HELCOM RECOMMENDATION 11/4

(supersedes HELCOM Recommendation 9/6)
Adopted 15 February 1990, having regard to Article 13, Paragraph b) of the Helsinki Convention

RESTRICTION OF DISCHARGES FROM THE KRAFT PULP INDUSTRY

THE COMMISSION,

RECALLING that according to Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention) the Contracting Parties shall take all appropriate measures to control and strictly limit pollution by noxious substances,

RECALLING ALSO that Annex II of the Helsinki Convention defines lignin substances contained in industrial waste waters as noxious substances for the purposes of Article 6 of the Convention, and that Annex III of the Convention defines organic substances and nutrients as substances to be controlled to minimize land-based pollution of the marine environment,

RECALLING FURTHER that HELCOM Recommendation 9/6 calls for an agreement on maximum average load of chlorinated organic substances from the production of bleached kraft pulp in each Contracting Party and on the applied analytical method,

RECOGNIZING FURTHER that the kraft pulp mills are responsible for an important part of the discharges from the pulp and paper industry into the Baltic Sea,

DESIRING to limit the discharges from this industry with best available technology, *)

DESIRING ALSO more information about the discharges from the pulp and paper industry,

RECOGNIZING the importance of reducing the discharges of the kraft pulp industry
a) to minimize the hazards to human health and to the environment from toxic, persistent and bioaccumulatic substances;
b) to reduce oxygen-consuming discharges so as not to cause oxygen deficiency of any significance, nor to impair the habitat of the characteristic fish populations;
c) to reduce nutrient discharges so as not to cause eutrophication on any significance;
d) to avoid tainting, to the extent possible, of taste or smell of fish by wastewater, as well as changes in the organoleptic properties of water;
e) by developing industrial processes, in particular bleaching techniques for pulp, and treatment techniques for wastewater, and by preventing incidental effluent discharges so as to minimize the adverse effects of wastewater discharges;
f) by developing effluent treatment techniques that minimize the amount of sludge created. At the same time maximal utilization and further processing of the sludge shall be aimed at,

RECOMMENDS that the Governments of the Contracting Parties as a first step take measures to reduce the discharges from kraft pulp industry, namely

for bleached kraft pulp
g) that in the production of bleached kraft pulp within the catchment area of the Baltic Sea the load of chlorinated organic substances (AOX) should be reduced so that the specific loading from each Contracting Party's production of bleached kraft pulp from 1 January 1995 not exceeds the

annual mean value of

2 kg of AOX per metric tonne of air dry bleached softwood pulp; and
1 kg of AOX per metric tonne of air dry bleached hardwood pulp; or
1.4 kg of AOX per metric tonne of the Contracting Party's total production of air dry bleached kraft pulp.

The method of analysis should be SCAN-W 9:89 or DIN 38 409, part 14. Analysis shall be made on unsettled samples;

h) that the specific loading from each Contracting Party's production of bleached kraft pulp shall not exceed the annual mean value of oxygen consumption of 65 kg per metric tonne of air dry bleached kraft pulp. the oxygen consumption is determined as chemical oxygen demand using the dichromat method (COD_{Cr});
i) that biochemical oxygen demand (BOD) shall be reduced in proportion to the reduction of chemical oxygen demand (COD_{Cr} recommended in item h);

for unbleached kraft pulp

j) in the production of unbleached kraft pulp the reduction of chemical oxygen demand (COD_{Cr}) and biochemical oxygen demand (BOD) be respective to the level recommended in items h) and i) above, for production of bleached kraft pulp;

for phosphorus in the production of kraft pulp in general

k) the specific loading of phosphorus from each Contracting Party's kraft pulp production shall not exceed the annual mean value of 60 g per tonne of air dry kraft pulp;

for kraft pulp in general

l) the objectives under h) - k) shall be attained by the year 2000 at mills that have started to operate before 1 January 1989, and immediately at mills which will start to operate thereafter,

RECOMMENDS FURTHER, in order to attain the objectives that the Contracting Parties

- initiate projects and investigations and arrange seminars for the exchange of information and experience, and
- take efforts to harmonize the monitoring systems for discharges and recipient control, analytical methods, and techniques for determining the toxicity of the effluents. Harmonizing methods for analysis of dioxins, suspended solids, biochemical oxygen demand (BOD), chemical oxygen demand (COD_{Cr}) and phosphorus (P_{tot}) shall be aimed at. The comparability of the results should be secured through intercalibration exercises,

RECOMMENDS ALSO that the Contracting Parties re-evaluate before the Commission meeting in 1994 the emission limit values of the present Recommendation and reconsider them, e.g. on a "plant by plant" basis,

RECOMMENDS ALSO that the Contracting Parties report to the Commission every three years starting from 1997.

*) The term "best available technology" is understood to take into consideration technical and economic feasibility.