

### **HELCOM RECOMMENDATION 31E/1**

*Supersedes HELCOM Recommendation 19/5.*

Adopted 20 May 2010,  
having regard to Article 13,  
Paragraph b) of the Helsinki Convention

## **IMPLEMENTING HELCOM'S OBJECTIVE FOR HAZARDOUS SUBSTANCES**

### **THE COMMISSION,**

**RECALLING** that HELCOM's objective with regard to hazardous substances is to prevent pollution of the Convention Area by continuously reducing discharges, emissions and losses of hazardous substances, with the ultimate aim of concentrations in the environment near background values for naturally occurring substances and close to zero for man-made synthetic substances,

**RECALLING ALSO** that the HELCOM Baltic Sea Action Plan (2007) called for a considerable reduction of land-based pollution, including specific measures for a certain number of priority hazardous substances,

**RECALLING FURTHER** that in the HELCOM Baltic Sea Action Plan it is agreed that the HELCOM goal on hazardous substances is a Baltic Sea undisturbed by hazardous substances,

**TAKING INTO ACCOUNT** international requirements on hazardous substances, aiming to prevent, reduce and substitute the use of certain hazardous substances and persistent organic pollutants,

**RECOMMENDS** that the Governments of the Contracting Parties apply the Strategy to implement the HELCOM Objective for hazardous substances as appears in Attachment 1, and make use of the principles and methodologies contained therein to move towards the target of the cessation of discharges, emissions and losses of hazardous substances to achieve the Baltic Sea in good environmental status by 2021,

**RECOMMENDS ALSO** to focus the work of HELCOM on hazardous substances of specific concern for the Baltic Sea (HELCOM List of Priority Hazardous Substances as contained in Appendix II of Attachment 2), with the aim to develop measures preventing pollution of the marine environment,

**RECOMMENDS FURTHER** to keep the HELCOM List of Priority Hazardous Substances under review and to update the list based on monitoring and other scientific data.

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**HELCOM Recommendation 31E/1, ATTACHMENT 1****STRATEGY TO IMPLEMENT HELCOM OBJECTIVE FOR HAZARDOUS SUBSTANCES****1. Guiding Principles**

Assessments made, and programmes and measures adopted to implement the Strategy to achieve the HELCOM Objective with regard to hazardous substances will be in accordance with the general obligations as set out in Articles 3 and 5 of the Helsinki Convention, 1992, and consequently will involve the application of:

- (i) the precautionary principle;
- (ii) the polluter pays principle;
- (iii) best available technology and best environmental practice.

In addition, substitution of the use of hazardous substances by less hazardous substances or technologies, where such alternatives are available, is a means to reach this objective. Hazardous substances shall progressively be replaced by suitable alternative substances or technologies, where these are economically defensible and technically available.

Using the principles of the EU legislation concerning the marketing and use of chemicals and similar legislation in the Contracting Parties not members of the EU, emissions, discharges and losses of new hazardous substances shall be avoided by applying the principles of sustainable chemistry (see 2.1, definitions).

In the work to achieve this objective, sound chemicals management has to be applied, including precautionary risk management measures based on the intrinsic properties of chemicals, using internationally agreed systems for the classification and labelling of chemicals. The assessment of risks is also a valuable tool for setting priorities and developing action programmes.

**2. Definitions**

2.1 For the purpose of this Strategy:

- a) "Hazardous substances" are substances which fall into one of the following categories:
  - i) substances or groups of substances that are toxic, persistent and liable to bioaccumulate; or substances that are very persistent and very bioaccumulative.
  - ii) substances or groups of substances that may occur in the marine environment and at the same time are Carcinogenic, Mutagenic or toxic to Reproduction (CMR), meeting the criteria for classification in category 1a or 1b in the UN Global Harmonized System for classification and labelling of chemicals (GHS).
  - iii) other substances or groups of substances, identified on a case-by-case basis from scientific evidence as causing probable serious effects to human health or the environment of an equivalent level of concern as those above (e.g. endocrine disrupters); this second category will include both substances which work synergistically with other substances to generate such concern and also substances which do not themselves justify inclusion but which degrade or transform into substances referred to in (i), (ii) or (iii).

For the purpose of this strategy different definitions of the categories "persistent, bioaccumulative and toxic (PBT properties)" may be used, including definitions of very

Persistent and very Bioaccumulative (vPvB)<sup>1</sup>. The Commission will take such information about the PBT properties of chemicals into consideration when updating the HELCOM list of substances for priority action, assisted by the appropriate subsidiary body.

The Commission will identify hazardous substances or groups of substances using available information and internationally accepted methods and criteria, assisted by the appropriate HELCOM subsidiary bodies.

