

## Polyethylene Plants Operation



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### ➡ Course Objective

- identify and assess the risks inherent to product handling, equipment use and operations,
- measure the possible consequences on safety, health and the environment,
- apply recommended preventive measures,
- adopt the most appropriate behavior to counter risks.

### ➡ Target Audience

- Operating personnel (engineers, shift leaders and/or operators) in refineries and petrochemical/chemical plants; any staff involved in operations (maintenance, SHE department).

### ➡ Course Outline

#### **PLANT OPERATIONS & SAFETY**

- Hazard and risk identification.
- Safety, health, environmental consequences.
- Risk management: technical, organizational and human aspects.

## **PRODUCT-RELATED RISKS**

- Flammability:
- Explosive atmosphere: combustible products (gaseous, liquid and solid). Oxidizers. Ignition sources; flames, self-ignition temperature, sparks and static electricity, pyrophoric products, etc.
- Preventive measures and precautions: during normal conditions, during draining and sampling; in the event of leaks; with regard to storage tanks; during loading and unloading; during repair work.
- Risks and precautions related to BLEVE.
- Fluid behavior and related risks:
- Pressure in a vessel and consequences of an increase or decrease in temperature: thermal expansion, vaporization, collapsing due to vacuum, freezing due to pressure drop, etc.
- Risk assessment and preventive measures.
- Chemical and physical hazards involving personnel:
- Poisoning: ingestion, metabolism and elimination. Prevention.
- Burns caused by heat sources and chemical products.

## **SAFETY IN PROCESS OPERATIONS**

- Precautions and risks related to the use of utilities: inert gases, liquid water, steam, air, gas oil, fuel gas.
- Safety related to blowdown and drainage toward: flare, slops, tanks, oily water...
- Blinding procedures: conditions for installing blinds or spades.
- Degassing-inerting: steam, nitrogen, water, vacuum, work permits...
- Entry into vessels. Atmosphere analysis: oxygen content, explosivity, toxicity.
- Start-up: checks, accessibility and cleanliness, line up, nitrogen-, water-, steam- or vacuum deaeration.

- Tightness testing; commissioning and start-up.

## **HUMAN BEHAVIOR & SAFETY MANAGEMENT**

- Human factors. Safety barriers, compliance with procedure, risk of routine.
- Employees' involvement: commitment and responsibility.
- Available tools to improve safety: procedures, risk assessment, safety meetings, accident investigation and reporting, audits, field observations, emergency drills.

## **➤ The Feature Of Asia Master Training And Development Center**

- we pick up the customer from the airport to the hotel.
- we give the participant training bag includes all the necessary tools for the course.
- Working within groups to achieve the best results.
- All our courses are confirmed and we do not postpone or cancel the courses regardless of the number of participants in the course.
- We can assist you in booking hotels at discounted prices if you wish to book through us.
- We offer the certificate from Asia Masters Center for Training and Administrative Development.

➔ **The Cost Of The Training Program Includes The Following:**

- 1) Scientific article on flash memory.
- 2) Training Room.
- 3) Training.
- 4) Coffee break.
- 5) The training bag includes all the tools for the course.

➔ **Course schedule**

- 1) Pick up & drop from the Airport
- 2) The training hours daily 5-6 hours
- 3) Theoretical and practical training as needed
- 4) Professional trainer from Malaysian Petroleum Company (Petronas) and other trainers.

**Price (USD)**

**Communicate with the training department  
to know the participation fees**

➤ **There are offers and discounts for groups**

**The details of the bank account**

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Account name: Asia Masters Center SDN. BHD  
Bank account number: 80-0733590-5  
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