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Advanced Oil Movement, Blending and Storage Terminal Training Course

31 January – 11 February 2027
Kuala Lumpur

Advanced Oil Movement, Blending and Storage Terminal Training Course

Ref: 1293_48561 **Date:** 31 January – 11 February 2027 **Location:** Kuala Lumpur **Fees:** 8500 GBP

Oil Movement, Blending and Storage Terminal is a 2-week training course for terminal, tank farm and oil movement supervisors who run crude and product transfers, in-line and tank blending, and storage operations, and each participant prepares a terminal oil movement and blending operating plan. Tighter product specifications, crowded berth and pipeline schedules and scrutiny of vapour losses now expose every weak line-up. Jupiter Prime Training delivers Oil Movement, Blending and Storage Terminal.

Why Oil Movement, Blending and Storage Terminal Matters Now

Three groups shape terminal work today. Customers and refinery planners expect on-specification batches delivered to the hour, so blending accuracy and scheduling discipline carry commercial weight. Pipeline shippers, ship operators and auditors examine custody transfer figures and challenge every unexplained loss. Neighbouring communities and insurers expect tight vapour control and a credible fire response at tank farms. A terminal that moves oil well protects margin, reputation and permits; one that does not faces claims, contamination and incident risk. The course draws on recognised American Petroleum Institute API practices for tank design, inspection and measurement, and on hazard and operability study HAZOP thinking for transfer line-ups.

Who Gains Most from Oil Movement, Blending and Storage Terminal

- Supervisors who plan and sign off tank-to-tank, pipeline and marine transfers
- Blending leads accountable for recipe accuracy and product certification
- Gauging and measurement leads who own custody transfer and loss figures
- Tank farm leads responsible for inspection planning and out-of-service tanks
- Shift leads who run vapour control systems and first fire response

Oil movement departments of refineries and independent storage terminals gain most when schedulers, blenders and measurement staff attend together and agree one transfer and loss vocabulary.

Oil Movement, Blending and Storage Terminal Capabilities

Participants move from executing transfers to planning a whole terminal day, balancing tank availability, blend quality, measurement accuracy and safeguards.

- Calculate gross and net standard volumes from tank gauging and temperature data — custody transfer settlement
- Design a blend recipe and line-up that meets specification with minimum giveaway — product release
- Build a terminal schedule across berths, pipelines and tanks — customer and shipper commitments
- Assess tank condition from inspection findings — return to service or repair decisions
- Apply loss control reconciliation to a monthly stock balance — finance and audit queries
- Specify vapour recovery and fire protection arrangements — permit and insurer expectations

Key Oil Movement, Blending and Storage Terminal Terms

- Custody transfer — the measured handover of oil between owners, on which invoices, duties and loss claims are based.
- Net standard volume — product volume corrected to a reference temperature and with water and sediment removed.
- Line-up — the set of valve, pump and tank positions that routes a transfer from source to destination.
- Floating roof — a tank roof resting on the liquid surface that reduces vapour space and evaporation losses.
- Blend giveaway — product quality beyond specification that a blend delivers at no extra price, wasting valuable components.
- Ullage — the empty space above the liquid in a tank, measured to calculate the volume held.

Oil Movement, Blending and Storage Terminal Day by Day

Day 1: The Terminal as a Link in the Supply Chain

- Terminal Types and Throughput Profiles — Crude, Product and Chemical Duties
- Oil Movement Flow Diagrams — Source, Route and Destination Mapping
- Commercial Interfaces With Shippers and Customers — Service Expectations
- Roles in an Oil Movement Shift — Authority and Handover Points
- Terminal Performance Indicators — Turnaround, Losses and Off-Spec Events

Day 2: Storage Tank Design and Selection

- Fixed, Floating and Internal Floating Roof Tanks — Product Suitability
- Tank Design Practices per API Standards — Shell, Bottom and Roof Choices
- Tank Appurtenances and Mixers — Sampling and Homogeneity
- Bund and Secondary Containment Design — Spill Volume Capacity
- Tank Allocation by Product Grade — Segregation and Flexibility

Day 3: Gauging, Sampling and Measurement

- Manual and Automatic Tank Gauging Methods — Measurement Uncertainty
- Temperature and Density Correction Tables — Standard Volume Calculation
- Sampling Procedures for Tanks and Lines — Representative Quality Data
- Meter Provers and Meter Factors — Pipeline Metering Accuracy
- Water and Sediment Determination — Net Volume Disputes

