



## Asset Integrity Management in Oil & Gas Industries

### Course Description:

Assets Integrity Management is nowadays one of the essential elements of operational excellence that many companies have embraced to maintain the competitive edge in their line of business. This Assets Integrity Management in Oil & Gas Industries training course identifies the different strategies required to ensure that the integrity and reliability of physical assets are effectively managed throughout the entire life cycle from design through to decommissioning.

### **This Assets Integrity Management in Oil & Gas Industries training course will highlight:**

- Introduction to BS-ISO 55000 (Formerly PAS 55 Part 1&2) and how it assures continual improvement and operation excellency
- How AIM (Asset Integrity Management) process can maximize the economic value of the company by optimally designing, maintaining, operating and decommissioning assets to high and consistent standards
- Explain the different strategies required to ensure that the integrity and reliability of assets are effectively managed throughout the entire life cycle from design (Pre- FEED through decommissioning)



## Objectives

Operator's ultimate goal is to perform as a world class company while ensuring facility integrity and protecting Health, Safety and the Environment. Asset Integrity Management aims to contribute to the successful achievement of the companies' vision and gives assurance to management and shareholders that the assets integrity is well maintained.

### **By the end of this Assets Integrity Management in Oil & Gas Industries training course, participants will learn to:**

- Explore the basic Assets Integrity Management Modules (8 Modules)
- Recognize the different control options and explain how good mitigation can reduce the risk exposure and be used as an effective tool to address the life extension requirements of ageing facilities
- Clarify the organizational interfaces, roles and responsibilities of the relevant officers engaged in the development, roll-out and implementation of AIMS
- Learn major operator's advancement in AIMS realities and benchmark the assets integrity management practices with best-in-class operators.
- Foster greater engagement, empowerment and leadership of the workforce while improving communications and cross-disciplinary teamwork to assure successful AIMS

## Training Methodology

Participants to this training course will receive a thorough training on the subjects covered by the course outline with the Tutor utilizing a variety of proven adult learning teaching and facilitation techniques. Throughout the training course, participants will be encouraged to discuss their organization specific problems, seek group views and guided to develop their own corrective action agenda for implementation upon returning to their workstations.

## Organizational Impact

The Assets Integrity Management in Oil & Gas Industries training course is very comprehensive and fully guided by the requirements of BS-ISO 55000, so participants will fully understand the fundamentals of Asset Integrity Management and be qualified at the expert level to develop their own AIMS framework upon return to their organizations. The training course will also provide a holistic understanding of the AIMS and help effective management of



any challenges encountered during the development of a new AIMS or management of existing AIMS framework.

At the organization level the course will help maximizing the economic value of the company by optimally design, maintain, operate and decommission its facilities to high and consistent standards.

### **Personal Impact**

This training course will help participants to bridge the gap between the theoretical and practical knowledge of Integrity Management methodology and processes.

### **It will further participants to:**

- Understand the requirements for development, implementation and roll out of the AIMS framework
- Get Exposed to major operator's advancement in AIMS realities and benchmark the Asset integrity management practices with best-in-class operators

### **WHO SHOULD ATTEND?**

**The Assets Integrity Management in Oil & Gas Industries training course training course is suitable to a wide range of professionals but will greatly benefit:**

- Asset Managers
- Team leaders and senior engineers engaged in the development, roll-out and implementation of Asset Integrity Management System
- CEO's, SVP's, Executives, Managers who are inspired for continual improvement, excellence and sustainable success of their organizations
- Projects Managers
- Operation & Maintenance Managers
- Engineers
- Organization excellence specialists



## Course Outline:

### **DAY 1**

#### **Introduction to Asset Integrity Management**

- Integrity Management Strategy
- Integrity Management of Physical Assets
- Asset Integrity Management system evolution
  - Integrity Management Policy & Strategy
- Data Management and Acquisition
  - Data acquisition, migration and verification
  - Understanding of data and information
- Hazard Identification & Risk Assessment
  - Risk identification process
  - Risk Matrix mathematical model
  - Hazard and Hazard Control measure

### **DAY 2**

#### **Execution of Control Measures and People Impact**

- Monitoring & Inspection
  - Inspection & Monitoring of tangible and non-tangible assets.
  - Typical inspection reporting and data assessment
  - Measure the effectiveness of the control measures
  - Expectations of interested parties in the long term
- Roles and Responsibilities
  - RACI chart model
  - Motivation, empowerment & engagement of workforce.



- Encouraging creativity, innovation and continual improvement " KAIZEN"

### **DAY 3**

#### **Asset Integrity Management Implementation & Review**

- Implementation
  - Significant activities to assure Asset Integrity
  - Codes, Standards and operating instructions
- Performance Management & Reporting Schedules
  - Integrity Performance Measure versus Integrity Compliance
  - Automation of KPI's Reporting
- Management Review and Audit
  - Audit scope and deliverables
  - Audit outcomes and recommendations tracking

### **DAY 4**

#### **Learning Organization Basic requirements**

- Continual Improvement
  - Mechanisms of knowledge capture and transferee
  - How organization awareness can promote the lesson learned process
  - Developing a Learning Organization
- Integrity Management regulatory Codes & Standards
  - ISO 9002 Versus ISO 9004
  - How British Standard PAS 55 Part 1 & 2 (BS-ISO 550000) can influence future AIMS development Roll-out & implementation

## DAY 5

### Excellency in Asset Integrity Management System

- How BS-ISO 55000 can Lead the Change to seamless & Integrated business solution
- Change Management process and methodology
- Cost of Integrity Loss
  - Integrity Management & Cost saving
- Computer and Asset Management
  - Data Management System
  - Software's and Market potential
- Excellence is Integrity Management
- Why Asset Integrity Management fail in places
- Developing best fit "AIMS" for your organization (Business Case)