



## Purpose:

The e-learning module is designed for theoretical training of ratings as able seafarer deck in accordance with Chapter II of the STCW Convention in the part concerning of prevention of the marine environmental pollution.

The ELM is included in the "*Able seaman*" library.

## What is an e-learning module?

E-learning module is the electronic textbook on one or more sections. Theoretical materials can be accompanied by drawings, diagrams, photos, animations and videos. There is a test for assessment of knowledge gained at the end of each section.

## Contents:

- MARPOL - 73/78
- Technical equipment for waste utilization
- Actions on oil spill prevention
- Storage and disposal of waste prohibited for utilization
- Disposal of garbage outside special areas

## Target groups

Deck - Support

## Ship types

Generic



## Regulations

### Table A-II/5 STCW Code

Competence:

Apply precautions and contribute to the prevention of pollution of the marine environment

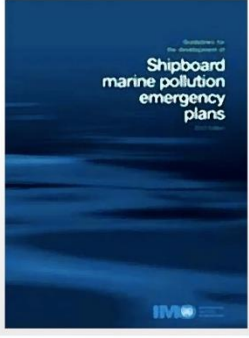


MARINE ENVIRONMENTAL POLLUTION PREVENTION  
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Section 1. MARPOL - 73/78

In addition, each ship must have a "Ship Oil Pollution Emergency Plan (SOPEP)" approved by the classification society or other competent authorities.

The Ship Oil Pollution Emergency Plan, or SOPEP, is a prevention plan carried on board of almost all cruise and cargo vessels. In this plan you get an overview of possible procedures in case of an oil spill. In the plan is also mentioned who you should contact (list of authorities, oil clean up teams and port state control) and how to report this event to the nearest coast guard station.



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Section 2. Technical equipment for waste utilization

SHIP EQUIPMENT FOR PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS AND OFF-SHORE FACILITIES

Biological sewage treatment plants are installed on ships for the treatment of sewage water.

Biological sewage treatment systems are a small part of a larger process that treat human wastes by using bacteria and other microbial accomplices to break them down into other byproducts such as sludge.



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Section 2. Technical equipment for waste utilization

SHIP EQUIPMENT FOR PREVENTION OF POLLUTION OF SEA ENVIRONMENT BY BILGE AND BALLAST WATERS

Demuulsification plants are installed on ships to separate water from oil-water emulsion.

The principle of operation is based on the fact that oil-water emulsion is pumped into the slop tank and mixed with special chemical additives. After settling, the emulsion is divided into three layers. The lower layer is pumped to the sludge tank, and the treated water is pumped to the oily (bilge) water separator. The upper layer remains in the tank.



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Section 3. Actions on oil spill prevention

Most often, marine pollution from ships in port occurs during bunkering or cargo operations on tankers.

When performing bunkering operations (including operations with oily waters), the following is carried out on board the vessel:

- crew and passengers are notified;
- smoking is prohibited on open decks;
- the place of reception and delivery of fuel is fenced off;
- scuppers on deck are plugged;
- portholes are closed on the side of fuel delivery and acceptance;
- the "Bravo" flag is hoisted (red all-round fire is switched at night time);
- pallets are installed, cleaning material is brought;



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Section 5. Disposal of garbage outside special areas

In special areas, it is forbidden to throw any garbage, with the exception of food waste, at a distance of at least 12 miles from the nearest shore.

Such areas are:

- Mediterranean, Black Sea, Baltic Sea, Red Sea, Northern Sea, Irish Sea, Caribbean Sea, South China Sea, Inland Seas of Japan, Gulf area, Wider Caribbean region;
- Persian and Mexican Gulfs, Caribbean Sea;
- English Channel;
- Antarctic areas south of 60° S.



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Test tasks

COMMENT

Reports of cases of oil pollution at sea or of discovery of a contaminated surface in the sea are given to the coastal state.

Question text:

To which state are reports of cases of oil pollution at sea or of discovery of a contaminated surface in the sea given?

Choose the correct answer

Sovereign state.

Rule-of-law state.

Coastal state.

Federal state.

Attempt: 1

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