Day 4: Custody Transfer and Loss Control

- Custody Transfer Documentation and Witnessing — Settlement Integrity
- Shore and Ship Figure Comparison — Vessel Experience Factor Use
- Stock Balance and Loss Reconciliation — Gain and Loss Investigation
- Evaporation and Handling Loss Estimation — Acceptable Loss Limits
- Theft and Leak Detection Methods — Unexplained Variance Response

Day 5: Blending Operations

- Blend Property Calculation Methods — Octane, Viscosity and Vapour Pressure
- In-Line Versus Batch Tank Blending — Speed and Accuracy Trade-Offs
- Additive Injection and Dye Systems — Branded Product Requirements
- Blend Optimisation and Giveaway Reduction — Component Value Protection
- Product Certification and Release Procedures — Off-Spec Prevention

Day 6: Pipeline and Marine Transfers

- Transfer Line-Up Verification Checklists — Contamination Prevention
- Interface Management in Multiproduct Pipelines — Batch Cut Decisions
- Pumping Rates and Surge Pressure Limits — Hose and Line Protection
- Marine Loading Arm and Jetty Operations — Ship-Shore Safety Checks
- Road and Rail Loading Gantry Operations — Overfill Protection

Day 7: Tank Inspection and Maintenance

- In-Service and Out-of-Service Inspection per API Practice — Inspection Intervals
- Tank Bottom Corrosion and Cathodic Protection — Floor Life Extension
- Tank Cleaning and Sludge Handling — Safe Entry Planning
- Floating Roof Seal and Drain Inspection — Roof Sinking Prevention
- Repair and Return-to-Service Criteria — Capacity Availability

Day 8: Vapour Control and Fire Protection

- Vapour Recovery and Vapour Balancing Units — Emission Reduction
- Static Electricity and Ignition Source Control — Loading Safety
- Tank Fire Scenarios and Boilover Hazards — Response Planning
- Foam Systems and Cooling Water Design — Fire Protection Capacity
- Overfill Prevention and High-Level Alarms — Spill Avoidance

Day 9: Terminal Scheduling and Control

- Tank Availability and Inventory Forecasting — Ullage Planning
- Berth and Pipeline Slot Scheduling — Demurrage Avoidance
- Terminal Management System Data Flows — Real-Time Stock Visibility
- HAZOP of a Transfer Line-Up — Safeguard Confirmation
- Shift Handover and Permit Coordination — Operational Continuity

Day 10: Practising the Terminal Oil Movement and Blending Operating Plan

- Measurement and Loss Basis From Days 3 and 4 — Stock Accuracy
- Blend Recipes From Day 5 — Product Quality Targets
- Transfer and Schedule Inputs From Days 6 and 9 — Weekly Movement Plan
- Safeguard Review From Day 8 — Vapour and Fire Readiness
- Completing the Terminal Oil Movement and Blending Operating Plan — Shift Use

Applying Oil Movement, Blending and Storage Terminal After the Course

- Run a month-end stock balance reconciliation for one product group and trace the three largest unexplained variances.
- Review the blend recipes of the highest-volume grade for giveaway and propose a revised component ratio.

Oil Movement, Blending and Storage Terminal Questions FAQ

What is Oil Movement, Blending and Storage Terminal operation and why does it matter now?

It is the planning and control of crude and product transfers, blends and tank storage at a terminal. It matters now because tighter specifications, busy schedules and loss scrutiny expose weak measurement and line-up practices.

Which roles gain most from Oil Movement, Blending and Storage Terminal training?

Terminal, tank farm and oil movement supervisors gain most, including blending leads, gauging and measurement leads, tank inspection planners and shift leads who run vapour control and first fire response.

How does Oil Movement, Blending and Storage Terminal training differ from a short tank farm loss control course?

It covers the whole terminal day over two weeks. Beyond gauging and losses, you work on tank design, blending, pipeline and marine transfers, vapour control, fire protection and scheduling at an advanced supervisory level.

What do you bring back from Oil Movement, Blending and Storage Terminal training?

You bring back an operating plan for your terminal that links measurement, blend recipes, transfer schedules and safeguards into one document your shift teams can use.

Oil Movement, Blending and Storage Terminal: The Way Forward

The terminal oil movement and blending operating plan first informs next week's tank allocation and transfer sequence. Shift supervisors, blenders and measurement staff use it to coordinate line-ups and releases. After its first month in use, the loss limits and blend ratios deserve a fresh look, because product slates, customers and tank condition keep changing.