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Directive on Environmental Quality Standards

Policy Review

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 642317.

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With thanks to:

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Project coordination and editing provided by Ecologic Institute.

Acknowledgments & Disclaimer

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Directive on Environmental Quality Standards

Policy Review
Directive on Environmental Quality Standards
Name/Type of the Legal Act or Policy
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, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council. The Directive is called "Directive on Environmental Quality Standards", but also known as the "Priority Substances Directive". Other relevant previous acts: Decision No 2455/2001/EC: sets out the first list of 33 substances or groups of substances that have been prioritised for action at Community level.
Entry into force
December 2008
Departments/Units in charge
DG ENV, Dir. C Quality of Life, Water & Air, 1. Water *[CLAYTON H.: Policy Officer – Implementation and Development of Water Framework and Priority Substances Directives & water policy]*
Common Implementation strategy (CIS processes)
Art. 9, EQSD: The Commission shall be assisted by the Regulatory Committee referred to in Art. 21(1) of Directive 2000/60/EC. WFD CIS Working Group "Chemicals"
Main Objective
"In accordance with Art. 4 of Directive 2000/60/EC, and in particular paragraph 1(a), Member States should implement the necessary measures in accordance with Art. 16(1) and (8) of that Directive, with the aim of progressively reducing pollution from priority substances and ceasing or phasing out emissions, discharges and losses of priority hazardous substances." (Preamble EQSD) The objective of the directive is "that of achieving of good surface water chemical status by laying down EQS for priority substances and certain other pollutants" (Preamble EQSD (32)) Art. 1: Subject matter "This Directive lays down environmental quality standards (EQS) for priority substances and certain other pollutants as provided for in Art. 16 of Directive

2000/60/EC, with the aim of achieving good surface water chemical status and in accordance with the provisions and objectives of Art. 4 of that Directive."

Principles included in the legal text

In the preamble: Precautionary principle; the principle that preventive action should be taken; that environmental damage should, as a priority, be rectified at source and that the polluter should pay. (2) Principle of subsidiarity; principle of proportionality (the directive does not go beyond what is necessary in order to achieve the objective) (21)

Other objectives/Key concepts/key elements of the legislation

"As a matter of priority, causes of pollution should be identified and emissions should be dealt with at source, in the most economically and environmentally effective manner" (Preamble EQSD).

The EQSD established:

- in Annex I, limits on concentrations of the priority substances in surface waters of 33 priority substances and 8 other pollutants;
- the list of 33 priority substances in Annex II as Annex X of the Water Framework Directive;
- the possibility of applying EQS for sediment and biota, instead of those for water;
- the possibility of designating mixing zones adjacent to discharge points where concentrations of the substances in Annex I might be expected to exceed their EQS;
- a requirement for Member States to establish an inventory of emissions, discharges and losses of the substances in Annex I
- an obligation to review the list of priority substances by 13 January 2011.

By replacing five older directives, the EQSD contributed to the Commission's Better Regulation initiative.

Terminology

For the definition of terms, reference is made to the definitions given in the Water Framework Directive (WFD). Important terms used in the directive include the following:

Environmental quality standards (EQS): "means the concentration of a particular pollutant or group of pollutants in water, sediment or biota which should not be exceeded in order to protect human health and the environment." (WFD Art. 2)

Priority substances: are substances of EU-wide concern which present a significant risk to or via the aquatic environment. Emissions, discharges and losses of priority substances need to be reduced.

Priority hazardous substances: are a subset of priority substances. According to the WFD, "'Hazardous substances' means substances or groups of substances that are toxic, persistent and liable to bio-accumulate, and other substances or groups of substances which

give rise to an equivalent level of concern." The emission, discharge or loss of priority hazardous substances needs to be ceased or phased-out.

Maximum allowable concentrations: are EQS established to protect against short-term exposure of chemical pollution.

