



Process Hazards Analysis

Time: 1st Day - 8:30am to 4:30pm
 2nd Day - 8:30am to 3:30pm
 CEUs: 1.4

Audience: Process Safety and Engineering groups.

Course Description: This course covers the basic fundamentals of how to facilitate a Process Hazard Analysis (PHA) on operating processes and Management of Change projects. These analyses are to address the federal regulatory requirements using the different methodologies and techniques in facilitating Process Hazard Analysis. The course presents a series of examples in a workshop format to illustrate the methodologies. This course is designed for future facilitators that have participated as a team member in previous PHA's.

1st Day

- Process Hazard Analysis (PHA) Overview
- OSHA Expectations for Study Compliance
- PHA Methodologies/Techniques
- What is Process Safety Information
- Understanding Noding
- Deviations (Guidewords and Parameters for HAZOP)
- Causes
- Consequence

2nd Day

- What are Safeguards
- Understanding and Evaluating Risk
- Writing of Recommendations
- Multiple PHA Workshop Examples

Course developed by Dr. Angela Summers: •2009 ISA Fellow, •Technical editor for Guidelines for Safe and Reliable Instrumented Protective Systems •1 of 5 US Experts to the IEC 61508/IEC 61511 committee • Working Group Chair, TR84.00.02 (SIL Verification) and TR84.00.04 (Guidance on ISA 84.00.01-2004) • Member: ISA, IEC, API, NFPA, and CCPS • Ph.D. and Engineering Fellow, The University of Alabama • Licensed Professional Engineer in the State of Texas.