

Process Safety Management PSM Compliance





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Introduction:

Process Safety Management PSM compliance involves adhering to established regulations and standards to prevent accidents in industrial operations. It focuses on identifying, evaluating, and mitigating risks associated with hazardous processes to ensure safety, protect assets, and maintain operational integrity. This training program provides a deep understanding of Process Safety Management PSM principles and compliance requirements to ensure safe operations in high-risk industries. Participants will explore regulatory frameworks, risk management practices, and safety systems essential for preventing incidents and protecting personnel, assets, and the environment.

Program Objectives:

By the end of this program, participants will be able to:

- Explore the core principles and regulatory requirements of PSM.
- Identify process hazards and implement effective risk management techniques.
- Develop and maintain safety systems to achieve regulatory compliance.
- Monitor performance through audits and continuous improvement.
- Enhance workplace safety culture and reduce operational risks.

Target Audience:

- · HSE Managers and Officers.
- Process Safety Engineers.
- · Compliance and Quality Professionals.
- Plant and Operations Managers.
- Maintenance and Reliability Teams.

Program Outline:

Unit 1:

Introduction to Process Safety Management PSM:

Overview of PSM and its importance in high-risk industries.



- Understanding OSHA 29 CFR 1910.119 and global PSM standards.
- Key elements of a Process Safety Management program.
- Benefits of PSM compliance in preventing accidents.
- Role of leadership in fostering a safety culture.

Unit 2:

Hazard Identification and Risk Assessment:

- Identifying process hazards using HAZOP, FMEA, and What-If analyses.
- Risk assessment techniques to evaluate potential consequences.
- Developing process hazard analysis PHA reports.
- Strategies for mitigating identified risks.
- Incorporating safety systems into operational processes.

Unit 3:

Safe Design and Operating Procedures:

- How to design safe processes and select appropriate equipment.
- Developing and maintaining Standard Operating Procedures SOPs.
- Ensuring proper management of change MOC in processes.
- Process safety information PSI documentation requirements.
- Importance of training personnel to comply with safety procedures.

Unit 4:

Audits, Incident Investigation, and Emergency Response:

- Measures of conducting internal and external PSM audits for compliance.
- How to investigate incidents and identify root causes.
- Implementing corrective and preventive actions CAPA.
- Emergency response planning and preparedness.
- · Measuring safety performance using KPIs.



Unit 5:

Continuous Improvement and Compliance Assurance:

- Monitoring and evaluating PSM implementation.
- Creating a sustainable PSM framework for long-term compliance.
- Leveraging technology for process safety monitoring.
- The role of engaging teams in safety reviews and improvement initiatives.