise the risk of overlooking hazardous chemicals, transformation products and chemical mixtures; detect hot spots of contamination for investigative monitoring; identify risk drivers and prioritising them for management measures; and link chemical and ecological status.

Watch lists

The proposal would make the **watch list for pollutants in groundwater** mandatory. The groundwater watch list would contain a maximum of **five substances** or groups of substances. The

first list should be established within two years of the entry into force of the proposed directive. Member States would have to monitor the substances on the list at least once per year over two years at selected representative monitoring stations. The **surface water watch list**, to be updated 23 months after the directive's entry into force, would contain a maximum of **10 substances** or groups of substances at any one time (compared to 14 currently). Member States would need to monitor the substances on the list at least twice a year over two years, except for substances sensitive to climatic or seasonal variabilities, for which the monitoring should be more frequent.⁸

The European Chemicals Agency would help the Commission select the substances to put on the watch lists. ECHA would also assess the monitoring results provided by Member States at the end of the monitoring period to determine whether the substances listed should be removed or maintained on the list.

Micro-plastics and selected **antimicrobial resistance genes**⁹ should be included in both watch lists as soon as suitable monitoring methods have been identified.

The watch lists would be updated every three years (instead of every two years).

Reporting

The proposal would allow for simplified and more frequent reporting of monitoring and water status data, notably by means of automated data delivery mechanisms. The European Environment Agency would have the task of analysing the data and making it available.

Warning and cooperation in exceptional circumstances

Drawing on the lessons from the 2022 [ecological disaster in the Oder river](#), the proposal would introduce an **obligation**, in cases of exceptional circumstances of natural origin or force majeure (extreme floods, prolonged droughts) or significant pollution incidents, for Member State authorities to **alert** downstream Member States in the same river basin (and the Commission) **immediately** and for all of them to cooperate to investigate causes and address consequences.

Advisory committees

In its [opinion](#) adopted on 22 February 2023 (rapporteur: Arnaud Schwartz, Diversity Europe – Group III, France), the European Economic and Social Committee (EESC) strongly supports the Commission's proposal to add a number of crucial water pollutants to the lists of priority substances for surface and groundwater. However, it notes that pollutants were largely added as individual substances, without taking into account chemical mixture effects. In its view, threshold values should be developed for other substance groups beyond PFAS, including bisphenols, pyrethroids and neonicotinoids.

The EESC believes that the EU must respond faster to scientific knowledge on water pollution and translate it into legal action and solutions, and insists on the importance of access to justice in environmental matters. The EESC urges the ECHA to strengthen its legal and technical capacity on pharmaceuticals and pesticides, in order to be equipped to deal with its new tasks, given that, currently, the Agency deals primarily with chemicals regulated under REACH, not covering pesticides and pharmaceuticals.

On pesticides, the Committee regrets that quality standards for glyphosate were set before the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) had issued its [final scientific opinion](#), without any indication that they would be revised now that the opinion is available. It also stresses that no individual quality standard for pesticides should be higher than the proposed 'total pesticides' parameter. Noting a continued lack of indicators to monitor the health of groundwater systems, such as temperature, the EESC wonders why the Commission has not included such relevant criteria in its proposal. The EESC welcomes the proposal that monitoring data

and the resulting water status would be made available to the EEA and the public at least once a year, instead of once every six years.

The European Committee of the Regions (CoR) decided not to draw up an opinion.

National parliaments

No reasoned opinion on the grounds of subsidiarity was submitted within the given [deadline](#).

Stakeholder views¹⁰

The [deadline](#) for feedback on the proposal following its adoption was 14 March 2023. In total, 71 [contributions](#) were received.

