

Joint Statement on the revision of lists of surface and groundwater pollutants

19 October 2022

As a joint alliance of EU health and environmental civil society organisations we hereby share our main policy recommendations on the update of the lists of surface and groundwater pollutants under the Water Framework Directive (2000/60/EC – WFD), the Environmental Quality Standards Directive (2013/39/EU – EQSD) and the Groundwater Directive (2006/118/EC – GWD).

Despite some improvements, water pollution remains a key environmental challenge across the EU and globally. Twenty years after the adoption of the Water Framework Directive, less than 40% of Europe's rivers, lakes, coastal and transitional waters are in good chemical status. While the number for groundwater bodies in good chemical status is higher (74%), there are some large regional differences¹ and it is also an effect of the fact that fewer pollutants are monitored in groundwater.ⁱ

Yet, this does not reveal the full scale of EU water pollution as chemical status is only assessed against a small fraction of the substances present in the environment and does not consider mixture effects meaning that **the full picture of chemical pollution in aquatic environments is underestimated and underreported.**ⁱⁱ It must also be acknowledged that fresh water and ocean pollution are one: and the protection of Europe's blue spaces depends on decisions adopted upstream.

The ongoing revision of lists of pollutants presents an opportunity to better tackle the chemical water pollution as identified in the fitness check evaluation of the water legislation, in particular related to mixture effects, uptake of scientific advances and transparency.ⁱⁱⁱ We would like to set out key policy recommendations for these important legislative revisions.

1. Expand the list of water pollutants to reflect the real scale of pollution

Currently, most of the pollutants or priority substances to be tackled across the EU have individual threshold values that do not account for mixture effects. Additionally, one substance that is regulated can easily be substituted by another with similar harmful properties. Setting threshold values for a group of substances with similar properties is a way to counter that², but should not impact the substance-by-substance monitoring established by the EQSD and GWD.

¹ 80% of groundwater area in Luxembourg, close to 50% in Czech Republic and 27% in Belgium in poor status due to contamination of pesticides and biocides

² In line with the Chemicals Strategy for Sustainability aim to regulate substances as groups

Moreover, several currently listed Priority Substances are no longer in use. For instance, 13 of the 20 pesticides³ listed as priority substances are now banned in the EU. While banned substances can still be of significant environmental concern^{iv}, the list of Priority Substances must reflect reality. Many **substances that are both in frequent use and of very high concern for aquatic life and human health are not yet listed as Priority Substances**. This includes **glyphosate** (the most sold pesticide in the EU), **PFAS**, **several pharmaceuticals and microplastics**.

Surface water

- We support the addition of all the candidate substances⁴ and the approach to add substances as groups with a threshold value for the whole group. This should include the listing of the whole group of bisphenols and not only Bisphenol A;
- The proposed glyphosate EQS should be complemented with an EQS for its metabolite AMPA; and a general limit for pesticides should be introduced in coherence with GWD
- No weakening of standards. The new methodology to develop PFAS EQS for surface water renders a PFOS standard that is higher than the current one⁵, which must be avoided;
- Introduce a new Annex to the EQSD with EU-wide EQS for the current River Basin Specific Pollutants and include it in the chemical status assessment;
- The deselection criteria^v should ensure that measures are taken against illegal use, that areas with stable trends are decontaminated, and that reporting to the Commission continues where EQS are exceeded;
- It is not acceptable that Member States stop monitoring priority substances before official deselection. We expect the Commission to uphold the monitoring requirements of the EQSD.

Groundwater

Groundwater ecosystems are more vulnerable to stressors than many other freshwater ecosystems due to slower biological and physical degradation processes together with longer residence times of pollutants. Given the great difficulty to restore contaminated groundwater bodies, as well as indications that groundwater ecosystems are less resilient to stressors, they need to be treated with a corresponding level of care.

