

CONVENTION ON THE PROTECTION OF THE MARINE ENVIRONMENT OF THE BALTIC SEA AREA

HELSINKI COMMISSION - Baltic Marine HELCOM 16/17 Environment Protection Commission

Annex 8

16th Meeting  
Helsinki, 14-17 March 1995

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**HELCOM RECOMMENDATION 16/4**

Adopted 15 March 1995  
having regard to Article 13, paragraph b)  
of the Helsinki Convention, 1974

**REDUCTION OF EMISSIONS INTO THE ATMOSPHERE FROM THE PULP AND PAPER INDUSTRY**

**THE COMMISSION,**

**RECALLING** paragraph 1 of Article 6 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), in which the Contracting Parties undertake to take all appropriate measures to control and minimize land-based pollution of the marine environment of the Baltic Sea Area,

**RECALLING ALSO** that according to Paragraph 2 of Article 2 of the Helsinki Convention land based pollution includes airborne pollution,

**RECALLING ALSO** that according to Paragraph 8 of Article 2 of the Helsinki Convention, the Contracting Parties shall endeavour to use best practical means in order to minimize airborne pollution of the Baltic Sea Area by noxious substances,

**RECALLING ALSO** the Ministerial Declaration at the ninth meeting of the Helsinki Commission,

**DESIRING** to limit the emissions into the atmosphere from the pulp and paper industry,

**DESIRING ALSO** more information about the emissions into the atmosphere from the pulp and paper industry,

**RECOMMENDS** that the Governments of the Contracting Parties as a first step take measures to reduce the emissions from the pulp and paper industry, so that the emissions of nitrogen oxides, NO<sub>x</sub> (nitrogen oxide + nitrogen dioxide), as a yearly average for each Contracting Party's emissions from recovery boilers and lime kilns do not exceed the following values:

**Recovery boilers - existing plants, from 1 January 2000**

	I	II
	mg/MJ	g/m <sup>3</sup> 1)
Kraft Pulp 60 0.20		
Sulphite Pulp	120	0.40

### Recovery boilers - new plants, from 1 January 1996

	I	II	
	mg/MJ		g/m <sup>3</sup> <sup>1)</sup>
Kraft Pulp	50	0.15	
Sulphite Pulp	95	0.30	

### Lime kilns, from 1 January 2000

	I	II	
	mg/MJ		g/m <sup>3</sup> <sup>1)</sup>
Oil fired	1500.3		
Fired with biogas or solid fuels	3000.6		

<sup>1)</sup> at 3% oxygen concentration

**RECOMMENDS FURTHER** that the Governments of the Contracting Parties as a first step take measures to reduce emissions of gaseous sulphuric compounds from the pulp and paper industry so that,

a) as a yearly average for each Contracting Party production of kraft and sulphite pulp, the following values are not exceeded from 1 January 2000:

Kraft pulp 1.0 kg S/t of pulp produced  
Sulphite pulp 1.5 kg S/t of pulp produced

Emissions from all relevant sources are included except those from auxiliary boilers,

"Gaseous sulphuric compounds" include reduced sulphuric compounds like odorous gases,

**RECOMMENDS FURTHER** that the Contracting Parties within 2 years re-evaluate the emission limits concerning NO<sub>x</sub>-emission from recovery boilers - new plants and S-emissions from sulphite pulp and kraft pulp processing,

**RECOMMENDS FURTHER** that the Contracting Parties re-evaluate, before the Commission meeting in the year 2000, the emission limit values of the present Recommendation and also consider if the values should be on a plant-by-plant basis,

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

**REPORTING FORMAT FOR HELCOM RECOMMENDATION 16/4  
ON REDUCTION OF EMISSIONS INTO THE ATMOSPHERE FROM THE PULP  
AND PAPER INDUSTRY**

- a) Names of the relevant mills and their production figures in tonnes/year;
- b) Yearly average emissions in mg NO<sub>x</sub>/MJ fuel input or as mass concentration from recovery boilers, lime kilns and auxiliary boilers for each mill and as an average for the Contracting Party's total emissions from these sources;
- c) Total emissions in tonnes/year of NO<sub>x</sub> from the Contracting Party's Pulp and Paper Industry;
- d) Yearly average emissions of gaseous sulphuric compounds in kg S/t from the production of kraft and sulphite pulp for each mill and as an average for the Contracting Party's total kraft and sulphite pulp production, respectively. The only emissions not to be included are those from auxiliary boilers. When calculating the emission figure for a mill, a sulphur balance can be a useful tool;
- e) Yearly average sulphur emission from auxiliary boilers measured as g S/MJ fuel input for each mill and for the Contracting Party's total Pulp and Paper Industry;
- f) Total emissions in tonnes of gaseous S per year from the Contracting Party's Pulp and Paper Industry.