

About the Course

This course introduces process safety management in the oil and gas industry, the elements and benefits of process safety management systems, and tools for implementing and managing a system. In this course the participant will learn to use tools and techniques for managing process safety. The Center for Chemical Process Safety's (CCPS) book titled "Guidelines for Risk Based Process Safety" or "RBPS Guidelines" will be the text for this course. Participant-centered exercises and selected case studies will be used to build on the concepts that CCPS advocates for risk based process safety. Throughout the course, participants will be challenged to think how their process safety management system can be enhanced and modified to meet the concepts of risk-based decision making. An individual action plan will be developed to apply the information from the course to the workplace.

"I really enjoyed learning this material. This is the key to my current position and also to my future positions within my graduate program." - Participant, United Kingdom

"I really enjoyed the MOC and asset integrity subjects. Clyde was really passionate about the subject and has really inspired me to be more focused on process safety." - Mechanical Engineer, Qatar

Target Audience

HSE professionals, operations and maintenance technicians, engineers, supervisors and project managers requiring a basic foundation in developing and managing process safety. The more technical aspects of process safety engineering are covered in PS-4, Process Safety Engineering.

You Will Learn

Participants will learn how to:

- Identify processes applicable to Process Safety Management (PSM) and describe relevant terms used
- Identify which standards are to be applied for managing process hazards
- Apply programs and tools for managing a PSM system
- Choose appropriate decision making methods and tools to identify process hazards
- Describe and use techniques available for control of hazards associated with process designs
- Describe the criteria and methods of selecting equipment and safe guarding controls

- Research and apply the performance parameters for the safety systems in operations
- Explain the role of all disciplines and their contribution to the management of potential HSE hazards

Course Content

- Process safety culture and competency
- Compliance with standards
- Understand hazards and risk
- Operating procedures and safe work practices
- Asset integrity and reliability
- Management of change
- Conduct of operations
- Incident investigation (associated with plant failures)
- Measurement and metrics
- Management review and continuous improvement