

## N637: Fundamentals of Risk Based Process Safety Management

#### Format and Duration

Classroom - 2 Days Virtual - 4 Sessions

Instructor(s): Guillermo Pacanins or Jamie Merriam

### Summary

This two day overview course designed to give operations and technical personnel a basic understanding of the principles of process safety management. The course is designed to be interactive using both group work and case studies to reinforce the learning and understanding. This overview course is based upon the Risk Based Process Safety Approach developed by the Center for Chemical Process Safety published in 2007. It also takes into consideration the Canadian Society for Chemical Engineering PSM standard.

## Learning Outcomes

Participants will learn:

- I. Examine and categorize the similarities and differences between occupational and process safety systems, and describe their functions operating in tandem.
- 2. Compare and contrast current Industry Standard Process Safety Management (PSM) programs.

3. Develop an understanding of Risk-Based Process Safety Management (RBPSM) and its applicability in the industry.

4. Identify and analyze the importance and key details of each PSM component.

5. Discuss the application of each PSM element and their impact on daily work activities.

6. Establish and describe the relationship between safety culture and PSM.

7. Formulate practical strategies using succinct comparisons and analytical approaches to investigate areas requiring additional scrutiny.

8. Demonstrate the methodology for integrating PSM into current safety management systems and propose key implementation procedures for applying PSM in the field.

## Training Method

Two classroom days providing 1.6 CEU (Continuing Education Credits) or 16 PDH (Professional Development Hours)

This course contains 12 technical hours and may be eligible for Continuous Maintenance points by The Board of Canadian Registered Safety Professionals (BCRSP)

## Who Should Attend

Anyone who is working in close proximity to hazardous processes such as Operations and Maintenance Personnel, Supervisors, Engineers and Safety Professionals. Anyone who wishes to gain a better understanding of process safety and the application of the principles to facilities handling hazardous materials.



## N637: Fundamentals of Risk Based Process Safety Management

Instructor(s): Guillermo Pacanins or Jamie Merriam

#### Format and Duration

Classroom - 2 Days Virtual - 4 Sessions

# **Course Content**

#### Part One - Commitment to Process Safety

- I. Leadership
- 2. Employee Participation
- 3. Compliance to Standards
- 4. Workforce Competency
- 5. Stakeholder outreach and engagement

#### Part Two – Understand Hazards and Risks

- I. Process Knowledge Management
- 2. Hazard Identification and Risk analysis

#### Part Three – Manage Risk

- 3. Operating Procedures (Normal and Abnormal)
- 4. Safe Work Practices
- 5. Asset Integrity and Reliability
- 6. Contractor management
- 7. Training and Performance Assurance
- 8. Management of Change
- 9. Operational Readiness
- 10. Conduct of Operations
- 11. Emergency Management

#### Part Four – Learn from Experience

- 12. Incident Management
- 13. Measurement and Metrics
- 14. Auditing
- 15. Management Review and Continuous Improvement