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

HELSINKI COMMISSION - Baltic Marine Environment Protection Commission

HELCOM 20/99 14/1 Annex 8

20th Meeting Helsinki, 22-24 March 1999

# HELCOM RECOMMENDATION 20/5 \*)

Adopted 23 March 1999 having regard to Article 13, Paragraph b) of the Helsinki Convention 1974

## MINIMUM ABILITY TO RESPOND TO OIL SPILLAGES IN OIL TERMINALS

## THE COMMISSION,

**RECALLING** Article 11 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention) and Article 14 of the 1992 Helsinki Convention according to which the Contracting Parties shall individually and jointly take all appropriate measures to maintain adequate ability and to respond to pollution incidents in order to eliminate or minimize the consequences of these incidents to the marine environment of the Baltic Sea Area,

**RECALLING ALSO** Annex VI of the 1974 Helsinki Convention and Annex VII of the 1992 Helsinki Convention which provide basic principles on co-operation of the Contracting Parties in responding to marine pollution incidents,

**RECALLING FURTHER** HELCOM Recommendation 1/8 on minimization of the use of dispersants, sinking agents and absorbents in oil combatting operations in the Baltic Sea Area, HELCOM Recommendation 11/13 concerning development of national ability to respond to spillages of oil and other harmful substances and HELCOM Recommendation 17/13 concerning the use by the Baltic Sea States of the Manual on Co-operation in Combatting Marine Pollution within the framework of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention),

**RECALLING FURTHERMORE** Article 7 of the 1992 Helsinki Convention on Environmental impact assessment and HELCOM Recommendation 17/3 concerning information and consultation with regard to construction of new installations affecting the Baltic Sea,

**BEARING IN MIND** the plans of the Contracting Parties to increase the amounts of oils to be transported at sea, the development of the existing and the construction of new oil terminals, and consequently the increased risk of pollution incidents during loading/unloading operations,

<sup>\*)</sup> This Recommendation supplements HELCOM Recommendation 11/13.

**STRESSING** that a pollution incident in a coastal area may cause serious damage to the wellbeing and the socio-economic development of the peoples, to the coastal ecosystems, to the natural habitats, to the biological diversity and to the ecological processes,

**BEING AWARE** that a pollution emergency plan for an oil terminal should be based on a systematical assessment of risks of oil spills and that the pollution emergency plan should be a part of the overall safety policy and safety planning of that oil terminal,

**TAKING INTO ACCOUNT** Article 3 of the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 (OPRC Convention) and the provisions of seaport emergency plans of Section II of the IMO Manual on Oil Pollution - Contingency Planning,

**RECOMMENDS** that the Governments of the Contracting Parties shall, as a supplement to HELCOM Recommendation 11/13 concerning development of national ability to respond to spillages of oil and other harmful substances, ensure that the Guidelines on minimum ability to respond to oil spillages in oil terminals attached to this Recommendation are applied by the oil terminals in their respective countries,

**RECOMMENDS ALSO** the Governments of the Contracting Parties to carry out Environmental Impact Assessment (EIA) studies in accordance with the 1991 Espoo Convention on Environmental Impact Assessment in a Transboundary Context and/or the European Council Directive 85/337/EEC of 27 June 1985 (as later amended) on the assessment of the effects of certain public and private projects on the environment before the plans for enlargement of existing oil terminals or construction of new oil terminals are decided,

**AUTHORIZES** the Combatting Committee to amend the Guidelines contained in the Attachment,

**REQUESTS** the Governments of the Contracting Parties to apply this Recommendation from the date of its approval to new oil terminals and in 2001 to existing oil terminals,

**REQUESTS ALSO** the Governments of the Contracting Parties to report on the implementation of this Recommendation, in accordance with Article 16, Paragraph 1 of the 1992 Helsinki Convention,

**REQUESTS FURTHER** the Governments of the Contracting Parties to report to:

- the Combatting Committee on the combatting arrangements in oil terminals in accordance with the procedure approved by the Combatting Committee, and
- the Environment and Technological Committees on the implementation of the concept of EIA studies in relation to oil terminals in their respective countries.

## GUIDELINES ON MINIMUM ABILITY TO RESPOND TO OIL SPILLAGES IN OIL TERMINALS

# 1. INTRODUCTION

The purpose of these guidelines is to outline technical and operational means concerning the implementation of HELCOM Recommendation 20/5 concerning minimum ability to respond to oil spillages in oil terminals.

The Guidelines should be implemented in close co-operation between the Port Authority and the operators of the oil terminal, taking into account the situation of the terminal: whether at open sea\*), within a semi-enclosed sea area or in an enclosed port area.

A pollution emergency plan for an oil terminal should be part of the safety arrangements of the port, aiming primarily at the prevention of accidents and oil spills. Safety arrangements shall be based on systematical risk assessments and analysis and on reducing the identified risks minimizing the possibility for an oil spill during oil tanker operations in ports and terminals.

