



Document title	Update of PBDE secondary threshold for sediments
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Reference	

Background

During the national checking of HELCOM indicator evaluations a question was raised about the suitability of the existing secondary threshold for Polybrominated biphenyl ethers (PBDEs) in sediments. The previous thresholds for PBDEs were agreed on at HELCOM HOD 48-2015.

HELCOM [HOD 48-2015](#) (outcome para 3.63, Annex 4) agreed on the threshold values (referred to as GES-boundaries) for the core indicators 'Abundance of coastal fish key functional groups', 'Abundance of key coastal fish species', 'Abundance of salmon spawners and smolt', 'Abundance of sea trout spawners and parr', 'Abundance of waterbirds in the breeding season', 'Distribution of Baltic seals', 'Population trends and abundance of seals', 'Nutritional status of marine mammals' (later changed to only evaluate seals), 'Reproductive status of seals' (later changed to only evaluate seals), 'Trends in arrival of new non-indigenous species', 'Hexabromocyclododecane (HBCDD)', 'Metals', '**Polybrominated biphenyl ethers (PBDE)**', 'Perfluorooctane sulphonate (PFOS)', 'Radioactive substances: Cesium-137 in fish and surface waters' and 'White-tailed eagle productivity'. Further the meeting agreed on the concepts for the thresholds values of 'Number of drowned mammals and waterbirds in fishing gear' and 'Zooplankton mean size and total stock' noting that no quantitative values had been proposed.

In the earlier versions of the HELCOM indicator for PBDEs the following information is provided: In cases where it is not possible to evaluate the environmental status using biota-monitoring, a secondary threshold value based on concentration in sediment can be used as a complement. The **threshold value for sediment is 4.5 µg kg⁻¹ dry weight (dw)**. This value has been suggested by the working group on priority substances for the protection of the benthic community.

This current threshold and information relates to a draft proposal from 2010 (WFD WG E draft proposal for Environmental Quality Standards (dossier 22 Dec 2010)), as defined in the document provided in [this link](#).

This earlier proposal has since been updated, in a [2011 dossier](#): PolyBDEs EQS dossier 2011, POLYBROMINATED DIPHENYL ETHERS (BDEs), an EQS dossier prepared by the Sub-Group on Review of the Priority Substances List (under Working Group E of the Common Implementation Strategy for the Water Framework Directive). This updated dossier represents the latest proposed **threshold value for sediment and is 310 µg kg⁻¹ dry weight (dw)**.

This subject was discussed at EN-HZ 8-2018 (06 February 2018) and the expert network proposed that the threshold should be updated to represent the most recent and most up-to-date threshold proposal available (Meeting outcomes under preparation).

The current secondary threshold for PBDEs in sediments is used in the first version of the State of the Baltic Sea report and this proposal would maintain the inclusion of PBDEs in sediments in the final version of the report, simply using the updated threshold value. Data available for this indicator in the current update include the assessment of 77 stations using the primary threshold (biota) and 14 stations using the secondary threshold for sediments. All sediment assessments are represented by 'initial data' (i.e time series of less than 3 years) and all but one of these 14 sediment stations achieves the threshold value (are green) using the current threshold. Thus, by implementing the updated threshold value it is likely to have a minimal impact on the assessment of PBDEs at the station level, and should not cause any delay in the HOLAS II State of the Baltic Sea report preparations.

Action requested

The Meeting is invited to adopt the revised secondary threshold value for PBDEs in sediments.