Non-governmental organisations (NGOs) [welcomed](#) several good elements in the proposal. They regretted, however, that the proposed directive backtracks on existing requirements by erasing the current 20-year deadline for phasing out priority hazardous substances set out in the WFD, and largely falls short on tackling chemical mixtures. They criticised the proposed quality standards for glyphosate, much higher than the threshold for the total of pesticide active substances. Furthermore, they considered that the six-yearly review cycle risks being too lengthy; and did not welcome the suggestion to limit the pollutants on the groundwater watch list to five substances, or the two-year deadline to establish the first list, given that a voluntary approach is already in place. NGOs regretted the lack of provisions on monitoring able to capture the effects of peak pollution events. They called for producers and importers of substances of concern for aquatic life to contribute to the monitoring costs, still largely falling on public budgets, via extended producer responsibility, based on toxicity of the substance and volume.

The European Chemical Industry Council [CEFIC](#) insisted that the prioritisation process of the priority substance lists for surface and groundwater must continue to be based on risk assessment, like in the previous revisions, and not rely solely on the chemical properties of a substance. It pointed to the need to ensure coherence with existing EU legislation, such as REACH, the IED or the Plant Protection Products Regulation, as some substances have already undergone measures to reduce risk. The priority lists should be revised only in cases where there is sound evidence that high EU risk still exists. CEFIC was concerned with the setting of uniform values for PFAS for surface water and groundwater in line with the European Food Safety Authority's opinion on drinking water limits, and asked for a different standard to be applied to rivers not classified for drinking water use.

[Pharmaceutical industry associations](#) expressed concern that changing the legislative process from co-decision procedure to delegated act would lead to less transparent and democratic decision-making. They insisted on the need for more science outcomes, standard and validated methods and for guidance concerning effect-based methods and effect-based trigger applications. They demanded that the standard for the total of pharmaceutical active substances be removed from the final directive, as its inclusion is in their view neither scientifically justified nor transparent.

Along the same lines, [CropLife Europe](#) took the view that the approach proposed for regulating non-relevant metabolites of pesticides in groundwater is not sufficiently grounded in science and needs to be revised. Similarly, the crop protection industry association argued that the approach taken for regulating pesticides and their relevant metabolites in surface water by setting a 'total EQS' is unnecessary, not grounded in science, was not the subject of stakeholder consultation or impact assessment, and should be deleted.

[Plastics Europe](#) did not accept that bisphenol A be identified as a priority hazardous substance. They warned that the proposed standard is orders of magnitude below the limit of detection and the target values of other regulatory frameworks (notably an [upcoming REACH restriction](#)); and that BPA listing as a priority hazardous substance, which implies that all emissions to the environment have to be ceased, would put polycarbonate manufacturing at risk.

[Eurometaux](#) insisted on the need for increased and formalised dialogue between Commission/ECHA and experts in the working groups under the common implementation strategy for the WFD (Working Group on Chemicals). They called for robust socio-economic impact assessments to be conducted to properly evaluate the costs, benefits and consequences of adding substances to the priority list and revising established standards for existing priority substances.

The [Scientific Committee on Health, Environmental and Emerging Risks](#) (SCHEER), welcoming the adjustment of the legal framework to technical and scientific progress, made a series of recommendations to improve the proposal. These include: adding three hazard classes to the definition of priority hazardous substances, notably endocrine disruptors, in line with the recent [amendment](#) to the Classification, Labelling and Packaging Regulation; double-checking the generic quality standard for individual pesticides in groundwater, established in the 1980s; specifying in the final directive that a groundwater quality standard must not be higher than the corresponding standard for surface waters; and exploring the possibilities of using EBMs for other groups of compounds beyond estrogens, such as photosynthesis-inhibiting herbicides. As regards mixtures assessment, SCHEER recommended applying the approach taken for PFAS to the groups of estrogenic compounds, photosynthesis-inhibiting herbicides, and neonicotinoid insecticides.

Legislative process

European Parliament

In Parliament, the Committee on the Environment, Public Health and Food Safety, responsible for the file, adopted its [report](#) on 27 June 2023 (rapporteur: Milan Brglez, S&D, Slovenia). It reinstates the deadline for phasing out emissions of priority hazardous substances. It requires **additional parameters** and quality standards for the total of bisphenols and the total of pharmaceutical active substances in surface waters; and for the total of PFAS in both surface waters and groundwater. It also tightens the standards for glyphosate, [atrazine](#) and non-relevant pesticide metabolites.