In a port area there are normally several private operators in addition to the Port Authority, the operators being responsible for their own activities. It is important that one of the actors, mostly the Port Authority, takes care of the coordination of the safety arrangements of the various private operators. In a similar manner the Port Authority should prepare an overall contingency plan for the port and make sure that the pollution emergency plans of the various operators correspond with the overall contingency plan. The Port Authority and the operators shall exchange information about these plans and organize exercises on a regular basis.

Nevertheless, it must be realized that due to adverse weather conditions and probable local limitations the outlined operational and technical means can not always ensure a successful cleaning operation.

# 2. POLLUTION EMERGENCY PLANS

The Port Authority should ensure that each oil terminal has its own pollution emergency plan, elaborated in accordance with both Chapter 2 of Section II of the IMO Manual on Oil Pollution and with national regulations, and that these plans are a part of the overall port contingency plan in order to establish an organization, communication and other procedures for responding to marine oil spills. Due consideration should be given to all emergency incidents which could occur during ship movements and oil handling on jetties and terminals.

The pollution emergency plan must take into account:

- the type and quantities of handled oil (crude oil and oil products); special attention has to be paid to persistent oils,
- maximum dimensions of laden tankers and their dwt and dimension of the biggest cargo tank in m<sup>3</sup>,
- \*) Oil terminals situated "at open sea" includes also offshore terminals.

- maximum discharge rate (m<sup>3</sup> per hour) and description of emergency stopping device,
- location of the terminal or jetty, such as open sea terminals, enclosed or semi-enclosed terminals,
- access from the port approach to the terminal,
- currents, exposition to sea swell,
- weather and ice conditions,
- manouvering space for terminal berthing tankers and tug boat regulations,
- description of the fairway from the open sea to the oil terminal.

## 3. POLLUTION RESPONSE EQUIPMENT

The pollution emergency plan should appoint the exact storage place for the combatting equipment and its access.

The equipment should be located nearby the oil piers and jetties; in case of an open-sea loading platform or mooring boyos, on stand-by supply vessels. The response measures should be taken immediately by the terminal operator. Other supporting measures within the overall contingency plan should be a part of the pollution emergency plan, *inter alia*, tug boats and fire fighting vessels.

The total capacity of the equipment should correspond with the spill expectancy and the unloading or loading rate.

The equipment for combatting operations should fulfill the following requirements:

- Oil recovery systems and booms shall be designated to be operational under the conditions:
  - -- of wave heights up to two (2) m and current velocity of up to one (1) knot in open sea terminals, and
  - -- of wave heights up to one (1) m and current velocity up to one (1) knot in enclosed and/or semi-enclosed ports.

Combatting equipment which is liable to be used under ice conditions should be well tested for this purpose.

#### **Dispersants**

The use of dispersants in an enclosed port area is restricted to very exceptional cases, if no other adequate means can be applied and if the use of dispersants has no impact on the coastal Baltic Sea Area. Any such use is subject to authorization by the competent national authorities.

#### 4. BOOM AND SKIMMER CAPACITIES

#### a) Confined port areas

The ability to close the port entrance in case of a serious outflow is recommended, if the width of the channel or entrance is not exceeding 1,000 m. The closing of the port entrance requires at least a **coastal sea boom** for this purpose.

#### Semi-enclosed port areas

Within semi-enclosed port areas coastal booms should be stored for easy access and for fast deploying to ensure the surrounding of the maximum tanker size.

In the case of both confined and semi-enclosed port areas, a specialised port cleaning boat is recommended when the wind direction and wind force lead to an oil-concentration in port regions or corners where booming and recovery with skimmers could be difficult. Vacuum trucks could also be useful for land-based clean-up operations.

c)

b)

#### Open sea terminals

A **high-sea boom** is recommended in open sea terminals and in ports with an entrance to the open sea or with an entrance exposed to the open sea.

Regular training with tugboats or other powerful auxiliary vessels should ensure a fast deployment of the booms.

If the current along the terminal or jetty exceeds 0.7 knots the boom configuration should be adjusted to maximum deployment angels to flow direction at different current strengths for bottom tension booms to prevent the escape of oil.

Technical information paper No. 2 of ITOPF <sup>\*</sup>) contains further details on various boom deployments. The two-fold length of the maximum tanker should be the basis orientation when deciding the length of the booms within the port. Thus making it possible to prevent the oil already along the berth from spreading. This requires a high alert time and a trained tugboat crew.

In case of open sea terminals the length of high-sea booms should be at least not less than three (3) times the length of the maximum tanker visiting the terminal.

The **skimmer performance** should be orientated on the maximum wing tank capacity of the biggest tanker calling at the port or the terminal. The skimming capacity must be part of the standard response set, together with hydraulic generators suitable for operation in explosive atmosphere.

The skimming capacity should be sufficient to recover at least 50% of the tank contents within 24 hours.

The port or the terminal operator should update this calculation in close co-operation with the Port Authority in order to adjust the skimming capacity to changing tanker dimensions.

A permanent readiness for emergency response measures should be ensured during ship movements and/or oil loading/unloading activities for both confined port areas, semi-enclosed port areas and open sea terminals.

During winter and icy conditions special arrangements are recommended in addition to those described above.