- b) "Substance" means a chemical element and its compounds in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.
- c) "Group of substances" means a number of substances:
  - (i) where the substances have been shown to present a similar level of hazard, using internationally accepted criteria; and
  - (ii) which are sufficiently related both in terms of their physicochemical properties and their field of application to be jointly managed and which require common preventive action because of the comparable level of concern which they pose to the environment or man estimated by extrapolation of the assessment of an appropriate sample of the group.
- d) "Sustainable chemistry" is the design, manufacture and use of efficient, effective, safe and more environmentally benign chemical products and processes.<sup>2</sup>

### 3. Strategy of HELCOM with regard to Hazardous Substances

Using the guiding principles, in particular the precautionary principle, the Commission will identify, prioritize and require the Contracting Parties to control and monitor (i.e. to prevent, reduce and, to the extent possible, eliminate) the emissions, discharges and losses of hazardous substances which reach, or could reach, the marine environment.

#### 3.1 Criteria for selection and priority setting of substances

The Commission will, considering the work undertaken in other fora:

- (i) take the specific conditions in the Baltic Sea into consideration;
- (ii) apply relevant selection and prioritization mechanisms for hazardous substances in order to produce and maintain a HELCOM List of Priority Hazardous Substances.

The criteria used in these selection and prioritisation mechanisms may include that the substances or groups of substances:

- a) are a potential threat to the aquatic environment due to their hazardous properties;
- b) reach, or are likely to reach, the marine environment to a significant degree, from point sources or from diffuse sources.

and/or:

- c) show indications of risks for the marine environment or may endanger human health via consumption of food directly or indirectly from the marine environment;
- d) have been found in the Convention Area.

<sup>1</sup> See **The European Union: REACH Regulation 1907/2006 – Annex XIII, or OSPAR: Cut-Off Values for the Selection Criteria of the OSPAR Dynamic Selection and Prioritisation Mechanism for Hazardous Substances** (Reference Number: 2005-9)

<sup>2</sup> <http://www.oecd.org/dataoecd/16/25/29361016.pdf>

The application of these criteria should both reflect the hazardous characteristics of substances and groups of substances and give priority to their actual or potential occurrence and effects in the Convention Area.

### **3.2 Assessment Methodologies**

Noting the specific requirements for the assessment of the risks of hazardous substances in the marine environment the use of the common EU/OSPAR approach on risk assessment methodology for the marine environment should be encouraged, taking due consideration of the specific conditions of the Baltic Sea. Contracting parties are expected to inform the Commission about hazardous substances present in the Baltic Sea.

The classification criteria as specified in the Globally Harmonized System of classification and labelling of chemicals (GHS) should provide the guiding principles for identifying hazardous substances of concern in the marine environment as well as guidance for selecting less hazardous substitutes. The PBT and vPvB properties should also be taken into consideration (see section 2.1 a.)

In the assessment of monitoring data concerning the presence of hazardous substances in the marine environment, HELCOM has at its disposal the Periodic Assessments of the State of the Baltic Sea. Contracting Parties should cooperate to establish relevant background/reference values, monitoring data or risk assessments. This includes the participation in common research projects and monitoring programmes. However, the existence of background values is not a pre-requisite for selection and prioritization of substances in question.

### **3.3 HELCOM List of Priority Hazardous Substances**

The Commission will on the basis of the Baltic Sea Action Plan, the HELCOM assessment criteria and the work undertaken in other fora, on a regular basis update the HELCOM List of Priority Hazardous Substances (see Appendix II of Attachment 2).

The listing may include elements of prioritisation. For substances which only need partial reduction or restrictions, the list may also include guidance on which areas of use where substitution is especially important.

Notwithstanding the process outlined in sections 3.1, 3.2 and 3.3, the Commission will continue to work on those substances which have already been selected by HELCOM for a phase out (Helsinki Convention, 1992, Annex I, Parts 2 and 3), and include in its work those hazardous substances or groups of substances which are listed by the Stockholm Convention (see [www.pops.int](http://www.pops.int)) and UN-ECE for priority action under the protocol on POPs and Heavy Metals to the Convention of Long-Range Transboundary Air Pollution (see <http://www.unece.org/env/lrtap/welcome.html>).

### **3.4 Criteria for the selection and implementation of measures**

In accordance with the Precautionary Principle, effective actions are to be taken when there are reasonable grounds for concern that hazardous substances, present in the marine environment or which reach or could reach the marine environment, may bring about hazards to human health, harm living resources and marine ecosystems, damage amenities or interfere with other legitimate uses of the sea, even when there is no conclusive evidence of a causal relationship between the inputs and the effects.

