

# Construction HSE Hazards

## INTRODUCTION

- The sites or yards where offshore oil and gas facilities such as modules and platforms, and onshore petrochemical plant are fabricated and constructed involve activities with high hazards such as working at height, confined space entry, rigging and lifting, hot work to name but a few. Moreover these and other hazards vary in nature and scale and in the ways they are performed and controlled according to the respective construction site's specific standards and practices.
- Therefore, for personnel mobilized to and temporarily working in these sites, it is important that they have a sound knowledge and awareness of the hazards and essential safeguards and controls to ensure they can not only stay safe but help those around them to stay safe too. This applies both to seasoned field personnel who from time to time move to different sites and to personnel with minimal previous construction site experience.
- This training course on Construction HSE Hazards will give or expand delegates' awareness and knowledge of the nature and types of hazardous activities, safeguards and controls that should be in place in major facilities construction sites or yards.

This training course will cover:

- Overview of construction site hazards and risks
- Hazardous work activities (one by one) and controls
- Control of work
- Safety programs

## OBJECTIVES

This training course is intended to give delegates the ability to:

- Improve and enhance their understanding of hazardous work activities in construction sites
- Learn the essential controls and safeguards for each specific hazardous work activity
- Learn the principles for the safe control of work
- Understand safety program initiatives and examples

By the end of this Construction HSE Hazards training course, delegates will learn to:

- Be conversant with the essential controls and safeguards to be applied for hazardous work
- Recognize unsafe acts or conditions in construction work activities and be pro-active in their correction
- Promote and actively participate in safety programs at construction sites

## TRAINING METHODOLOGY

- Participants to this training course will receive a thorough training on the subjects covered by the seminar outline with the Tutor utilizing a variety of proven adult learning teaching and facilitation techniques. Course methodology includes, Class lectures using visual aids with instructor-guiding delegates to take part in discussions, questions, and sharing their experience; Workshops with Team exercises to develop and consolidate delegates' understanding of the presented topics.

## ORGANISATIONAL IMPACT

- When an organization deploys personnel into a contractor's site or yard, it needs to ensure that such personnel will know how to act safely and recognize whether an appropriately safe environment is maintained around them for their work.
- Therefore it is important such personnel are well equipped in the knowledge and understanding for the hazardous activities they are exposed to.

An organization's employees will gain enhanced knowledge to improve:

- Their understanding of hazardous work activities in construction sites
- Recognition of the essential controls and safeguards to be applied for each specific hazardous work activity
- Observing the principles and the requirements for the safe control of work
- Identifying unsafe acts or conditions in construction work activities and being pro-active in their correction
- Understanding, promoting and actively participating in safety programs at construction sites
- Safety awareness of personnel to be deployed to future sites

## PERSONAL IMPACT

Delegates will be able to gain or improve their knowledge and recognition of hazards, essential safeguards and controls for hazardous work activities in construction sites or yards including:

- Greater confidence and assurance when exposed to hazardous work activities
- Identification of unsafe acts and conditions and taking or communicating actions
- Greater awareness on how to keep themselves and work colleagues safe
- Added ability to promote and participate in safety initiatives
- Provide improved feedback to their organization on the safety conditions at a site or yard
- Be recognized by their employer for their enhanced safety knowledge and understanding for future site deployments

## WHO SHOULD ATTEND?

- This training course on Construction HSE Hazards is directed towards staff within an organization that are mobilized to, or frequent visitors to an operator's or contractor's construction or fabrication site or yard. It is also directed towards non-site-based employees of organizations that have their own construction sites or yards, or their new hires, and supplier or service company personnel deployed to or attending a customer's site or yard.

This training course is suitable for a wide range of professionals across an organization, but will be particularly beneficial to:

- Construction Supervisory or Inspection Personnel
- Health, Safety, Environmental and Quality
- Operations and Projects Managers, Leaders and Supervisors
- Field Engineers, Surveyors or Inspectors
- Support Department Personnel including but not limited to, Engineering, Procurement, Contracting, Controls, Health, Safety, Environmental and Quality
- Commissioning Personnel

## Course Outline

### Overview of Construction Hazards & Risks

- Hazard Awareness
- Site Inductions
- Unsafe Acts and Unsafe Conditions
- Top Ten Hazards

## Hazardous Work Activities & Controls

- Working at Height and Fall Prevention
- Hot Work
- Rigging and Lifting
- Hand and Power Tools
- Heat Stress

## Hazardous Work Activities & Controls (Continued)

- Confined Space Entry
- Mobile Equipment
- Nitrogen
- Pressure Testing
- Energy Isolation

## Control of Work

- Job Safety Analysis
- Permit to Work
- Housekeeping
- Inspections
- Emergency Response

## Safety Programs

- Observations and Interventions
- Hazard Communication
- Tool Box Talks
- Management Walkabouts
- Campaigns and Initiatives