- We welcome the listing of additional substances⁶, but it remains insufficient: setting threshold values for only two pharmaceuticals for groundwater is not enough. The Commission should **develop threshold values for sub-groups of pharmaceuticals and pesticides**⁷ for groundwater, such as has been considered for surface water;
- **Review the individual standard for pesticides** and lower it for those substances where the surface water EQS is below 0.1 µg/L, and adjust the total pesticides standard accordingly;

³ For editing purposes we use the term pesticides to mean pesticide-active substance

⁴ Diclofenac, Carbamazepine, Ibuprofen, Estrogenic hormones (estrone, 17-beta-estradiol, ethylestradiol), antibiotics (Azithromycin, Clarithromycin, Erythromycin), nicosulfuron, glyphosate, triclosan, neonicotinoids (Acetamiprid, Clothianidin, Imidacloprid, Thiacloprid, Thiamethoxam), pyrethroids (Bifenthrin, Deltamethrin, Esfenvalerate, Permethrin), PFAS, Bisphenol A, silver

⁵ As pointed out by SCHEER in their [opinion on EQS for PFAS in surface water](#)

⁶ non-relevant metabolites for pesticides, PFAS and the pharmaceuticals Carbamazepine and Sulfamethoxazole

⁷ The pesticides threshold values should be designed in the application of the existing general pesticide limit of 0.1 µg/l single substance and 0.5 µg/l total (Directive 2006/118/EC, annex 1).

- **Indicate active substances of pesticides and biocides to be monitored in groundwater**, including as a minimum the most used ones, to monitor compliance with risk management and progressive reduction measures;
- Follow the European Medical Agency (EMA) recommendation^{vi} to apply a precautionary approach to set **thresholds for groundwater at one order of magnitude lower than for surface water** for existing and candidate substances;
- Include new indicators to protect groundwater ecosystems, such as temperature.

Both the EQSD and the GWD should be made coherent with the recast Drinking Water Directive and include provisions to tackle **microplastics**.

2. Improve monitoring practices

It is well-known that European waters contain cocktail of contaminants, and that **mixture effects** are missed by substance-by-substance monitoring. In mixtures, pollutants can have an effect at a concentration lower than the EQS set for an individual substance. Current monitoring requirements of surface water priority substances (1 time per month) can miss **peak events** occurring e.g. after fertiliser or pesticide spreading or sewer overflows following heavy rain, which can significantly increase the load and massively underestimates the concentrations felt by aquatic organisms.^{vii}

Additionally, it has been observed that river basin authorities make very **varied monitoring efforts** for pollutants in water. For example, only four countries reported groundwater data for glyphosate in the 2nd generation River Basin Management Plans^{viii}, despite this being the most sold pesticide in the EU.

- Develop guidelines on **effect-based monitoring**, chemical screening techniques and other methods to capture mixture effects as a complement to chemical monitoring;
- Promote **event-based monitoring** to capture the effects of peak events. This should also trigger measures to decrease such activities e.g. by informing farmers to not apply fertiliser or pesticide when heavy rain is expected;
- Implement a **common minimum reference framework for monitoring**, including a minimum number of sampling points per unit area, sampling frequency and duration as well as coherence in terms of which substances to be monitored and how, including adequate meta information such as a documentation of sampling and analytical methods'

3. EU water legislation must respond faster to scientific knowledge

The revision of lists of surface and groundwater pollutants should take place every 6 years⁸ but the as the timetable has not been kept, the revision will only apply to the 4th river basin planning cycle (2028-2033).

The voluntary nature of the Groundwater Watch List (GWWL) has resulted in the data collected being, scattered, limited and incoherent, due to lack of coherent monitoring and methodology. Additionally, the results have not been made public as Member States do not feel the data is 'representative'.

The narrow list of substances that determine chemical status **limits actions under other EU legislation**. For example, Plant Protection Products Regulation (PPPR) authorisations must be reviewed if WFD chemical status is at risk but in practice that's only applicable for those seven pesticides that are

⁸ WFD - Article 16(4) and 16(7), EQSD- Article 8, GWD - Article 10

listed as priority substances and are still authorised. Conversely, the WFD and its daughter directives are highly influential for legislations further downstream, especially the Marine Strategy Framework Directive (MSFD) for coastal and marine waters.

