

Process Safety Management Course



Course Description:

- Risk-Based Process Safety Management (RBPS) was developed by the Center for Chemical Process Safety (CCPS) in the USA and builds on the original process safety management ideas published in the early 1990s.
- RBPS provides a guideline that helps build and operate a more effective system to manage the process risks.
- This course will assist companies to reduce risk and avoid losses from the unintended releases of toxic, reactive, or flammable liquids and gases in processes involving highly hazardous materials. RBPS also has industry-wide benefits as an incident at an unrelated company

Course Objective

By attending this course, you will learn

- Identifying potential failure Modules or deviations that could lead to incidents at your company's processing facilities
- Understand and discuss the principles of an inherently safer design
- Understand the framework for Risk-Based Process Safety Management
- Understand and discuss the application of the twenty elements of RBPS
- Understand the auditing system of PSM
- Understand the fundamentals of some process hazard analysis techniques such as HAZID & HAZOP

Course Certificate

Certificate will be issued to all attendees completing minimum of 80% of the total tuition hours of the course.

Who should attend?

This program provides an overview of all significant aspects and considerations of PHA for those who are involved in management, engineering (design, process, chemical, facilities, instrumentation, and control), operations and safety of process operations. Engineers, safety/environment personnel, plant operators, area managers, projects and maintenance personnel will benefit from the practical approach presented in this program.

Training Methodology

This is an interactive course. There will be open question and answer sessions, regular group exercises and activities, videos, case studies, and presentations on best practice. Participants will have the opportunity to share with the facilitator and other participants what works well and not so well for them, as well as work on issues from their own organizations. The online course is conducted online using any online program

Course Outline

1. Day 1

- Safety moment
- Introduction for process safety management
- overview of the key elements of process safety management
- Introduction to hazards and risk
- Introduction to barrier concept
- Process safety culture

2. Day 2

- Compliance with standards
- Process safety competency
- Workforce involvement
- Stakeholder outreach
- Process knowledge management

3. Day 3

- Principles of Inherently Safer Design
- Hazard identification and risk analysis (HIRA)
- Fundamentals of Hazard Identification (HAZID) Study
- Fundamentals of Hazard and Operability (HAZOP) Study
- Introduction to RA via LOPA

4. Day 4

- Operating procedures
- Safe work practices (PTW)
- Asset integrity and reliability
- Contractor management
- Training and performance assurance
- Management of change

5. Day 5

- Operational readiness PSSR
- Conduct of operations
- Emergency management
- Incident investigation
- Measurement and metrics
- Auditing
- Management review and continuous improvement
- Wrap up