Given the vulnerability of the groundwater ecosystem, the report demands that the threshold values applicable to groundwater be **10 times lower** than the corresponding standards for surface waters, except in certain cases (where the actual risk posed to the groundwater ecosystems can be established, it may be appropriate to set threshold values for groundwater at a different level). To improve groundwater protection, the Commission would have to assess, within four years of the directive's entry into force, the impacts of physico-chemical elements (such as pH, oxygenation, temperature) on the health of groundwater ecosystems; and the chemical status of areas of high ecological value, vulnerability or pollution (such as caves and karst areas and former industrial sites). Those assessments should be accompanied by a proposal to revise the GWD, where appropriate.

The report proposes not to limit the number of substances on the **watch lists**; to establish a deadline for identifying suitable monitoring methodologies for micro-plastics and antimicrobial resistance genes (18 months after the act's entry into force); and to consider the inclusion of [xanthates](#) and non-relevant metabolites of pesticides in the surface water watch list, and of [sulphates](#) in both surface and ground water watch lists, in order to improve the availability of data on their presence.

The report would require the Commission to evaluate the reliability of **EBMs** as screening methods within 12 months of the two-year monitoring period required for estrogenic substances. Once EBMs are ready to use for other substances as well, the Commission should be empowered to adopt delegated acts to require Member States to apply EBMs for monitoring those substances, in parallel to conventional methods, with a view to possibly setting effect-based trigger values in the future.

Within one year of the directive's entry into force, the Commission would be required to look into the possible introduction of an **extended producer responsibility** mechanism for producers placing on the EU market products containing any of the substances or compounds listed in Annex I of the GWD and in Annex I of the EQSD, as well as substances of emerging concern included on the watch lists, to help cover the costs of water monitoring programmes. To alleviate the financial and

administrative burdens associated with the monitoring of an increased number of substances, the Commission would have to set up a joint **European monitoring facility** for managing the monitoring requirements when Member States so request. Its use would be voluntary.

Regarding cooperation in exceptional circumstances or pollution incidents, the report requires **emergency** communication and response arrangements to be set up for all international river basin districts. It also adds provisions on **access to justice**.

On 12 September 2023, Parliament's plenary adopted the report unchanged by 495 votes in favour to 12 against, with 124 abstentions, setting Parliament's mandate for negotiations with the Council.

As the 2019–2024 parliamentary term was coming to an end, and the Council still had not agreed a position, the file was put to the vote in plenary on 24 April 2024, in order to close Parliament's first reading. The [text](#), as amended on 12 September 2023, was adopted by 452 votes in favour to 43 against, with 83 abstentions.

The file is part of the [unfinished business](#) on which work should resume in the current parliamentary term. The ENVI committee's new rapporteur is Javi López (S&D, Spain). On 4 December 2024, ENVI members [voted](#) to enter into interinstitutional negotiations.

Council

The Council adopted its [negotiating mandate](#) on 19 June 2024. For pollutants and quality standards, [the Council](#) keeps the EQS for the sum of 24 **PFAS** proposed by the Commission in surface waters. For groundwater, however, it proposes to align the PFAS requirement with the 'parametric value defined in the Drinking Water Directive' (currently setting a QS for the sum of 20 PFAS). This implies that any updates done for drinking water would automatically apply to groundwater. In parallel, the Council adds a separate sum QS for [four PFAS](#) (PFHxS, PFOS, PFOA and PFNA). The Council deletes the proposed QS for the total of **pharmaceutical active substances** for groundwater. Instead, it adds a generic value for 'Individual pharmaceuticals' in Part D Annex II GWD, to be applied to any pharmaceutical identified as posing a risk at national level, unless a stricter standard or threshold value has been set specifically for that substance at EU or national level. In Annex I GWD, the Council raises the threshold for the pharmaceuticals carbamazepine and primidone (moved to Annex I), and for sulfamethoxazole, to a level 10 times less strict than originally proposed. The Council deletes the **'total pesticides'** QS for surface waters. While the Commission proposes different QS levels depending on the knowledge of toxicity, the Council sets unified QS for non-relevant pesticide metabolites in groundwater, though these are less strict than those picked by Parliament. It asks the Commission to establish, within six months of the entry into force, a **list of all known pesticide metabolites**, indicating if they are relevant or not. The Council moves several priority substances from Annex I to Annex II, thereby classifying them as river basin specific pollutants.