Derogations

"In accordance with Art. 13 of, and Annex VII(A)(5) to, Directive 2000/60/EC, any exemptions to the application of the EQS for priority substances applied to water bodies in accordance with Art. 4(4), (5) and (6) of that Directive, taking into account Art. 4(8) and (9) thereof, should be reported in the river basin management plans. Provided that the requirements of Art. 4 of Directive 2000/60/EC including conditions for exemptions are met, activities, including dredging and shipping, leading to discharges, emissions and losses of priority substances can take place." (Preamble EQSD (17)). Exemptions are furthermore possible in relation to transboundary pollution (Art. 6 EQSD)

Types of management measures

- Appliance of EQS for surface water bodies.
- Possibly establishment of EQS for sediment and/or biota at national level. (Art. 3(2); EQSD)
- Arrange for the long-term trend analysis of concentrations of those priority substances that tend to accumulate in sediment and/or biota and ensuring that such concentrations do not significantly increase in sediment and/or relevant biota (Art. 3(3); EQSD)
- Possibly establishment of mixing zones adjacent to points of discharge: Concentrations of one or more substances may exceed the relevant EQS within such mixing zones if they do not affect the compliance of the rest of the body of surface water with those standards. (Art. 4(1); EQSD)
- Establishment of an inventory of emissions, discharges and losses: ..."Member States shall establish an inventory, including maps, if available, of emissions, discharges and losses of all priority substances and pollutants listed in Part A of Annex I 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." (Art. 5(1); EQSD)
- The EQSD itself does not foresee measures to reduce pollutants.

Spatial coverage

The EQS apply to surface water bodies. As reference is made to the WFD, it can be supposed that the spatial coverage corresponds to the one of the WFD.

Reporting units – what are the specific transposition requirements

"Member States should be able to establish EQS for sediment and/or biota at national level and apply those EQS instead of the EQS for water set out in this Directive. Such EQS should

be established through a transparent procedure involving notifications to the Commission and other Member States so as to ensure a level of protection equivalent to the EQS for water set up at Community level. The Commission should summarise these notifications in its reports on the implementation of Directive 2000/60/EC." (Preamble EQSD (16); also Art. 3) Reporting of the EQSD is directly linked to reporting under the WFD. Exemptions to EQS for example need to be reported in the river basin management plans. The same applies to designated mixing zones. Updated inventories of emission, discharges and losses shall be published in the updated river basin management plans. (Art. 5, EQSD)
Management unit
The EQS are set for surface water bodies, they are harmonised through the EQSD at European level. The directive encourages member states to establish EQS for sediment and biota at national level. The inventory of emissions, discharges and losses shall be made for each river basin district or part of a river basin district lying within the territory of the member state. (Art. 5(1); EQSD)
Key planning steps
The EQSD encourages the following: (1)Member states can establish EQS for sediment and biota at national level, in addition to EQS for surface water provided by the directive; (2)MS can designate mixing zones in the proximity of the points of discharge. Technical guidelines should be developed to contribute to the harmonisation of methodologies used by Member States to establish the inventories of emissions, discharges and losses, including losses from pollution accumulated in sediments.
Timelines
"Member States shall determine the frequency of monitoring in sediment and/or biota so as to provide sufficient data for a reliable long-term trend analysis. As a guideline, monitoring should take place every three years, unless technical knowledge and expert judgment justify another interval." (Art. 3(3) EQSD) Member States shall update their inventories as part of the reviews of the analyses specified in Art. 5(2) of Directive 2000/60/EC (= at the latest 13 years after the date of entry into force of the WFD and every six years thereafter). "Member States shall publish the updated inventories in their updated river basin management plans." (Art. 5, EQSD) "The Commission shall, by 2018, verify that emissions, discharges and losses as reflected in the inventory are making progress towards compliance with the reduction or cessation objectives laid down in Art. 4(1)(a)(iv) of Directive 2000/60/EC, subject to Art. 4(4) and (5) of that Directive." (Art. 5(5) EQSD)
Integration/coordination issues with other related pieces of legislation
The EQSD amends and subsequently repeals Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC and 86/280/EEC. The directive follows and amends the WFD. The WFD "lays down a strategy against pollution of water and requires further specific measures

for pollution control and environmental quality standards (EQS). This Directive lays down EQS in accordance with the provisions and objectives of Directive 2000/60/EC" (Preamble EQSD).

The EQSD makes furthermore reference to the following legal acts:

- EU Drinking Water Directive: specifying that it may require more stringent standards. (Preamble EQSD (18))
- Regulation (EC) No 166/2006 of the European Parliament and Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register
- Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control

The criteria for identifying substances that are persistent, bioaccumulative and toxic, as well as substances of other equivalent concern, notably very persistent and very bioaccumulative, as referred to in Directive 2000/60/EC, are established in the Technical Guidance Document for Risk Assessment in support of Directive 93/67/EEC, Directive 98/8/EC and Regulation (EC) No 1907/2006. In order to ensure consistency of Community legislation, only those criteria should be applied to the substances under review according to Decision No 2455/2001/EC, and Annex X to Directive 2000/60/EC should be replaced accordingly. (Preamble EQSD (28))

Coordination issues with the EU Biodiversity Strategy

Target 1: Chemical pollution can affect individual species. Protecting from chemical pollution can protect individual species.

