



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.

**CP6029981**

Nomor Sertifikat / Certificate No.

**6200414035370123**

Dengan ini dinyatakan bahwa

*This is to certify that*

Nama

**:: DEDET TRIO**

*Name*

Tempat dan tanggal lahir : **PADANG , 11 March 1982**

*Place and date of birth*

telah menyelesaikan pelatihan dan lulus evaluasi :

*has completed approved training and passed the assessment of*

**BASIC TRAINING FOR LIQUEFIED GAS TANKER CARGO OPERATIONS Revalidation**

yang dilaksanakan oleh : **STIP Jakarta**

*which has held by*

di : **Jakarta**

at : **08 May 2023 to 12 May 2023**

Sesuai ketentuan STCW 1978 beserta dengan amandemennya, Peraturan Chapter V, Section A-V/1-2-1 STCW 2010

*in accordance with the provisions of STCW 1978 as amended, Regulation Chapter V, Section A-V/1-2-1 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.*

Tandatangan Pemilik

*Signature of the Holder*



**Jakarta, 20 October 2023**

**An. Direktur Jenderal Perhubungan Laut**

*O.b. Director General of Sea Transportation*

**Ketua Direktur/Kepala**  
**Principal/Director/Head**



**H. AHMAD WAHID, S.T., M.T., M.Mar.E.**

# **BASIC TRAINING FOR LIQUEFIED GAS TANKER CARGO OPERATIONS**

## **Subject Area**

**Based on Reg. V/1-2 and STCW 2010 Code Section A-V/1-2-1**

### **1. Contribute to the Safe Operation of a Liquefied Gas Tanker**

#### **1.1 Basic knowledge of liquefied gas tankers**

##### **1.1.1 Types of liquefied gas tankers**

##### **1.1.2 General arrangement and contribution**

#### **1.2 Basic knowledge of cargo operation**

##### **1.2.1 Piping systems and valves**

##### **1.2.2 Cargo handling equipment**

##### **1.2.3 Loading, unloading and care in transit**

##### **1.2.4 Emergency shutdown (ESD) system**

##### **1.2.5 Tank cleaning, purging, gas-freeing and inerting**

#### **1.3 Basic knowledge of the physical properties of liquefied gases**

##### **1.3.1 Properties and characteristics**

##### **1.3.2 Pressure and temperature, including vapour pressure/temperature relation ship**

##### **1.3.3 Types of electrostatic charge generation**

##### **1.3.4 Chemical symbols**

#### **1.4 Knowledge and understanding of tanker safety culture and safety management**

### **2. Take Precaution to Prevent Hazard**

#### **2.1 Basic knowledge of the hazards associated with tanker operation**

##### **2.1.1 Health hazard**

##### **2.1.2 Environmental hazards**

##### **2.1.3 Reactivity hazards**

##### **2.1.4 Corrosion hazards**

##### **2.1.5 Explosion and flammability hazards**

##### **2.1.6 Sources of ignition**

##### **2.1.7 Electrostatic hazards**

##### **2.1.8 Toxicity hazards**

##### **2.1.9 Vapour leaks and clouds**

##### **2.1.10 Extremely low temperatures**

##### **2.1.11 Pressure hazards**

#### **2.2 Basic knowledge of hazards controls**

##### **2.2.1 Inerting, drying and monitoring techniques**

##### **2.2.2 Anti-static measures**

##### **2.2.3 Ventilation**

##### **2.2.4 Surgeation**

##### **2.2.5 Cargo inhibition**

##### **2.2.6 Importance of cargo compatibility**

##### **2.2.7 Atmospheric control**

##### **2.2.8 Gas testing**

#### **2.3 Understanding of information on a Material Safety Data Sheet (MSDS)**

### **3. Apply Occupation health and Safety Precautions and measures**

#### **3.1 Function and proper use of gas-measuring instruments and similar equipment**

#### **3.2 Proper use of safety equipment and protective devices**

#### **3.3 Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines and personal shipboard safety relevant to liquefied gas tankers**

#### **3.4 Basic knowledge of first aid with reference to Material Safety Data Sheet (MSDS)**

### **4. Carry out Fire-Fighting Operation**

#### **4.1 Tanker fire organization and action to be taken**

#### **4.2 Special hazards associated with cargo handling and transportation of liquefied gases in bulk**

#### **4.3 Fire-fighting agents used to extinguish gas fires**

#### **4.4 Fixed fire-fighting foam system operation**

#### **4.5 Portable fire-fighting foam operations**

#### **4.6 Fixed dry chemical system operations**

#### **4.7 Basic knowledge of spill containment in relation to fire-fighting operations**

### **5. Respond to Emergencies**

#### **5.1 Basic knowledge of emergency procedures**

### **6. Take Precaution to Prevent pollution of the environment from the release of Liquefied Gases**

#### **6.1 Basic knowledge of the effects of pollution on human and marine life**

#### **6.2 Basic knowledge of shipboard procedures to prevent pollution**

#### **6.3 Basic knowledge of measures to be taken in the event of spillage**

### **7. Assessment and Evaluation**