Moreover, the Council seeks to **extend the deadline** for complying with the standards for newly added surface water and groundwater pollutants until 22 December 2039. For substances subject to revised EQS, compliance should be achieved by 22 December 2033. By specifying that exemptions under Article 4.4 to 4.9 WFD would apply 'mutatis mutandis', the Council position would allow deadline extensions for two subsequent updates of the River Basin Management Plans, i.e. until 2045 or 2051, respectively.

The Council supports the proposed capping of substances on the watch lists. It specifies that microplastics and anti-microbial resistance genes would be included in the watch lists only once harmonised and reliable monitoring methods and evaluation standards not entailing excessive costs and scientifically agreed criteria for assessing the monitoring results are available.

The Council would make the use of EBMs **voluntary** for Member States.

Echoing Parliament's demand, the Council asks the Commission to explore the setting up of a **joint monitoring facility** for Member States to use on a voluntary basis. The Commission would have to

present a report on options for the establishment, financing and operation of such a facility within two years of the entry into force.

The Council would extend the **deadline** for transposing the proposed directive from one a half to two years.

Furthermore, the Council introduces a number of amendments going beyond the scope of the Commission proposal. Together with a new definition of the deterioration of the status of a water body, it proposes two **additional exemptions** to the environmental objectives of the WFD (Article 4), whereby temporary deterioration caused by a new project or a modification to an existing project, and deterioration by relocating water or sediment without causing a net increase in pollution, are not to be considered a breach of the directive, provided certain conditions are met.

The Council would also require the Commission to adopt an implementing act setting indicators at EU level showing measurement of **progress**, as it considers that the WFD 'one-out-all-out' principle (under which good status is achieved if all parameters qualify as good) makes it challenging to show progress, although the status of individual quality elements has improved since the WFD was adopted.

Trilogue negotiations are expected to start in early 2025, possibly at the end of January.

EUROPEAN PARLIAMENT SUPPORTING ANALYSIS

Vikolainen, V., [Revising the standards for surface water and groundwater pollutants](#), EPRS, European Parliament, March 2023.

OTHER SOURCES

European Parliament, [Surface water and groundwater pollutants](#), Legislative Observatory (OEIL).

ENDNOTES

- ¹ On this, see European Environment Agency, [Chemicals in European waters. Knowledge developments](#), 2018.
- ² Inland water (except groundwater) and transitional and coastal waters, as well as, with respect to chemical status, territorial waters (Source: Commission [impact assessment](#)).
- ³ Reaction or breakdown products of an active substance of a plant protection product, which are formed in the environment after the application, be it by biotic (microbials, other taxa) or abiotic processes (hydrolysis, photolysis) (Source: [European Commission, 2021](#)).
- ⁴ A watch list mechanism also exists for [drinking water](#). The first list was adopted in [January 2022](#).
- ⁵ Under the [Plant Protection Product Regulation](#), 'a metabolite is deemed relevant if there is a reason to assume that it has intrinsic properties comparable to the parent substance in terms of its biological target activity, or that it poses a higher or comparable risk to organisms than the parent substance or that it has certain toxicological properties that are considered unacceptable'.
- ⁶ Formally, the list of priority substances, currently forming Annex X WFD, would be incorporated in Annex I EQSD.
- ⁷ 'Total' means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.
- ⁸ To be specified in the Commission implementing act establishing the watch list.
- ⁹ Those two pollutants would also be added to the indicative list of main pollutants to be considered under the WFD (Annex VIII).
- ¹⁰ This section aims to provide a flavour of the debate and is not intended to be an exhaustive account of all different views on the proposal. Additional information can be found in related publications listed under 'European Parliament supporting analysis'.

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