



NEWBUILDINGS
SPECIAL SERVICE AND TYPE – ADDITIONAL CLASS

Carriage of Potable Water

JANUARY 2011

*This chapter has been amended since the main revision (January 2011), most recently in July 2011.
See “Changes” on page 3.*

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FOREWORD

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The Rules lay down technical and procedural requirements related to obtaining and retaining a Class Certificate. It is used as a contractual document and includes both requirements and acceptance criteria.

The electronic pdf version of this document found through <http://www.dnv.com> is the officially binding version
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CHANGES

General

As of October 2010 all DNV service documents are primarily published electronically.

In order to ensure a practical transition from the “print” scheme to the “electronic” scheme, all rule chapters having incorporated amendments and corrections more recent than the date of the latest printed issue, have been given the date January 2011.

An overview of DNV service documents, their update status and historical “amendments and corrections” may be found through http://www.dnv.com/resources/rules_standards/.

Amendments July 2011

- **General**

— The restricted use legal clause found in Pt.1 Ch.1 Sec.5 has been added also on the front page.

Main changes

Since the previous edition (January 2003), this chapter has been amended, most recently in January 2004. All changes previously found in Pt.0 Ch.1 Sec.3 have been incorporated and a new date (January 2011) has been given as explained under “General”.

In addition, the layout has been changed to one column in order to improve electronic readability.

CONTENTS

Sec. 1	General Requirements	5
A. General.....	5	5
A 100	Scope.....	5
A 200	Application.....	5
A 300	Class notation.....	5
A 400	Assumption	5
B. Documentation	5	5
B 100	General.....	5
C. Surveys and Testing	5	5
C 100	General.....	5
Sec. 2	Requirements for Carriage of Potable Water	6
A. Materials	6	6
A 100	Cargo piping and cargo tank materials	6
B. Tank Arrangement	6	6
B 100	Cargo tanks	6
B 200	Ballast tanks	6
C. Piping System	6	6
C 100	Cargo piping and tank vent.....	6
D. Water Quality	6	6
D 100	Quality of water loaded.....	6

SECTION 1 GENERAL REQUIREMENTS

A. General

A 100 Scope

101 The rules in this chapter give requirements with the objective of assuring transport in bulk of potable water with minimal risk of contaminating the cargo or otherwise reduce delivered quality.

A 200 Application

201 These rules apply to vessels dedicated to the transportation of potable water. The requirements are to be regarded as supplementary to those given for the assignment of main class.

A 300 Class notation

301 Vessels complying with the requirements of this section will be assigned the class notation:

Tanker for Potable Water

A 400 Assumption

401 It is assumed that cargo tanks are not used for any other purposes than transport of potable water, except under emergency conditions.

B. Documentation

B 100 General

101 The following plans and particulars are to be submitted:

- General tank arrangements
- Cargo tank arrangements
- Cargo piping
- Cargo tank air vents
- Cargo tank ullaging system
- Specification of tank coating with certificate of acceptance for toxicity and tainting testing by recognised laboratory or health authority
- Specifications of metallic and non-metallic materials in contact with the cargo.

102 For general requirements for documentation of instrumentation and automation, including computer based control and monitoring, see Pt.4 Ch.9 Sec.1.

103 The following control and monitoring system shall be approved by the Society:

- water quality instrument.

For requirements to documentation, see Pt.4 Ch.9.

C. Surveys and Testing

C 100 General

101 All systems and installations covered by this section are to be surveyed and tested to the satisfaction of the surveyor.

SECTION 2 REQUIREMENTS FOR CARRIAGE OF POTABLE WATER

A. Materials

A 100 Cargo piping and cargo tank materials

101 Materials in contact with water, including coatings are not to give off harmful substances in contact with water nor cause tainting or discoloration.

102 For non-metallic materials and coatings documentation showing their suitability for use in contact with water intended for human consumption is to be submitted, e.g. test documentation according to BS 6920 or equivalent.

B. Tank Arrangement

B 100 Cargo tanks

101 Cargo tanks are to be separated from tanks containing fuel oil lubricating oil or any other liquid, except ballast water, by means for cofferdams.

B 200 Ballast tanks

201 The vessel is to have sufficient segregated ballast capacity in order to enable safe operation under all conditions in normal operation of the vessel, i.e. sufficient for propeller submergence and draught forward in accordance with Pt.3 Ch.1 Sec.6 H.

C. Piping System

C 100 Cargo piping and tank vent

101 Cargo piping is to be separated from all other piping systems, i.e. no physical connection is allowed.

102 Tank vents are to be designed so as to prevent ingress of sea water.

103 Hydraulically operated valves are not to be located inside cargo tanks unless the hydraulic fluid used is harmless to the water quality in case a leakage should occur.

104 Submerged cargo pumps are not accepted if leakage of hydraulic fluid or lubricants may contaminate the cargo.

D. Water Quality

D 100 Quality of water loaded

101 The quality of the water loaded shall comply with the Directive 98/83/EC of the European Union or with a quality standard specified by the receiving country or port.

102 The «as loaded» quality shall be documented by laboratory test results either taken from the particular cargo or from a documented quality control system implemented by the water supplier.

103 The vessel is to be equipped with instruments for measuring pH-value and conductivity.