

# **COURSE OVERVIEW 0E0409(AD4) Liquefied Gas Tankers & Jetty Operations**

#### **Course Title**

Liquefied Gas Tankers & Jetty Operations

#### **Course Date/Venue**

Session 1: April 13-17, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha,

Session 2: August 17-21, 2025/Meeting Plus 8, City Centre Rotana Doha Hotel, Doha,



OE0409(AD4)

# **Course Duration/Credits**

Five days/3.0 CEUs/30 PDHs

### **Course Description**









Safety in all types of operations is the key factor in ensuring that a company always maintains its position about the profit line, both efficiently and ethically. It is critical to the well-being and reputation of the tanker and terminal industry. In today's global oil and gas markets, terminal, offshore, tank and transport operators are faced with increasing risk constraints and challenges stemming from complex cargo and terminal operations coupled with tighter safety, security and environmental regulations.

This course is required to provide sufficient competence for regulatory HID inspectors involved in carrying out inspections at jetties associated with shipto-shore transfer of hazardous substances, whilst ensuring their personal health and safety within a hazardous environment. Those parts of the course covering issues of regulation policy and practice will be presented by HSE staff. The participants to the course will consist of gas & pipeline specialist regulators and chemical industry regulatory inspectors who deal with refinery/fuel storage facilities linked to tanker jetties, plus small number of specialist in the fields of process safety, human factors, etc.



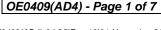






















The course will provide the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels. It will describe the parties involved, equipment, procedures and documentation applicable across the entire process of tanker berthing, loading and unloading as well as the health, safety and environmental aspects, and their applicability to the different products handled.

Participants of the course will have the technical knowledge required to serve on a tanker and be assigned specific duties and responsibilities related to cargo or cargo equipment. Further, participants will be able to gain sufficient knowledge of the practical application of the basic principles and concepts of safe tanker operations in order to carry out these duties.

#### **Course Objectives**

This course will provide the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels. Upon the successful completion of this course, each participant will be able to:-

- Apply and gain a good working knowledge on liquefaction gas tankers and jetty operations
- Discuss the technical fundamentals of liquefied gas and its safe carriage on marine tank vessels
- Define and discuss terminology, regulations and codes of practice
- Explain the design and equipment of LNG tankers, ship/shore emergency shutdown system, power emergency release system (PERC system) and ship maneuvering system
- Recognize loading arms and demonstrate proper arrangements for handling, care and carriage of equipments and tank ventilation
- Discuss pumps and pump theory, tank gauging systems, level arms, environmental protection systems and pollution prevention
- Carryout tanker operations through calculations, loading and discharge plans, loading arms and discharge procedures, tank cleaning, purging and gas freeing
- Identify toxicity and health hazards associated with oil and flammability hazards as well as control the hazard
- Employ safety equipment and protection of personnel and use emergency procedures

#### Exclusive Smart Training Kit - H-STK® (



Participants of this course will receive the exclusive "Haward Smart Training Kit" (H-STK®). The H-STK® consists of a comprehensive set of technical content which includes electronic version of the course materials conveniently saved in a Tablet PC.

#### **Who Should Attend**

This course is intended for marine terminal managers, superintendents, supervisors and engineers, facility managers and facility training coordinators, safety & environmental managers, engineers and officers, spill management team members, transfer supervisors, marine shipping coordinators and dock maintenance planners.

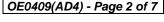






















# **Course Certificate(s)**

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

#### **Certificate Accreditations**

Certificates are accredited by the following international accreditation organizations: -

The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the ANSI/IACET 2018-1 Standard which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the ANSI/IACET 2018-1 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award 3.0 CEUs (Continuing Education Units) or 30 PDHs (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.



#### British Accreditation Council (BAC)

Haward Technology is accredited by the British Accreditation Council for Independent Further and Higher Education as an International Centre. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

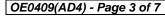
#### Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.

















#### Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Luis Manuel (Luis Manuel Luis) is a Senior Offshore Inspection Engineer with over 35 years of extensive and practic experience within the Oil, Gas, Petrochemical and Petroleu industries. His expertise includes Oil & Gas Marine Terminals, Vess Hull & Machinery Survey, Oil & Gas Fields Terminal Operation Seamanship, Shipping Overview, Marine Fire Fighting Equipme Hull Damage Control, Vessel Rescue, Life Saving, Safety Process

