

Understanding and Applying Human Factors for Process Safety

People are key components of processes. Human error is a given and will arise in all parts of the process life cycle. Therefore, it is vital that the factors influencing the likelihood of errors be identified and assessed.

In process safety management the topic of human factors is usually addressed during the performance of a process hazard analysis (PHA). However, PHA team members often have no background in human factors and are challenged by the assignment. This course is intended to provide process safety personnel with a better understanding and appreciation for the types of human factors issues that can impact on process safety so that improvements can be recommended.

This course explains what is meant by human factors in the context of process safety. Regulatory requirements are discussed and clarifications provided. Explanations are provided and examples are given for the various aspects of human factors involved in the interaction of people with processes so that attendees will be better able to identify such issues in their own processes. Attendees are taught how to perform an assessment of the current human factors design of their processes.

Objective:

To understand how improving the human factors design of a process can produce improvements in safety and health and also gains in quality, productivity and employee job satisfaction.

Duration:

One day, 0.7 CEUs awarded.

Course Topics:

- Regulatory requirements for human factors
- Model of human factors in processes
- Human factors issues in processes
 - People
 - Communications
 - Process equipment and tools
 - Displays, controls, and alarms
 - Computer hardware
 - Computer software
 - Procedures / operating instructions
 - Rules and practices
 - Job tasks
 - Workplace / workstation
 - Control room / station
 - Environment
 - Organization
 - Supervision / management
- Human factors assessment
- Human error analysis
- Human factors program
- Standards and guidelines
- Human factors in the process lifecycle

Target Audience:

This course is intended for process safety personnel, human factors engineers, and others who need to understand the subject of human factors as it applies to process safety and be able to identify human factors issues in processes.

For more information, contact:

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