



PCE237

Oil Movement, Storage & Troubleshooting



International Association
for Health and Occupational Safety
and the Environment



Course Introduction:

Upon the successful completion of this course, participants will gain enough knowledge on oil production and recovery, oil terminals and tank farms, Methods of gauging tanks, refrigeration of LPG, oil products specifications, tank mixing, emergency of oil spills, cleaning of crude oil tanks, cleaning of leaded gasoline tanks, work permit system, gas transmission pipelines, pigging operations in crude oil pipelines, quality assurance and control, contingency and safety procedures etc.

This course describes the requirements for efficient, effective, and safe operation of Oil movement facilities. This material is covered by concentrating only on the most commonly applied topics in each case, rather than attempting to discuss everything.

Course Objectives:

Upon successful completion of this course, the delegates will be able to:

- ✓ Provide participants with a complete and up-to-date overview of the oil movements and storage operations in modern refineries, marine terminals and oil plants
- ✓ Acquire knowledge on oil production, recovery, dehydration and desalting and be able to understand the description and installation of a tank farm
- ✓ Identify the different types of tank and review and improve the operation of a tank farm
- ✓ Illustrate the process of gas freeing of tanks and vessels and be able to determine the various methods of gauging tanks
- ✓ Describe marine terminal & SPM operations and be able to explain the various product specifications
- ✓ Perform blending, tank mixing, meters and meter proving and cleaning of crude oil and leaded gasoline tanks
- ✓ Identify oil spill emergencies and be able to review the operation and cathodic protection of gas transmission lines
- ✓ Increase knowledge on pigging of crude and gas pipelines and be able to demonstrate the process of ship loading
- ✓ Recognize the role and importance of quality assurance, control and work permit system

Who Should Attend?

This course is intended for all Team Leaders, Project Managers, Refinery Managers, Plant Managers, Oil Terminal, Managers/Superintendent/Supervisors, Section Heads, Plant Supervisors, Process Engineers, Mechanical Engineers, Electrical Engineers, Instrumentation/Control Engineers, technical staff and contractor personnel involved in oil movement and storage.

Course Outline:

Day 1:

OVERVIEW INTRODUCTION

- Oil Production, Recovery, Dehydration and Desalting
- Oil Terminal & Tank Farm
- Types of Tanks
- General Description and Installation of Tank Farm

Day 2:

TANKS AND FACILITIES

- Gas Freeing of Tanks and Vessels
- Methods of Gauging Tanks
- Static Electricity
- Crude Oil Processing
- Refrigeration of LPG, Handling and Bulk Storage

Day 3:

BLENDING AND LOADING OPERATIONS

- Marine Terminal Loading: SPM Operations
- Product Specifications and Blending
- Tank Mixing & Tank-Tank Transfer
- Meter Proving and Meter Factor

Day 4:

ABOVEGROUND STORAGE TANKS

- Emergency of Oil Spills
- Cleaning of Crude Oil and Leaded Gasoline Tanks
- Gauging of Marine Cold Product Tanks
- Gas Transmission Lines: Operation & Cathodic Protection

Day 5:

CLEANING & LOADING

- Pigging of Crude & Gas Pipelines
- Ship Loading and Checklist
- Quality Assurance, Control and Work Permit System
- Review and Presentation of Certificates

Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionnaires
- Group Work
- Discussion
- Presentation

Course Fees:

To be advised as per course location. This rate includes participant's manual, and-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session