

HELCOM RECOMMENDATION 13/3 *)

Adopted 5 February 1992

having regard to Article 13, Paragraph b) of
the Helsinki Convention

BASIC PRINCIPLES IN WASTEWATER MANAGEMENT IN CHEMICAL INDUSTRY

THE COMMISSION,

RECALLING Article 5 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 counteract the introduction of certain hazardous substances, as specified in Annex I of the Convention, into the Baltic Sea Area,

RECALLING ALSO that according to Article 6 of the Helsinki Convention all appropriate measures to control and strictly limit pollution by noxious substances, listed in Annex II of the Convention, shall be taken, and that according to Annex III of the Convention the pollution load of industrial wastes shall be minimized,

RECALLING FURTHER that the Ministerial Declaration of the ninth meeting of the Helsinki Commission calls for a considerable reduction of land-based pollution,

RECALLING FURTHER the "Procedure on how the Committees should act in a more flexible and independent way in matters relating to decisions on purely technical questions" adopted by the Commission (HELCOM 11/14, Annex 26),

RECOGNIZING that the chemical industry 1) is responsible for an important part of the discharges of hazardous substances into the Baltic Sea,

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

DESIRING ALSO to implement the HELCOM Recommendation 9/8 concerning measures aimed at the reduction of discharges from industry,
Standard Classification of Chemical Industry (Appendix 1) is based on International Standard Industrial Classification of all Economic Activities, Statistical Papers, Series M, No. 4, Rev. 3. United Nations, New York 1989.

RECOMMENDS to the Governments of the Contracting Parties that they apply to chemical industries producing wastewater which is discharged into waters or municipal sewerage systems, the following

General principles

- a) low waste technology should be applied wherever possible;
- b)

the chemicals listed in the Appendix 2 which may reach the environment should be substituted by less harmful chemicals or subjected to requirements which will provide at least as good a result from an environmental standpoint;

c)

water management in chemical factories should aim at closed water systems or at high circulating rate in order to avoid wastewater production wherever possible;

Principles for wastewater handling

d)

wastewaters containing substances/groups of substances listed in the Appendix 2 should before 1995 be separately treated before mixing with diluting waters (cooling water and low polluted wastewater). Furthermore, the treatment of the hazardous substances should be continuously improved by using best available technology for different streams with regard to the total result;

e)

chemical factories producing wastewaters which contain hazardous substances should be equipped with an internal segregated sewerage system: a drainage system for polluted process water which must enter a suitable central treatment plant, municipal (see HELCOM Recommendation 13/2) or owned by industry, before it is mixed with non- or low-polluted water for final discharge, and another drainage system which receives cooling water, non-polluted stormwater and possible very low-polluted wastewater for final discharge. This should be applied to all new plants. In existing plants segregating of process water from cooling water should start as soon as possible, but not later than 1999,

DECIDES that the Standard Classification of Chemical Industry (Appendix 1) and the list of substances (Appendix 2) should be kept updated and be revised when appropriate by the Technological Committee,

RECOMMENDS FURTHER that the Contracting Parties report to the Commission every three years starting in 1994.

Appendix 1

to HELCOM Recommendation 13/3

Standard Classification of Chemical Industry

Manufacture of Chemicals and Chemical Products 1.

Manufacture of basic chemicals

1.1 Manufacture of basic chemicals, except fertilizers and nitrogen compounds 1.2 Manufacture

of fertilizers and nitrogen compounds

1.3 Manufacture of plastics in primary forms and of synthetic rubber

- 2. Manufacture of other chemical products
 - 2.1 Manufacture of pesticides and other agro-chemical products
 - 2.2 Manufacture of paints, varnishes and similar coatings, printing ink and mastics
 - 2.3 Manufacture of pharmaceuticals, medical chemicals and botanical products
 - 2.4 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
 - 2.5 Manufacture of other chemical products n.e.c.

3. Manufacture of man-made fibres

Manufacture of Refined Petrochemical Products

Appendix 2

to HELCOM Recommendation 13/3

LIST OF SUBSTANCES REFERRED TO IN ITEM b OF RECOMMENDATION ON BASIC PRINCIPLES IN WASTEWATER MANAGEMENT IN CHEMICAL INDUSTRY

1. organohalogen compounds and substances which may form such compounds in the aquatic environment,
2. organophosphorus compounds,
3. organotin compounds,
4. substances in respect of which it has been proved that they possess carcinogenic or mutagenic properties or effect on capacity for reproduction in or via the aquatic environment,
5. mercury and its compounds,
6. cadmium and its compounds,
7. biocides and their derivatives not appearing in 1 to 6,
8. the following metalloids and metals and their compounds:
 - zinc
 - copper
 - nickel
 - chromium
 - lead
 - selenium
 - arsenic

antimony
molybden
um tin
berylliu
m
uranium
vanadiu
m cobalt
thallium
telluriu
m silver