Target 2: All ecosystem services depending on the quality of water are supported by the EQSD.

Target 3: Some of the priority (hazardous) substances are pesticides. Regulating their use reduces the negative impact of agriculture on biodiversity.

Target 4: Some priority (hazardous) substances may have an impact on fish stocks (e.g. influencing reproduction). In this case the EQSD can also have a positive impact on fish resources.

Relevance to ecosystems/habitats?

The directive mentions the "aquatic environment" (Preamble EQSD). "Chemical pollution of surface water presents a threat to the aquatic environment with effects such as acute and chronic toxicity to aquatic organisms, accumulation in the ecosystem and losses of habitats and biodiversity, as well as a threat to human health" (Preamble EQSD). In terms of ecosystem services, all services depending on chemical water quality are concerned (e.g. drinking water provision and bathing).

Drivers

No definition of the term provided in the legal act. The EQSD directly mentions dredging, shipping, use of pesticides. An EEA report on "Hazardous substances in Europe's fresh and

marine waters" (2011) mentions the following key sources of hazardous substances: Urban environment; Agriculture; Mining; Landfills and contaminated land; Transport of hazardous substances to coastal waters; Sources emitted directly into the marine environment.
Pressures
Pollution is the main subject of the directive, with both point and diffuse pollution mentioned.
Assessment of Environmental State
The preamble of the EQSD states that member states should monitor amongst others sediment and biota in order to provide data for long-term trend analysis of those priority substances that tend to accumulate in sediment and/or biota. At the same time it is mentioned, that "for the majority of substances the establishment of EQS values at Community level should, at this stage, be limited to surface water only". "Furthermore, Member States should be able to establish EQS for sediment and/or biota at national level and apply those EQS instead of the EQS for water set out in this Directive." EQS are defined in terms of annual average values and in terms of maximum allowable concentrations.
Assessment of Status
The subject of the directive is to set environmental quality standards (EQS) for a selected list of pollutants. Thereby it further defines good chemical status of water bodies. "The aquatic environment can be affected by chemical pollution both in the short- and long-term, and therefore both acute and chronic effects data should be used as the basis for establishing EQS. In order to ensure that the aquatic environment and human health are adequately protected, EQS expressed as an annual average value should be established at a level providing protection against long-term exposure, and maximum allowable concentrations should be established to protect against short-term exposure."

About AQUACROSS

Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies (AQUACROSS) aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services. Funded by Europe's Horizon 2020 research programme, AQUACROSS seeks to advance knowledge and application of ecosystem-based management (EBM) for aquatic ecosystems to support the timely achievement of the EU 2020 Biodiversity Strategy targets.

Aquatic ecosystems are rich in biodiversity and home to a diverse array of species and habitats, providing numerous economic and societal benefits to Europe. Many of these valuable ecosystems are at risk of being irreversibly damaged by human activities and pressures, including pollution, contamination, invasive species, overfishing and climate change. These pressures threaten the sustainability of these ecosystems, their provision of ecosystem services and ultimately human well-being.

AQUACROSS responds to pressing societal and economic needs, tackling policy challenges from an integrated perspective and adding value to the use of available knowledge. Through advancing science and knowledge; connecting science, policy and business; and supporting the achievement of EU and international biodiversity targets, AQUACROSS aims to improve ecosystem-based management of aquatic ecosystems across Europe.

The project consortium is made up of sixteen partners from across Europe and led by Ecologic Institute in Berlin, Germany.

AQUACROSS PARTNERS

Ecologic Institute (ECOLOGIC) | Germany

Leibniz Institute of Freshwater Ecology and Inland Fisheries (FVB-IGB) | Germany

Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) | France

Wageningen Marine Research (WMR) | Netherlands

University of Natural Resources & Life Sciences, Institute of Hydrobiology and Aquatic Ecosystem Management Austria

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ACTeon – Innovation, Policy, Environment (ACTeon) | France

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