The most cost effective measures should have the highest priority for implementation and should be selected by taking into account:

- a) the sustainability of the marine ecosystem;
- b) the polluter-pays principle by virtue of which the costs of pollution, prevention, control and reduction measures are to be borne by the polluter;
- c) the advantages and disadvantages of proposed measures.

Measures should be developed and/or applied in the light of the requirements laid down in the definitions of BAT and BEP in the Helsinki Convention, taking the minimization of use of

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hazardous substances fully into account. If in this process hazardous substances are to be substituted by other available substances, it has to be ensured that they are less hazardous.

Recognizing the extended producer responsibility, the improvement of industry practices aiming at the substitution of substances, products and processes by more environmentally sound solutions, could help to achieve the objective of moving towards the cessation of discharges, emissions and losses of hazardous substances, in particular:

- a) the development and use of environmentally sound products and the development of less hazardous substances or more environmentally sound technologies;
- b) the principle of substitution - wherever possible, in line with other environmental goals - of products and processes causing the release of hazardous substances to the environment by ones that do not. This includes the substitution of hazardous substances by changing processes to ones not involving these substances. In doing so, the whole life cycle of the product should be considered;
- c) waste handling and waste management, as well as development and use of treatment technology that avoid losses of hazardous substances to the environment.

### **3.5 Measures and Actions**

The Commission shall coordinate the efforts to set intermediate targets and time frames.

With regard to hazardous substances identified by the Commission for action, such action generally includes:

- a) identifying the sources of hazardous substances and their pathways to the marine environment, using, *inter alia*, information derived from monitoring, research, specific surveys and assessment activities;

and, as a result,

- b) the identification of relevant measures to deal with the problem, including the adoption of measures to reduce discharges, emissions and losses of hazardous substances and taking into account the sources and pathways of hazardous substances.

Considering also the programmes of work on point and diffuse sources which need to be developed by HELCOM and integrated with this Strategy, HELCOM should in particular address the following issues:

- actions at the appropriate geographical and administrative level;
- improvement of policy instruments;
- effectiveness of economic instruments;
- co-operation with all relevant authorities and target groups.

### **3.6 Co-operation and Dialogue**

The Commission and Contracting Parties, individually or jointly, will endeavour to maintain and develop further a constructive dialogue on the reduction of hazardous substances with all parties concerned, including producers, manufacturers, user groups, authorities and environmental NGOs to ensure that all relevant information is available for the work of the Commission in connection with this Strategy.

The Commission and the Contracting Parties will invite and encourage industry to co-operate in fulfilling the Objective of HELCOM with regard to hazardous substances, *inter alia* :

- a) to incorporate the Strategy in the implementation of BAT and/or BEP;
- b) to provide reliable data on production volumes, use patterns, emission scenarios, exposure concentrations and properties of substances.

In order to achieve internationally harmonized approaches and to avoid duplication of work on hazardous substances, the Commission will ensure that measures and information which have already been agreed or which are being negotiated by Contracting Parties in other fora are considered by the Commission as appropriate in the development of measures and initiative to control hazardous substances within HELCOM. Contracting Parties shall bring these measures and this information to the attention of the Commission. When significant common ground has been identified in measures and initiatives proposed by HELCOM and those other fora, the Commission will initiate appropriate discussions to determine the level of co-operation and liaison necessary.

**HELCOM Recommendation 31E/1, ATTACHMENT 2****Appendix I****List of substances of possible concern**

*(to be further developed and completed on basis of the list of potential substances of concern to be considered by HELCOM, as contained in Recommendation 19/5 and Annex I of the Helsinki Convention)*

**Appendix II****List of Priority Hazardous Substances**

*(to be updated)*

1. Dioxins (PCDD), furans (PCDF) & dioxin-like polychlorinated biphenyls
  
  - 2a. Tributyltin compounds (TBT)
  - 2b. Triphenyltin compounds (TPhT)
  
  - 3a. Pentabromodiphenyl ether (pentaBDE)
  - 3b. Octabromodiphenyl ether (octaBDE)
  - 3c. Decabromodiphenyl ether (decaBDE)
  
  - 4a. Perfluorooctane sulfonate (PFOS)
  - 4b. Perfluorooctanoic acid (PFOA)
  
  5. Hexabromocyclododecane (HBCDD)
  
  - 6a. Nonylphenols (NP)
  - 6b. Nonylphenol ethoxylates (NPE)
  
  - 7a. Octylphenols (OP)
  - 7b. Octylphenol ethoxylates (OPE)
  
  - 8a. Short-chain chlorinated paraffins (SCCP or chloroalkanes, C10-13)
  - 8b. Medium-chain chlorinated paraffins (MCCP or chloroalkanes, C14-17)
  
  9. Endosulfan
  
  10. Mercury
  
  11. Cadmium
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