

## **HELCOM RECOMMENDATION 28E/4**

Adopted 15 November 2007  
having regard to Article 20, Paragraph 1 c)  
of the Helsinki Convention

### **AMENDMENTS TO ANNEX III “CRITERIA AND MEASURES CONCERNING THE PREVENTION OF POLLUTION FROM LAND-BASED SOURCES” OF THE 1992 HELSINKI CONVENTION**

#### **THE COMMISSION,**

**TAKING INTO CONSIDERATION** the amendment procedure for the Annexes of the 1992 Helsinki Convention, as contained in Article 32 of that Convention,

#### **RESOLVES:**

- a) to amend Annex III of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1992, in accordance with the Attachment to this Recommendation;
- b) to ask the Depositary Government to Communicate these amendments to the Contracting Parties with the Commission's Recommendation for acceptance; and
- c) to determine that the accepted amendments shall enter into force one year after the adoption of this HELCOM Recommendation,

**REQUESTS** the Governments of the Contracting Parties to report on the progress of implementation of the amendments to Annex III in accordance with the agreed deadlines and Article 16, Paragraph 1 of the 1992 Helsinki Convention.

## Revised Annex III “Criteria and Measures Concerning the Prevention of Pollution from Land-Based Sources”

### 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 Environmental Practice (BEP) and Best Available Technology (BAT) to reduce the pollution from agricultural activities. The Contracting Parties shall elaborate Guidelines containing items 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 them to the prevailing conditions within the country to reduce the adverse environmental effects of agriculture. Specified requirement levels shall be considered to be a minimum basis 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 number of animals on the farm and the amount of land available for spreading manure, expressed as animal density. The maximum number of animals should be determined with consideration taken of the need to balance between the amount of phosphorus and nitrogen in manure and the crops' requirements for plant nutrients.

##### 2. *Location and design of farm animal houses*

Farm animal houses and similar enclosures for animals should be located and designed in such a way that ground and surface water will not be polluted.

##### 3. *Construction of 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 utilise nutrients. The minimum level to be required should be 6 months' storage capacity.

Manure storage should be constructed to safeguard against unintentional spillages and be of such a quality that prevents losses. With regard to different types of manure, the following principles should be considered:

- solid manure should be stored in dung yards with watertight floor and side walls
- liquid manure and farm waste should be stored in containers that are made of strong material impermeable to moisture and resistant to impacts of manure handling operations.

Animal manure should be used in such a way that as high a utilisation efficiency as possible is promoted.

Co-operation between farmers in the use of manure has to be encouraged.

##### 5. *Agricultural wastewater, manure and silage effluents*

Wastewater from animal housing should either be stored in urine or slurry stores or else be treated in some suitable manner to prevent pollution. Effluents from manure or from preparation and storage of silage should be collected and directed to storage units for urine or liquid manure.

##### 6. *Application of organic manures*

Organic manures (slurry, solid manure, urine, sewage sludge, composts, etc) should be used in such a way that a high utilisation efficiency can be achieved. Organic manures shall be spread in a way that minimises the risk of loss of plant nutrients and should not be spread on soils that are frozen, water saturated or 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.

#### *7. Application rates for nutrients*

The application of nutrients in agricultural land shall be limited, based on a balance between the foreseeable nutrient requirements of the crops and the nutrient supply to the crops from the soil and the nutrients with a view to minimise eutrophication.

National guidelines should be developed with fertilising recommendations and they should make reference to:

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

The amount of livestock manure applied to the land each year including by the animals themselves should not exceed the amount of manure containing:

- 170 kg/ha nitrogen
- 25 kg/ha phosphorus

with a view to avoiding nutrient surplus, taking soil characteristics, agricultural practices and crop types into account.

#### *8. 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

#### *9. Water protection measures and nutrient reduction areas*

Protection measures should be established to prevent nutrient losses to water particularly as regards

- Surface water: buffer zones, riparian zones or sedimentation ponds should be established, if necessary.
- Groundwater: Groundwater protection zones should be established if necessary. Appropriate measures such as reduced fertilisation rates, zones where manure spreading is prohibited and permanent grassland areas should be established.
- 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.

#### *10. Ammonia emissions*

In order to reduce ammonia emissions from animal husbandry, a surplus of nitrogen in the manure should be avoided by adjusting the composition of the diet to the requirements of the individual animal. In poultry production, emissions should be brought down by reducing the moisture content of the manure or by removal of manure to storage outside the housing system as soon as possible.

Programmes including strategies and measures for reducing ammonia volatilisation from animal husbandry should be developed.

Urine and slurry stores should be covered or handled by a method that efficiently reduces ammonia emissions.

### **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 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 runoff of plant protection products. Establishment of protection zones along surface waters should be encouraged. Application by aircraft shall be forbidden; exceptional cases require authorisation.

#### *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 a specified size should require approval with regard to environmental aspects and impacts of the farms.

Installations for the intensive rearing of poultry, pigs and cattle with more than 40,000 places for poultry, 2,000 places for production pigs (over 30 kg), 750 places for sows or 400 animal units cattle shall have a permit fully co-ordinated by the relevant authorities.

The permits must take into account the whole environmental performance of the enterprise, covering e.g. emissions to air, water and land, generation of waste and prevention of environmental accidents. The permit conditions must be based on BAT.

The competent authorities, in determining permit conditions, can take into account the technical characteristics of the enterprise, its geographical location and the local environmental conditions.

These large animal enterprises shall be considered as point sources and shall have adequate measures.

For installations with more than 100 AU the Contracting Parties shall put in practice general rules or a system corresponding to a simplified permit system to ensure the implementation of the requirements in this Annex.

Both of these permit systems shall be applied to existing installations and new installations and existing installations which are subject to substantial changes by 2012.

**Regulation 5: Monitoring and evaluation**

The Contracting Parties shall describe the implementation and monitoring of measures in this Annex in their national programmes.

To evaluate the effectiveness of the measures, 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.