



Health, Safety and Environment

Risk Based Process Safety Management (RBPS)

Course Introduction

The main objective of a Risk Based Process Safety Management approach is to assist an organisation build and operate a more effective process safety management system and will enable delegates to design or improve each process safety activity associated with the management of process safety within their organization

Target Audience

- Health and Safety Officers
- Environmental Health and Safety professionals
- Health and Safety Managers

Learning Objectives

- Understand the principles of Risk Based Process Safety utilizing the CCPS model
- Recognize the importance of the necessary commitment to ensure the implementation RBPS management system through an understanding of safety culture
- Describe the primary international standards related to process safety and the importance of compliance
- Understand the importance competency maintenance including the principles of continuous improvement involving both the workforce and other stakeholders
- Understand and practice a structured approach to hazard assessment
- Understand the principles of managing risk
- Understand and employ the principles of continuous improvement through a structured learning and review process including audits

Course Outline

• DAY 01

Module 1 - Overview Of Risk Based Process Safety

- KeyTopics: ◦ Accident Prevention Background
- Case studies
- Swiss cheese model ◦ RBPS Concepts ◦ Risk based process Safety Pillars ◦ Risk Based Process Safety Elements ◦ Process Safety Culture
- Management Commitment
- The importance of an opening and questioning environment ◦ Compliance with Standards
- Legislation,
- International Industry Standards,
- Company Standards ◦ Workforce Involvement enhancing experience and knowledge
- Safety Committees
- Workforce feedback ◦ Stakeholder Outreach
- Workforce
- Regulatory bodies
- Business partners
- Customers
- Vendors
- Environmental interest groups
- Public

• Day 02

Module 2 - Understand Hazards and Risk

- KeyTopics: ◦ Process Safety Competency ◦ Process Knowledge Management ,
- Availability of knowledge and its application
- Maintenance of process safety information
- Dissemination of knowledge and continuous learning ◦ Hazard Identification and Risk Analysis
- HAZID
- HAZOP
- Quantitative Risk Assessment

• Day 03

Module 3 - Operational Considerations

- KeyTopics: o Operating Procedures
- Procedural structure o Safe Work Practices
- Work Permits o Asset Integrity and Reliability o Contractor Management o Training and Performance Assurance

• Day 04

Module 4 - Operational Readiness 2

- KeyTopics: o Management of Change o Operational Readiness
- Pre Start Up Review (PSSR) o Conduct of Operations : o Safe Operating Limits
- Emergency Management o Emergency Response Planning o Training o Recovery

• Day 05

Module 5 - Learn from Experience

- KeyTopics: o Incident Investigation
- Importance of near misses (near hits)
- Root Cause Analysis o Measurement and Metrics
- Critical Key Performance Indicators (KPIs) o Auditing
- Internal Audits
- External Audits o Management Review and Continuous Improvement

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 26, 2025	May 30, 2025	5 days	5950.00 \$	USA - Texas
Aug. 25, 2025	Aug. 29, 2025	5 days	4250.00 \$	UAE - Dubai
Nov. 24, 2025	Nov. 28, 2025	5 days	4250.00 \$	UAE - Abu Dhabi

