

Annex III

Criteria and measures concerning the prevention of pollution from land-based sources

PART I PREVENTION OF POLLUTION FROM INDUSTRY AND MUNICIPALITIES

Regulation 1; General provisions

In accordance with the relevant parts of this Convention the Contracting Parties shall apply the criteria and measures in this Annex in the whole catchment area and take into account Best Environmental Practice (BEP) and Best Available Technology (BAT) as described in Annex II.

Regulation 2; Specific requirements

1. Municipal sewage water shall be treated at least by biological or other methods equally effective with regard to reduction of significant parameters. Substantial reduction shall be introduced for nutrients.
2. Water management in industrial plants should aim at closed water systems or at a high rate of circulation in order to avoid waste water wherever possible.
3. Industrial waste waters should be separately treated before mixing with diluting waters.
4. Waste waters containing hazardous substances or other relevant substances shall not be jointly treated with other waste waters unless an equal reduction of the pollutant load is achieved compared to the separate purification of each waste water stream. The improvement of waste water quality shall not lead to a significant increase in the amount of harmful sludge.
5. Limit values for emissions containing harmful substances to water and air shall be stated in special permits.
6. Industrial plants and other point sources connected to municipal treatment plants shall use Best Available Technology in order to avoid hazardous substances which cannot be made harmless in the municipal sewage treatment plant or which may disturb the processes in the plant. In addition, measures according to Best Environmental Practice shall be taken.
7. Pollution from fish-farming shall be prevented and eliminated by promoting and implementing Best Environmental Practice and Best Available Technology.
8. Pollution from diffuse sources, including agriculture, shall be eliminated by promoting and implementing Best Environmental Practice.
9. Pesticides used shall comply with the criteria established by the Commission.

Regulation 3; Principles for issuing permits for industrial plants

The Contracting Parties undertake to apply the following principles and procedures when issuing the permits referred to in Article 6, paragraph 3 of this Convention:

1. The operator of the industrial plant shall submit data and information to the appropriate national authority using a form of application. It is recommended that the operator negotiates with the appropriate national authority concerning the data required for the application before submitting the application to the authority (agreement on the scope of required information and surveys).

At least the following data and information shall be included in the application:

General information

- name, branch, location and number of employees.

Actual situation and/or planned activities

- site of discharge and/or emission;
- type of production, amount of production and/or processing;
- production processes;
- type and amount of raw materials, agents and/or intermediate products;
- amount and quality of untreated wastewater and raw gas from all relevant sources (e.g. process water, cooling water);
- treatment of wastewater and raw gas with respect to type, process and efficiency of pretreatment and/or final treatment;
- treated wastewater and raw gas with respect to amount and quality at the outlet of the pretreatment and/or final treatment facilities;
- amount and quality of solid and liquid wastes generated during the process and the treatment of wastewater and raw gas;
- treatment of solid and liquid wastes;
- information about measures to prevent process failures and accidental spills;
- present status and possible impact on the environment.

Alternatives and their various impacts concerning, e.g., ecological, economic and safety aspects, if necessary

- other possible production processes;
- other possible raw materials, agents and/or intermediate products;
- other possible treatment technologies.

2. The appropriate national authority shall evaluate the present status and potential impact of the planned activities on the environment.

3. The appropriate national authority issues the permit after comprehensive assessment with special consideration of the above mentioned aspects. At least the following shall be laid down in the permit:

- characterizations of all components (e.g. production capacity) which influence the amount and quality of discharge and/or emissions;
- limit values for amount and quality (load and/or concentration) of direct and indirect discharges and emissions;
- instructions concerning:
- construction and safety;

- production processes and/or agents;
 - operation and maintenance of treatment facilities;
 - recovery of materials and substances and waste disposal;
 - type and extent of control to be performed by the operator (self-control);
 - measures to be taken in case of process failures and accidental spills;
 - analytical methods to be used;
 - schedule for modernization, retrofitting and investigations done by the operator;
 - schedule for reports of the operator on monitoring and/or selfcontrol, retrofitting and investigation measures.
4. The appropriate national authority or an independent institution authorized by the appropriate national authority shall:
- inspect the amount and quality of discharges and/or emissions by sampling and analysing;
 - control the attainment of the permit requirements;
 - arrange monitoring of the various impacts of wastewater discharges and emissions into the atmosphere;
 - review the permit when necessary.

