



KEMENTERIAN PERHUBUNGAN REPUBLIK INDONESIA
DIREKTORAT JENDERAL PERHUBUNGAN LAUT



MINISTRY OF TRANSPORTATION OF THE REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF SEA TRANSPORTATION

SERTIFIKAT KETERAMPILAN CERTIFICATE OF PROFICIENCY

Nomor Seri / Serial No.

CP5915109

Nomor Sertifikat / Certificate No.

6200091302400723

Dengan ini dinyatakan bahwa

This is to certify that

Nama

Name

:: **SUPANGKAT HARI KUSWORO**

Tempat dan tanggal lahir

Place and date of birth

: **MALANG , 01 November 1979**

telah menyelesaikan pelatihan dan lulus evaluasi :

has completed approved training and passed the assessment of

ADVANCED TRAINING FOR CHEMICAL TANKER CARGO OPERATIONS Revalidation

yang dilaksanakan oleh : **Pertamina Maritime Training Center - Jakarta**

which has held by

di : **Jakarta**

at : **20 April 2009 to 24 April 2009**

Sesuai ketentuan STCW 1978 beserta dengan amandemennya, Peraturan :

in accordance with the provisions of STCW 1978 as amended, Regulation

Chapter V, Section A-V/1-1-3 STCW 2010

Chapter V, Section A-V/1-1-3 STCW 2010

yang telah mendapat pengesahan dari Direktorat Jenderal Perhubungan Laut selaku Administrasi.

which has been approved by the Directorate General of Sea Transportation as Administration.

Jakarta, 16 November 2023

An. Direktur Jenderal Perhubungan Laut

O.b. Director General of Sea Transportation

KEPALA SUB DIREKTORAT KEPELAUTAN
Head of Sub Directorate Of Seafarer

Tandatangan Pemilik

Signature of the Holder



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Capt. MALTUS J. KAPISTRANO, S.Si., M.Si.



Sertifikat ini berlaku untuk 5 (lima) tahun sejak tanggal diterbitkan

This Certificate is valid for 5 (five) years commenced from the date of issuance

ADVANCED TRAINING FOR CHEMICAL TANKER CARGO OPERATIONS

Subject Area

Based on Reg. V/1-1 STCW 2010 Code Section A-V/1-1.3

1. **Ability to safely perform and monitor all cargo operations**
 - 1.1 Knowledge of chemical tanker designs, systems and equipment
 - 1.2 Knowledge of pump theory and characteristics, including types of cargo pumps and their safe operation
 - 1.3 Proficiency in tanker safety culture and implementation of safety management system
 - 1.4 Knowledge and understanding of monitoring and safety systems, including the emergency shutdown system
 - 1.5 Ability to perform cargo measurements and calculations
 - 1.6 Knowledge of the effect of bulk liquid cargoes on trim and stability and structural integrity
 - 1.7 Knowledge and understanding of chemical cargo-related operations
 - 1.8 Development and application of cargo-related operation plans, procedures and checklists
 - 1.9 Ability to calibrate and use monitoring and gas-detection systems, instruments and equipment
 - 1.10 Ability to manage and supervise personnel with cargo-related responsibilities
2. **Familiarity with physical and chemical properties of chemical cargoes**
 - 2.1 Knowledge and understanding of the chemical and the physical properties of noxious liquid substances
 - 2.2 Understanding the information contained in a Material Safety Data Sheet (MSDS)
3. **Take precautions to prevent hazards**
 - 3.1 Knowledge and understanding of the hazards and control measures associated with chemical tanker cargo operations
 - 3.2 Knowledge and understanding of dangers of non-compliance with relevant rules/regulations
4. **Apply occupational health and safety precautions**
 - 4.1 Knowledge and understanding of safe working practices, including risk assessment and personal shipboard safety relevant to chemical tankers
5. **Respond to emergencies**
 - 5.1 Knowledge and understanding of chemical tanker emergency procedures
 - 5.2 Actions to be taken following collision, grounding, or spillage
 - 5.3 Knowledge of medical first aid procedures on board chemical tankers, with reference to the Medical First Aid Guide for Use in Accidents Involving Dangerous Goods (MFAG)
6. **Take precautions to prevent pollution of the environment**
 - 6.1 Understanding of procedures to prevent pollution of the atmosphere and the environment
7. **Monitor and control compliance with legislative requirements**
 - 7.1 Knowledge and understanding of relevant provisions of the International Convention for the Prevention of Pollution from Ships (MARPOL) and other relevant IMO instruments, industry guidelines and port regulations as commonly applied
 - 7.2 Proficiency in the use of the IBC Code and related documents
8. **Assessment and evaluation**

