

**Training Title**

**OIL MOVEMENT STORAGE & TROUBLESHOOTING**

**Training Duration**

**5 days**

**Training Venue and Dates**

REF			15 – 19 March,		
SM060	Oil Movement Storage & Troubleshooting	5	2020	\$4,500	Dubai, UAE

**Will be conducted in a five star hotel. The exact venue will be notified on confirmation.**

**Training Fees**

**4,500 US\$ per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Buffet Lunch**

**Training Certificate**

**Define Management Consultancy & Training Certificate of course completion will be issued to all attendees.**

**TRAINING OVERVIEW**

**TRAINING INTRODUCTION**

**Oil Movement, Storage plays a critical role in the ongoing expansion of the oil industry, especially with the continuing growth of the spot/short term market and the dynamic expansion of markets and supply sources. This program provides an understanding of liquid bulk cargo storage, Crude Oil storage and Handling, Cargo Calculations, Loss Control and other useful topics related to safety and pollution prevention.**

**Upon the successful completion of this course, participant will gain enough knowledge in oil terminals and tank farms, Methods of gauging tanks, oil products specifications, tank mixing, emergency of oil spills, cleaning of crude oil tanks, work permit system, pigging operations in crude oil pipelines, quality assurance and control, contingency and safety procedures etc. Actual case studies from around the world will be demonstrated to highlight the topics discussed**

**TRAINING OBJECTIVES**

**The aim of this course is to provide participants with:**

- A complete and up-to-date overview of the oil movements & storage operations in modern refineries.**
- Clear understanding of troubleshooting methodology and techniques**
- Expose to advanced techniques and best practices in movements & storage operations**

*DMCT/OL/9/18(Rev3Dt:23/9/18)*

- Understands associated hazards in movements & storage operations and method of control
- Understands Oil Spill Contingency plans
- Understands valve/ pipeline operation for custody transfer and reduce Shore/ Ship Discrepancy
- Understands some accounting basics as per API Standards, with the importance of Temperature and Sampling Quality.

### TRAINING METHODOLOGY

A highly interactive combination of lecture and discussion sessions will be managed to maximize the amount and quality of information, knowledge and experience transfer. The sessions will start by raising the most relevant questions, and motivate everybody finding the right answers. The attendants will also be encouraged to raise more of their own questions and to share developing the right answers using their own analysis and experience. All attendees receive a course manual as a reference.

- 30% Lectures
- 30% Workshops & Work Presentations
- 20% Case Studies & Practical Exercises
- 20% Videos & General Discussions

### WHO SHOULD ATTEND?

The course will be useful for new engineers, supervisors, field technicians, and managers, as well as business groups who are involved in day-to-day refinery activity and it is applicable to Offsite & Marine sections within the refinery organization.

### COURSE OUTLINE

1. Oil Terminal & Tank Farm
  - Crude Oil receiving/storage
  - Tank Farm Duty
  - Settling time & Water draining
  - Tank Mixing & Tank-Tank Transfer
  - Product Specifications & Blending
  - Example of Overall Monthly Refinery Balance
  - Calculations for crude oil received
2. Crude Oil Storage
  - Types of Storage Tanks
  - Maintenance of Storage Tanks
  - Tank Maintenance
  - Hazardous Conditions and Safety Procedures
  - Tank cleaning and desludging

DMCT/OL/9/18(Rev3Dt:23/9/18)

- Permit to work system

### Case Study 1

#### Crude Oil Tank Fire

### 3. Entry into Confined Space Video

#### Land Tank Measurements

- Types of Errors
- Fundamentals of Land Tanks Calibrations
- Manual Level Gauging of Land Tanks
- Automatic Level Gauging of Land Tanks
- Free Water Measurements in Land Tanks
- Temperature Measurements in Land Tanks
- Manual Sampling of Land Tanks
- Automatic Sampling of Land Tanks
- Advanced Techniques in Automatic Land Tanks Measurements (Ultra Sonic& Radar Systems)

### Case Study 2

#### Oil from Sludge Video

- Advanced Automatic Land Tanks Measurements (Ultra Sonic& Radar Systems) Video

#### 1. Introduction to Metering and Meter Proving

- Static Measurement - Land Tanks
- Dynamic Measurement
- Introduction to Meter Proving
- Meter Factor& K Factor
- Correction to meter reading
- Prover tank correction
- Pressure and temperature corrections
- Master meters
- Factors affecting the choice of meter proving equipment
- Displacement Meter Hardware
- Mechanical Automatic Temperature Compensation (ATC)
- Advanced Flow Measurements Techniques "Video illustration"

#### 2. Significance of Common Errors in Land Tank Measurements

- Pipeline Control
- Terminology/ Calculation Routines
- Laboratory Tests Relevant to Quantity Determination
- Fundamentals of Ship-Board Measurements

DMCT/OL/9/18(Rev3Dt:23/9/18)

➤ Ship Shore Comparison

### 3. Oil Spill and Contingency Plan

Course Evaluation & Summary

**Note:**

**Pre & Post Tests will be conducted**

**Case Studies, Group Exercises, Group Discussions, Last Day Review & Assessments will be carried out.**



[www.definettraining.com](http://www.definettraining.com)

DMCT/OL/9/18(Rev3Dt:23/9/18)

P.O BOX 45304  
ABU DHABI, U.A.E

T +971 2 6264455  
F +971 2 6275344

[www.definettraining.com](http://www.definettraining.com)