

**RESOLUTION A.497(XII)**

*Adopted on 19 November 1981  
Agenda item 11*

**AMENDMENTS TO THE REVISED SPECIFICATIONS FOR THE DESIGN,  
OPERATION AND CONTROL OF CRUDE OIL WASHING SYSTEMS**

THE ASSEMBLY,

RECALLING resolution A.297(VIII) by which it established the Marine Environment Protection Committee and specified the functions and responsibilities of that Committee,

RECALLING ALSO Regulation 13B(2) of Annex I of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973, concerning requirements for crude oil washing, and resolution 15 of the International Conference on Tanker Safety and Pollution Prevention, 1978, which contains the Specifications for the Design, Operation and Control of Crude Oil Washing Systems and that the Conference requested IMCO to review and revise, as necessary, the Specifications to reflect the latest technology and practices as may be developed by the time of entry into force of the Protocol,

RECALLING FURTHER resolution A.446(XI) by which it adopted revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems which superseded the Specifications contained in resolution 15 of the above-mentioned Conference,

HAVING CONSIDERED the recommendation made by the Marine Environment Protection Committee at its fifteenth session,

1. ADOPTS:

- (a) The amendments and additions to the revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems (Annex to resolution A.446(XI)), the text of which is set out in Annex 1 to the present resolution;
- (b) The amendments and additions to the agreed interpretations of certain of the provisions of the revised Specifications (Appendix III to the Annex to resolution A.446(XI)) as shown in Annex 2 to the present resolution;

2. INVITES Governments to implement the Specifications as amended by the present resolution.

ANNEX 1

**AMENDMENTS TO THE REVISED SPECIFICATIONS FOR THE DESIGN,  
OPERATION AND CONTROL OF CRUDE OIL WASHING SYSTEMS**

(resolution A.446(XI), Annex)

- 1 Paragraph 4.2.10(a): delete "heel of crude oil" and insert:  
"wedge of liquid crude oil remaining on the tank bottom".
- 2 Paragraph 4.4.8: delete "officer in charge of cargo and operations" and insert:  
"officer in charge of cargo and crude oil washing operations".

3 Appendix I: delete "7.4 This paragraph is not applicable." and insert:

- "7. (d) Details of the requirements of section 6 of these Specifications together with advice and instructions, where appropriate, in meeting these requirements such as:
- (i) Recommended methods and programmes of crude oil washing in order to accord with all foreseeable circumstances of cargo discharge restraints and to obtain maximum trim during the completion of washing and draining of each tank.
  - (ii) The method of draining tanks which shall include information on optimum trim conditions as required by 4.4.10.
  - (iii) The method of draining cargo pumps, cargo lines, crude oil washing lines and stripping lines, and spaces into which they may be drained together with the final discharge ashore via the small discharge line on completion of discharge.
  - (iv) Typical washing programmes under various conditions of loading specifying:
    - (1) the tanks to be washed in accordance with 6.1;
    - (2) the method for washing each tank, that is, single or multi-stage;
    - (3) the number of tank washing machines to be used simultaneously;
    - (4) the duration of the crude oil wash and water rinse where the latter is appropriate.
  - (v) The procedure for verifying by sound patterns that bottom mounted machines are operating shall be carried out towards the end of the wash cycle for each tank. When carrying out such verification all other machines shall be shut down if necessary."

## ANNEX 2

### AMENDMENTS AND ADDITIONS TO THE AGREED INTERPRETATIONS OF CERTAIN OF THE PROVISIONS OF THE REVISED SPECIFICATIONS (resolution A.446(XI), Annex, Appendix III)

1 Add the following paragraph:

"4.2.4 This paragraph requires each machine to be capable of being isolated by means of stop valves in the supply line. Where more than one submerged machine is connected to the same supply line a single isolating stop valve in the supply line may be acceptable provided the rotation of the submerged machines can be verified in accordance with paragraph 4.2.13(a) or (c) of the revised Specifications for the Design, Operation and Control of Crude Oil Washing Systems."

2 Add under paragraph 4.2.9(d), column entitled "*Disregard*":

- " (vi) corrugations on corrugated bulkheads
- (vii) face plates".

- 3 Add the following paragraph after the existing entry under 4.2.10(c):

*“The expression ‘totally discharged to the loading port harbour’ which is used in this paragraph shall be so construed as to mean the total quantity of arrival ballast except that quantity which is to be retained on board as specified in section 15 of the Crude Oil Washing Operations and Equipment Manual.”*

- 4 Add the following paragraph:

*“4.4.3 During bottom washing the stripping capacity shall be at least 1.25 times the total throughput of all the machines that may be simultaneously in use according to paragraph 4.4.3. This does not mean that all the machines in a tank have to be operated simultaneously during bottom washing but the bottom washing may be carried out in steps according to detailed procedures laid down in the Operations and Equipment Manual. The stripping capacity should be at least 1.25 times the throughput of all machines that are in operation simultaneously during any stage of the bottom washing.”*

- 5 Add the following paragraph:

*“4.4.5 In crude oil tankers having individual cargo pumps in each tank, each pump having an individual piping system, dispensation from the required special small diameter line may be given in cases where the combined amount of oil left in the tank after stripping and the volume of oil in the piping system from the manifold to the tank is less than 0.00085 times the volume of the cargo tank. If a deepwell cargo pump system is provided with an evacuating system for retained oil, the above consideration should also apply.”*

- 6 Add the following paragraph:

*“5.2 (b) This paragraph requires that officers who assume overall charge of a crude oil washing operation must have participated in a crude oil washing operation on the ship for which they are required to undertake the responsibility for cargo discharge, or on a similar ship. However, for new ships, for ships changing for the first time to the carriage of crude oil, for ships new to a particular owner, or for ships which are changing registry in which it may not be possible to acquire the particular experience, the Administration may accept as an alternative:*

- (i) a person such as a shore-based senior officer appointed by the company (additional to the ship’s complement) who is experienced in the operation of crude oil washing and is present to advise the ship’s personnel; or*
- (ii) a senior member of the crew such as the master, chief officer or cargo control officer who has participated in at least 4 crude oil washing operations and is on board the ship;*

*provided that an Operations and Equipment Manual, in a language readily understood by the ship’s officers, is available on the ship.”*