

The Operational Excellence Institute www.theopexinstitute.com

Page 1 of 4

Rev 3.0

HAZOP Team Leader Training Course

Introduction

The success of every company depends of each employee's understanding of the key business components. Employee training and development will unlock the companies' profitability and reliability. When people, processes and technology work together as a team developing practical solutions, companies can maximize profitability and assets in a sustainable manner. Training and development is an investment in future success - give yourself and your employees the keys to success

It is strategically important that your team understands the fundamentals of Hazard anlaysis. This is the difference between being in the best quartile of operational safety and being in the last quartile. There is vast difference in the operational ability of operating companies and most benchmarking studies have confirmed this gap in operational abilities.

Whether you have a team of new or seasoned employees, an introduction or review of these concepts are very beneficial in closing the gap if you are not in the best quartile, or maintaining a leadership position. Most studies show that a continuous reinforcement of best practices in operational safety principles is the most effective way to obtain the desired results. Training and learning should be an on going continuous life long goal.



The Operational Excellence Institute

www.theopexinstitute.com

Page 2 of 4

Rev 3.0

Course Objective

Process Hazard Analysis (PHA) studies are the foundation for process safety and risk management of hazardous process systems. They help companies identify hazard scenarios that could adversely affect people, property, or the environment.

There are several predictive PHA techniques and methodologies. They include Hazard and Operability Studies (HAZOP), What If Studies, Failure Modes and Effect Analysis (FMEA), and Major Failure Analysis (MFA).

The HAZOP Team leader's roles are;

- 1. Prepares for the study
- 2. Advises on the selection of team members
- 3. Methodology and definition of study scope
- 4. Oversees the team's brainstorming of cause and consequences of possible accidents
- 5. Formation of recommendations for appropriate corrective actions



The Operational Excellence Institute www.theopexinstitute.com

Page 3 of 4

Rev 3.0

Course Syllabus

The goal of the course would be to refresh the knowledge of those who have a basic understanding of PHA techniques and to build a foundation to those who are new to the PHAs.

Typical Course Outline

- Hazard Assessment Definition
- Review of actual industry hazards
- PHA Study Objectives
- Introduction of PHA Techniques / Probability Matrix
- Team Leader Responsibilities
- Preparation and Organization of PHA Studies
- Importance of Business Records / PHA Terminology
- Selection of Study Nodes / Design intent of node
- Introduction of Guide words
- Guidelines for managing the team
- Recording Study Results / Maintaining Quality Control
- Management of Results and Recommendations
- Communication of Results to Management
- Workshop Example HAZOP by team members



The Operational Excellence Institute www.theopexinstitute.com

Page 4 of 4

Rev 3.0

Who Should Attend

- People who are making day to day decisions regarding operation, design, maintenance, and economics of process industry plants.
- Engineers, Operating Personnel, PSM Coordinators, HSE Managers and Engineers
- Ideal for veterans and those with only a few years of experience who want to review or broaden their understanding of process safety.
- Other professionals who desire a better understanding of the subject matter.

What You Can Expect To Gain

- How to perform a Process Hazard Analysis to meet Process Safety Management requirements for initial PHAs and management of change analyses.
- How to analyze operating procedures for critical scenarios.
- Realistic workshops