# ADVANCED HEALTH & SAFETY MANAGEMENT

## 5 – Day Training Program

### INTRODUCTION

Most large organizations now have Health, Safety and Environmental Management Systems. Instead of prescriptive legislation and standards, a pro-active approach to risk management based on structured and systematic risk assessment is now in place.

This program is aimed at providing hands-on experience on the application of advanced H&S management principles and techniques relevant to the oil, gas and process industries. This programme will enable attendees to implement the HSE Management System, based on industry best practice. The program will also provide familiarity with promoting positive safety culture, accidents analysis and modern risk management techniques for planning and implementing action plans.

### WORKSHOP OBJECTIVES

- Demonstrate the role of risk management as the main element of HSE Management System.
- Have a clear understanding of risk management techniques and hands-on experience in applying this technique to their own sphere of activities.
- Analyze some principal stages in the accident chain and hazard models. This concept will be used to systematically analyse the root causes for selected incidents that have occurred.
- Have the experience in demonstrating that major hazards are adequately controlled.
- Ensure consistent optimization of resource allocation for production, maintenance and safety, based on risk and cost- benefit.
- Emphasis throughout the program will be placed on the practical application of advanced risk management techniques to new projects and current activities

### WHO SHOULD ATTEND

- All Personnel involved in implementing the Company's HSE Management System. The program is based on multi- disciplinary approach for integrating risk management within overall business management.

**PROGRAM**

**DAY ONE**

**MODERN HSE MANAGEMENT SYSTEMS**

- Programme introduction: delegate and tutor introductions; programme objectives.
- Introduction to HSE Management Systems.
- Elements, sub-elements and expectations of HSE-MS.
- The role of risk management within HSE-MS.
- The role of HSE Audits.
- Procedures for planning and implementing of action plans.

**DAY TWO**

**MODERN INCIDENTS INVESTIGATION TECHNIQUES**

- Human contribution to accidents
- The role of root cause Analysis in identifying management system failures
- Accident investigation techniques I: Fault Tree Analysis 'FTA'
- Working in small groups on the use of FTA
- Preparation of action plans
- Incident investigation techniques II: Events & Causal Factors Analysis 'E&CFA'
- Group exercise on investigating a multiple-fatalities accident involving offshore drilling rig.

**DAY THREE**

**MAJOR HAZARDS CONTROL**

- Control of Major Accident Hazards Codes of Practice
- The HSE- Safety Case Concept
- Elements of emergency planning
- Integrating HSE within major projects plans
- Elements of Projects HSE Plans
- Project HSE Reviews 'PHSER'

**DAY FOUR**

**MACHINERY SAFETY**

- Introduction into the causation of machinery accidents
- Machinery hazards identification
- Machinery and equipment safety Codes of Practice
- Machinery safety and the CE-marking

- International machinery safety standards
- Machinery risk assessment
- Design and selection of safeguards and safety devices

**DAY FIVE**

**PROMOTING A POSITIVE SAFETY CULTURE**

- Introduction to Safety Culture
- Techniques for improving safety culture
- Measuring improvements in safety culture
- Integrating safety culture within the HSE Management System