PART II PREVENTION OF POLLUTION FROM AGRICULTURE

Regulation 1; General provisions

In accordance with the relevant parts of this Convention the Contracting Parties shall apply the measures described below and take into account Best Environment Practice (BEP) and Best Available Technology (BAT) to reduce the pollution from agricultural activities. The Contracting Parties shall elaborate Guidelines containing elements specified below and report to the Commission.

Regulation 2; Plant nutrients

The Contracting Parties shall integrate the following basic principles into national legislation or guidelines and adapt to the prevailing conditions within the country to reduce the adverse environmental effects of agriculture. Specified requirements levels shall be considered to be a minimum base for national legislation.

1. Animal density

To ensure that manure is not produced in excess in comparison to the amount of arable land, there must be a balance between the amount of animals on the farm and the amount of land available for spreading manure, expressed as animal density. The maximum amount of animals should be precised with consideration taken to the amount of phosphorus and nitrogen in manure and the crops requirements of plant nutrients.

2. Manure storage

Manure storage must be of such a quality that prevents losses. The storage capacity shall be sufficiently large, to ensure that manure only will be spread when the plants

can utilize nutrients. The minimum level to be required should be 6 months storage capacity. Urine and slurry stores should be covered or handled by a method that efficiently reduces ammonia emissions.

3. Agricultural waste water and silage effluents

Waste water from animal housings should either be stored in urine or slurry stores or else be treated in some suitable manner to prevent pollution. Effluents from the preparation and storage of silage should be collected and directed to storages for urine or liquid manure.

4. Application of organic manures

Organic manures (slurry, solid manure, urine, sewage sludge, composts, etc) shall be spread in a way that minimizes the risk for loss of plant nutrients and should not be spread on soils that are frozen¹), water saturated or are covered with snow. Organic manures should be incorporated as soon as possible after application on bare soils. Periods shall be defined when no application is accepted.

5. Application rates for nutrients

Application rates for nutrients should not exceed the crops nutrient requirements. National guidelines should be developed with fertilizing recommendations and they should take reference to:

- a) soil conditions, soil nutrient content, soil type and slope;
- b) climatic conditions and irrigation;
- c) land use and agricultural practices, including crop rotation systems;
- d) all external potential nutrient sources.

6. Winter crop cover

In relevant regions the cultivated area should be sufficiently covered by crops in winter and autumn to effectively reduce the loss of plant nutrients

7. Water protection measures and nutrient reduction areas

- a) Surface water
Buffer zones, riparian zones or sedimentation ponds should be established, if necessary.
- b) Ground water
Ground water protection zones should be established if necessary. Appropriate measures such as reduced fertilization rates, zones where manure spreading is prohibited and permanent grass land areas should be established.
- c) Nutrient reduction areas
Wetland areas should be retained and where possible restored, to be able to reduce plant nutrient losses and to retain biological diversity.

¹ To be defined by national legislation depending on the regional climate and weather conditions.

Regulation 3; Plant protection products

Plant protection products shall only be handled and used according to a national risk reduction strategy which shall be based on Best Environmental Practice (BEP). The strategy should be based on an inventory of the existing problems and define suitable goals. It shall include measures such as:

1. Registration and approval

Plant protection products shall not be sold, imported or applied until registration and approval for such purposes has been granted by the national authorities.

2. Storage and handling

Storage and handling of plant protection products shall be carried out so that the risks of spillage or leakage are prevented. Some crucial areas are transportation and filling and cleaning of equipment. Other dispersal of plant protection products outside the treated agricultural land area shall be prevented. Waste of plant protection products shall be disposed of according to national legislation.

3. Licence

A licence shall be required for commercial use of plant protection products. To obtain a licence suitable education and training on how to handle plant protection products with a minimum of impact on health and the environment shall be required. The users' knowledge regarding the handling and usage of plant protection products shall be updated regularly.

4. Application technology

Application technology and practice should be designed to prevent unintentional drift or run-off of plant protection products. Establishment of protection zones along surface waters should be encouraged. Application by aircraft shall be forbidden; exceptional cases require authorization.

5. Testing of spraying equipment

Testing of spraying equipment at regular intervals shall be promoted to ensure a reliable result when spraying with plant protection products.

6. Alternative methods of control

Development of alternative methods for plant protection control should be encouraged.

Regulation 4; Environmental permits

Farms with livestock production above certain size should require approval with regard to environmental aspects and impacts of the farms.

Regulation 5; Environmental monitoring

The Contracting Parties shall develop projects to assess the effects of measures and the impacts of the agricultural sector on the environment.

Regulation 6; Education, information and extension service

The Contracting parties shall promote systems for education, information and extension (advisory service) on environmental issues in the agricultural sector.