Offshore Marine Operation Management, Offshore Survey, Oil & Gas Terminals Loadi & Discharging, Performance Monitoring of Offshore Structures, Offshore Pipeline Glob Buckling, Offshore Modular Units, Offshore Structure Design & Construction, Offshore Project Management, Tanker Vetting for Terminals, Loading Master Certification for Oi Gas Terminals, Port Terminals Crisis Management & Major Emergency Respons Further he is also well versed in ASME Post Construction Code, Inspection Plannir Fitness-for-Service (FFS) (API 579), Design, Inspection, Repair, Maintenance Alteration and Reconstruction of Steel Storage Tanks (API-653), Positive Mater Identification (API RP 578), Pressure Equipments and Pressure Vessels (ASME VIII API-510); Tanker & Marine Terminals, Offshore Rig Inspection, Pipelines & Pipi Design, Inspection & Maintenance (ASME B31, API 579 & API 580), Pipelines Manifolds System, Offshore Structure Engineering, Single Buoy Mooring (SBI Underwater Inspection by ROV, Subsea Pipeline Engineering, Integrity Assessme Forensic Analysis, Structural Analysis, Design & Engineering, Naval Architectu Regulatory Compliance Inspections, Stress & Fatigue Analysis using SACS, StruCa Caesar II and Finite Element Analysis simulators. He was the Technical Advisor a Engineering Manager of a leading international engineering firm where he led Inspections, Structural Engineering and Pipeline Projects for Total-ELF, Shell and Mobil

During his career life, Mr. Manuel has gained his thorough practical experience in multip engineering disciplines that includes pipeline/piping inspection and engineering, national engineering, container cargo lashing, aerospace engineering and offshore structu engineering (oil and gas exploration platforms) through several challenging positions su as the Senior Pipelines Engineer, Senior Piping Engineer, Senior & Lead Structure Engineer, Staff Engineer, Offshore Project Manager, Naval Architect Applications Engineer for various international companies including Chevro ExxonMobil, Addax Petroleum, ZAGOC, NASSCO, DWC, Point Engineering, ARMY, W.S. & Atkins, Atlas Engineering, Heerema Offshore, Casbarian Engineeri Associates (CEA), Textron Marine, Ingalls Shipbuilding and Peck & Hale. Further, he h been heavily involved in the development of fabrication and erection drawings for offsho structures including installation and rigging as well as in the instruction materials authorized by EDI (Engineering Dynamic Incorporated) for the training of engineers the Structural Analysis Computer System (SACS) software.

Mr. Manuel has a Bachelor's degree in Structural & Marine Engineering from the Sta University of New York. Further, he is a Certified Internal Verifier/Trainer/Assessor the Institute of Leadership & Management (ILM), a Certified Instructor/Trainer and author of the book "Offshore Platforms Design" and the "SACS Software Training Module".























# **Training Methodology**

All our Courses are including Hands-on Practical Sessions using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:-

30% Lectures

20% Practical Workshops & Work Presentations

30% Hands-on Practical Exercises & Case Studies

20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

# **Course Fee**

US\$ 8,500 per Delegate. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day

#### **Course Program**

The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will always be met:

#### Day 1

Day I	
0730 - 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Definitions & Terminology
0930 - 0945	Break
0945 - 1030	Regulations & Codes of Practice
1030 - 1230	Design & Equipment of LNG Tankers
1230 - 1245	Break
1245 - 1420	Ship/Shore Emergency Shutdown System
1420 – 1430	Recap
	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Topics that were Discussed Today and Advise Them of the Topics to be Discussed
	Tomorrow
1430	Lunch & End of Day One

#### Day 2

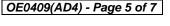
0730 - 0930	Power Emergency Release System (PERC System)
0930 - 0945	Break
0945 - 1100	Ship Maneuvering System
1100 - 1230	Loading Arms
1230 - 1245	Break
1245 - 1420	Arrangements for Handling, Care & Carriage of Equipments
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Two





















Day 3

0730 - 0930	Tank Ventilation Arrangements
0930 - 0945	Break
0945 - 1100	Pumps & Pump Theory
1100 - 1230	Tank Gauging Systems & Level Alarms
1230 - 1245	Break
1245 - 1420	Environmental Protection Systems & Pollution Prevention
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Three

Day 4

Day 7	
0730 - 0930	Tanker Operations
	Calculations • Loading and Discharge Plans • Loading Arms and Discharge
	Procedures • Tank Cleaning • Purging and Gas Freeing
0930 - 0945	Break
0945 - 1100	Safe Working Practices Specific to Maintenance & Repair Work
1100 - 1230	Toxicity & Health Hazards Associated with Oil
1230 - 1245	Break
1245 - 1420	Flammability Hazards
1420 – 1430	Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow
1430	Lunch & End of Day Four

Day 5

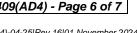
0730 - 0930	Hazard Control
0930 - 0945	Break
0945 - 1100	Safety Equipment & Protection of Personnel
1100 - 1230	Emergency Procedures
1230 - 1245	Break
1245 - 1345	Emergency Procedures (cont'd)
	Course Conclusion
1345 - 1400	Using this Course Overview, the Instructor(s) will Brief Participants about the
	Course Topics that were Covered During the Course
1400 - 1415	POST-TEST
1415 - 1430	Presentation of Course Certificates
1430	Lunch & End of Course





















# **Practical Sessions**

This practical and highly-interactive course includes real-life case studies and exercises:-



<u>Course Coordinator</u>
Reem Dergham, Tel: +974 4423 1327, Email: <u>reem@haward.org</u>



















