€TRAINING

Human Error Analysis & Prevention

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Introduction:

Human errors refer to the environmental, organizational, and job factors, and human and individual characteristics which influence the behavior at work in a way which can affect an organization's health and safety performance. A simple way to view human error is to think about three aspects: the job, the individual, and the organization, and how they interact to impact health and safety-related human behavior.

After an accident involving human failure - using human error analysis tools can identify the causes and contributing human error factors. Establishing these underlying causes of an accident/incident is the key to preventing similar human error accidents/incidents.

This conference is aimed at providing delegates with the practical on-site knowledge and skills to develop and successfully implement effective human error analysis techniques.

Conference Objectives:

At the end of this conference the participants will be able to:

- Learn the underlying reasons why human errors occur
- Explain the various human error analysis techniques and how they can be used
- Learn how to correct human performance issues before they cause problems
- Learn how to assist others in your organization in dealing with human performance in your operations
- Show how human behavior can lead to human errors and incidents/accidents
- Provide practical ideas and methods for observing and preventing human errors
- Review practical case studies to show how other organizations have used human error analysis techniques to prevent human errors in the workplace

Targeted Audience:

- HR Professionals
- Those seeking new prevention and mitigation approaches to solve human performance problems
- Those seeking techniques to analyze facilities, systems, and operations proactively and reactively

Course Outlines:

Unit 1: Introduction to Human Error:

- What is human error?
- Understanding the different types of human error
- Human Error related workplace and job task causation factors
- Human failures in the causes of accidents/incidents
- Define human error and prevention objectives

Unit 2: Human Error Analysis Factors:

- Managing Rule-Breaking situations Violations

- Human behavior patterns leading to human errors
- Cultural behavior and sensory and perception
- Using the Shell Hearts and Minds toolkit to improve human behavioral factors
- The different types of human errors and prevention options

Unit 3: Observation Methods for Unsafe Acts and Conditions:

- Using the Dupont STOP on-site safety observation tool for
    - Observing Substandard Practices and behavior
    - Observing Substandard Conditions
- Using Job Safety Analysis to identify and assesses types of human errors
- Identify human errors of presented accident scenario

Unit 4: Human Error Analysis Techniques:

- Analyzing site operations human error situations
- Using the Human Reliability Assessment HRA human error analysis technique
- Human error observation and prevention options
- Options and Solutions for preventing human errors
- Using the Fault Tree Analysis method to analyze human errors

Unit 5: Human Error Analysis & Prevention - Getting Started:

- Identifying and categorizing human errors in the workplace
- Considering Human factors when analyzing incidents and accidents
- Review of Human factors in existing work methods and procedures
- Human error analysis within the health and safety management system
- Checklist for observing human errors in the workplace