- **The GWWL should be made** mandatory to ensure coherent data collection on substances of potential EU-wide concern for groundwater;
- **The review cycle of the Watch Lists should be shortened**, e.g. substances monitored for 2 years (down from current 4);
- **The integration and response between sectorial policies must be enhanced** with consistent at-source action under the respective legislative framework, e.g. REACH, PPPR, Biocidal Products Regulation;
- Member States should put in place monitoring of newly added priority substances within 6 months of their listing and develop a preliminary Program of Measures covering those substances within 1 year.

4. Strengthen the responsibility of manufacturers, importers and users

The Commission should ensure that the Polluter Pays Principle is fully integrated in its proposal as well as in sectoral EU legislation, since pollution is still largely for free and the cost for pollution is born by society and the environment.^{ix} This includes monitoring of water pollution which is currently covered by public money. Additionally, substances can be put on the market without ensuring that they (or their metabolites) can be properly monitored in the environment.

Producers, importers and users of substances of concern for aquatic life should contribute to cover the associated environmental costs, including monitoring. More importantly, a correct price for pollution should work to de-incentive pollution, i.e. preventing pollution at source.

- The Commission should **require an extended producer responsibility to cover costs related to treatment, remediation and monitoring of substances**. This could be in the form of a fund into where manufacturers and importers of substances of concern, e.g. pesticides, biocides and pharmaceuticals pay a contribution;
- **Producer should demonstrate that affordable, easy-to-use analytical methods of sufficient sensitivity** to analyse substances in water and the environment **exist and** are made publicly available, before substances are allowed on the market'
- Effective incentives supporting sustainable water uses should be strengthened, e.g. in the context of the Common Agricultural Policy, to guarantee and promote environmentally friendly farming.

5. Use the most cost-efficient measures to address water pollution at source

Water pollution comes at large costs for society and the environment, including biodiversity loss, cost for treatment to reach drinking water standards as well as remediation of contaminated areas and are probably underestimated. The objective of data generation and sharing of monitoring data of substances of concern to aquatic life should trigger **measures to address the emissions at source**.

- Regulatory options need to take account of the Zero Pollution hierarchy of actions and promote **prevention at source measures over end-of-pipe or remediation**;
- To guide measures (for decision-makers, as well as other actors) **transparency on environmental information** is needed, such as emissions from industrial discharge

permits and agriculture, and should be made accessible to the public in a transparent and easily accessible manner'

- For substances of concern, as well as in cases with widely dispersed diffuse pollution, **EU-wide bans** are necessary and have also proven efficient in lowering concentrations of pollutants in water.^x

Clean water is a necessity for the health of the environment and citizens, and is a basis for the functioning of our society. A strong water protection framework, focusing on pollution reduction at source, will bring benefits for ecosystems, recreational water users, industry and ensure clean and affordable drinking water.

Co-signing organisations:



References

- ⁱ EEA, (2020) Pesticides in European rivers, lakes and groundwaters – Data assessment
- ⁱⁱ Brack et al. Environ Sci Eur (2018) 30:33 <https://doi.org/10.1186/s12302-018-0161-1>
- ⁱⁱⁱ European Commission (2019) [Fitness check of the Water Framework Directive, Groundwater Directive, Environmental Quality Standards Directive and Floods Directive](#)
- ^{iv} See for example PAN Europe and Ecologistas en Accion, (2018), [Ríos hormonados: Contamination of Spanish Rivers with Pesticides](#)
- ^v JRC (2022) final proposal [Deselection of existing Priority Substances](#) version 5
- ^{vi} EMA, (2018), [Assessing the toxicological risk to human health and groundwater communities from veterinary pharmaceuticals in groundwater](#) EMA/CVMP/ERA/103555/2015
- ^{vii} EAWAG news portal (2020) [Short-term peak concentrations are severely underestimated](#)
- ^{viii} EEA, [WISE database – Groundwater bodies: Pollutants](#)
- ^{ix} See for example ECA [Special Report 12/2021: The Polluter Pays Principle: Inconsistent application across EU environmental policies and actions](#) and ECA [Review 01/2022: Energy taxation, carbon pricing and energy subsidies](#)
- ^x European Commission (2013) Science for Environmental Policy [Herbicide levels in coastal waters drop after EU ban](#)