



## HELCOM RECOMMENDATION 25/4 \*)

*Superseded by HELCOM Recommendation 42-43/10*

Adopted 2 March 2004  
having regard to Article 20, Paragraph 1 b)  
of the Helsinki Convention 1992

### MEASURES AIMED AT THE REDUCTION OF DISCHARGES FROM FRESH WATER AND MARINE FISH FARMING

#### THE COMMISSION,

**RECALLING** Paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992 (Helsinki Convention), in which the Contracting Parties undertake to prevent and eliminate pollution of the Baltic Sea Area from land-based sources by using, inter alia, Best Environmental Practice for all sources and Best Available Technology for point sources,

**RECALLING ALSO** to Article 3 of the Helsinki Convention, in which the Contracting Parties shall individually or jointly take all appropriate legislative, administrative or other relevant measures to prevent and abate pollution in order to promote the ecological restoration of the Baltic Sea Area,

**HAVING REGARD** to the Ministerial Declaration of 1988, to the Baltic Sea Declaration of 1990 and to the Baltic Sea Environment Declaration of 1992, calling, inter alia, for a substantial reduction of the load of pollutants most harmful to the ecosystems of the Baltic Sea,

**RECOGNIZING** the importance of discharges and losses, nutrients and organic material in particular, from marine and fresh water fish farms as sources of pollution of the aquatic environment,

**DESIRING** to limit the pollution from the fish farms located in the catchment area of the Baltic Sea and in the Baltic sea by Best Available Techniques (BAT) and Best Environmental Practice (BEP),

**RECALLING** also the requirement in HELCOM Recommendation 20/4 concerning anti-fouling paint containing organotin compounds to ban the retail sale or use of organotin paints for fish net cages,

**RECALLING** also the provisions concerning the use of hazardous substances in the Directive 76/464/EEC concerning dangerous substances,

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\*) Supersedes HELCOM Recommendations 18/3 and 20/1.

**RECOMMENDS** to the Governments of the Contracting Parties to the Helsinki Convention that the following measures of BAT and BEP should be used in marine and fresh water fish farming (excluding small land based fish farms with a production not exceeding 1000 kg fish/year and fish ponds using natural fertility):

1. Plant operation, feeding methods and fish feed, predominantly dry, which cause minimum nutrient discharges and improve fish health and fish quality, should be used and developed.
2. New types of fish farms and methods for sludge removal in fish farms should be developed and introduced so as to decrease the discharges of nutrients, organic matters and chemicals.
3. The number of fish in a certain water volume should be set/balanced according to water exchange rate, aeration and feeding method in order to prevent water pollution including eutrophication as well as fish diseases; dead fish should be collected as soon as possible.
4. Fish farming should be subject to permits or prior regulations by the competent authority or appropriate body in accordance with the following principles:
  - a) limits to phosphorus and/or nitrogen discharges should be given in permits or prior regulations. Limits might also be expressed as maximum amounts of phosphorus and/or nitrogen in feed or maximum allowable feed consumption;
  - b) future environmental effects of the proposed installation should be evaluated as part of the authorization process for intensive fish farms;
  - c) permits and regulations should be reviewed at appropriate intervals taking into account existing permit conditions.
5. In all fresh water and marine fish farms nutrient discharges should not exceed the annual average of:

	Phosphorous (tot-P)*	Nitrogen (tot-N)*
Existing fresh water fish farms	7 g	50 g
New and reconstructed fresh water fish farms	6 g	50 g
Existing and new marine fish farms	7 g	50 g

\* Values per 1 kg fish (living weight) produced

The nutrient limit values (N and P) are calculated on the basis that living fish contains 0,4% of phosphorus and 2,75% of nitrogen.

6. Regional planning should be employed as an instrument for directing fish farming activities to suitable areas and mitigating conflicts between fish farming and other uses of the water area. Fish farms should not be placed in areas reserved for nature protection, if that might conflict with the aims of protection.

Sites of fish farms should be selected and discharges from them restricted by means of objective environmental impact evaluation methods in accordance with the holding capacity of the aquatic environment affected.

7. The discharges from and the ecological effects of fish farms should be adequately supervised by competent authority or appropriate body, e.g. by means of fish farm operation records, discharge calculations, monitoring and environmental impact models. The monitoring should focus on measuring reliably and cost-effectively the impacts of fish farming on the eutrophication status, oxygen depletion and the state of the sediments in the affected area.

8. The use of bioactive chemicals and drugs at fish farms should be officially approved and effectively controlled to minimize hazards to the environment. The prophylactic use of chemicals should be avoided. Washing or drying of net cages should be used instead of application of toxic compounds. It is suggested to encourage the use of biological means to reduce the application of chemicals. The use of vaccination should be promoted.

9. The transfer of cultivated fish and introduction of new species should be undertaken according to the Recommendations of EIFAC and ICES thus avoiding the possible negative effects. The interaction between cultured and wild fish should be avoided to protect the locally adapted stock.

10. Waste or waste water resulting from the handling and processing of fish should be treated, disposed of and utilized so as not to cause pollution of the Baltic Sea, surface or ground water.

11. The cooperation between the aquaculture industry and the authorities should be intensified including an elaboration of the following instruments:

- a) keeping under review and the further development of BAT and BEP;
- b) exchange of information;
- c) overview of discharges of potentially hazardous chemicals from aquaculture;
- d) control and regulation of the amounts contaminants in fish flesh and shellfish, e.g. mussels;
- e) making sure that information is available on fish stock, chemicals and feed used,
- f) discussions of the calculation methods used as background for issuing permits taking into account the local environmental impact,

**DECIDES** that the new requirements on nutrient discharges should be implemented by 2005 and the Recommendation reconsidered thereafter especially regarding the nutrient discharges,

**DECIDES ALSO** that the Recommendation should be reported for the first time for the year 2005 and thereafter according to the HELCOM reporting schedule.