

Background paper

Tackling Chemical Pollution in Our Waters

Introduction

Chemical pollution in water remains a major contributor to the failure of Member States to achieve the overall objective of good status under the Water Framework Directive (WFD). In addition to the WFD, the relevant regulatory framework also comprises two associated Directives - the Environmental Quality Standards Directive and the Groundwater Directive. Chemical pollutants are relevant to assessing: (a) the chemical status of surface waters (based on compliance with the Environmental Quality Standards (EQS) for Priority Substances (PS) and eight other pollutants); (b) the ecological status of surface waters (based on compliance with EQS set for River Basin Specific Pollutants (RBSPs)) and (c) the chemical status of groundwaters (based on compliance with EU-level quality standards for pesticides and nitrates, and nationally set threshold values (TVs) for other pollutants).

Furthermore, the surface water watch list provision entails monitoring requirements for additional pollutants in surface waters, and the groundwater watch list provision prompts additional voluntary monitoring, with a view in both cases to identifying additional pollutants of concern for possible regulation, in particular emerging pollutants.

It is important to note that the WFD aims to protect both human health and the environment, and that chemical pollutants are highly relevant to both aspects.

Challenges

The Commission's ongoing assessment of the 2nd River Basin Management Plans (RBMPs) suggests that the spatial coverage of monitoring programmes for chemical pollutants in surface waters has differed widely, meaning that some Member States have had to make greater use of extrapolation methods or expert judgment and have low confidence in the classification. The frequencies of monitoring have in many Member States not been sufficient to meet at least the minimum recommended in the WFD. Some Member States have not been able to employ sufficiently sensitive analytical methods for some pollutants, and some have done no (or only limited) monitoring in sediment or biota as required for monitoring trends, and no or limited monitoring in biota to assess exceedances for mercury, hexachlorobenzene and hexachlorobutadiene. However, the proportion of water bodies in unknown chemical status has decreased since the first cycle.

Inventories of emissions have been established in a large majority of River Basin Districts; however they are often incomplete (not all PS or eight other pollutants are included). When reported, the data quality is often uncertain, and there is still room for refinement of the methodology applied.

Member States have encountered particular difficulty in meeting the EQS for the pollutants in surface waters which were identified in the 2013 amendment to the EQS Directive as ubiquitous persistent, bioaccumulative and toxic (uPBTs), among them mercury. One of the main concerns of Member States is that few measures are available to them at national level to address the problem, which in some cases arises because of long-range atmospheric transport, and that it will be long-lasting. In that context, Article 4(4) exemptions are being applied, but there is concern about the limitation to two further extensions of the 2015 deadline.

Member States have commented that the presence of uPBTs makes it difficult to communicate progress to the public, although the 2013 amendment to the EQSD specifies that maps may be presented that show status also in the absence of those substances.

The addition of new PS to the list in 2013 and the possibility that more might be added in future has been perceived as complicating the assessment of chemical status and the deadlines for compliance with the good-status objective.

As regards the RBSPs, significant differences remain between the numbers of substances identified as RBSPs and the EQS set for them in different Member States, meaning that the assessment of ecological status is in that respect not always comparable.

As regards chemical pollutants in groundwaters, the monitoring coverage has also varied widely and in some cases decreased since the first assessment, suggesting that monitoring resources may be an issue. The chemical status of groundwater bodies overall has improved only very slightly, and the future rate of improvement is predicted to be slow. Not all Member States have derived TVs for all relevant pollutants, and those set are also not always comparable.

As regards emerging pollutants in surface waters, the obligation to monitor substances on the watch list has generated additional high-quality data for several substances, and these will be useful in the review of the PS list. But some Member States have raised queries about whether they need to continue monitoring substances when they have already provided good quality data, and there have been questions about the relative timing of the watch-list monitoring and PS review.