# Dynamics of Petroleum Depot Operations

#### INTRODUCTION

- This training course is designed for personnel working in the petroleum depot operations seeking to acquire more knowledge on effective handling of depot operations, storage, design standards, depot automation and warehouse control.
- Most organisations with growth aspirations have invested significant time and resources in
  planning their expansion strategies, but have not devoted commensurate attention to
  developing and executing an internal management model along the business chain that has to
  handle and deal with depot operations management.

## This training seminar will highlight:

- Evaluate the different custody transfer standards in use today
- Analyse the methodology for monitoring and controlling production losses
- Value the dynamics of oil product storage and distribution
- Learn the safety, health and environment aspects of depot operations

#### **OBJECTIVES**

This training programme has been critically designed to address performance challenge in the
various segments of the corporate value chain using a new approaches that will insight a new
thinking of resolving depot operational complexities.

## At the end of this training seminar, you will learn to:

- Understanding the various functions within a petroleum depot
- Understanding the principles governing depot operations
- Stocks taking, Accounting and control
- Product receipts and transfer, custody transfer
- Tank farm operations, calibration and management

#### ORGANISATIONAL IMPACT

• The Dynamics of Petroleum Depot Operations course gives the organisation the edge in the growing Storage Tank industry sector by assists the understanding of its impact on the world's energy supply chain. Specifically, the organisation will benefit from competent personnel with enhanced abilities in the handling of depot operations, storage, design standards, depot automation and warehouse control among others.

#### PERSONAL IMPACT

- Deeper understanding and improved ability to critically analyze the methods employed in this industry
- Become familiar with new the technology and its impact on Petroleum Depot Operations
- Enhance your understanding of correct tank gauging and custody transfer
- Technical skills advancement and knowledge to comprehend and carry out storage Depot Equipment Selection
- Appreciation of the technical, commercial and environmental aspects of Hydrocarbon storage business

#### WHO SHOULD ATTEND?

Participants benefit from lectures using PowerPoint presentations, case study analysis, group
discussion, workshop. Participants are also encouraged to learn from their peers and
professionals on their programme by sharing ideas and experiences. We place a particular
emphasis on group work where participants' real life situations are deliberated as vehicles for
learning.

This training course is suitable to a wide range of professionals but will greatly benefit:

- Depot Personnel Managers and Supervisors
- Facility Operatives
- Engineers
- Site Managers
- Anybody that has an interest in depot operations or running of a depot

#### **Course Outline**

#### **Depot Design Standards**

- Depot Design Standards
- Storage Depot Equipment Selection
- Storage Profiles and Layouts
- Storage Techniques
- Fire Prevention and Protection
- Depot Emergency Preparedness Planning

## **Product Receipts and Transfers**

- Loading and Receipts
- Compartment and Products Marine Receipts
- Quantity / Cargo Grade
- Normal Loading / Discharge Flow Rate
- Pump Performance / Rate
- Tank Gauging and Sampling
- Sampling Monitoring During Discharge
- Product Quality Control

### **Procedures**

- Methods of Tank Calibration
- Equipment & Calibration
- Flow Calibration
- Trends in Calibration
- Types of Calibration Test Rigs
- Tank Gauging Techniques

# **Custody Transfer**

- Custody Transfer
- Stocks Accounting and Control
- Tank Management Systems
- Leak Detection
- API 1130
- Depot Automation
- Warehouse Controls
- Monitoring and Controlling Production Losses

# **HSE & Effective Handling of Depot Operations**

- Risk Incurred by Flammable Products
- Flash Points
- Flammability
- Explosive Limits LEL & UEL
- Ignition Sources
- Flames
- Self-ignition Temperature
- Sparks and Static Electricity
- Pyrophoric Products
- The Permit to Work System
- Confined Space Operations
- Atmospheric Testing
- Oxygen Deficiency

