

# Project Risk Management

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## Project Risk Management

14 – 18 April 2019

### **Introduction:**

Risk is inherent in everything that we do and it's therefore no surprise that risk management holds a high level of importance within business environment. Risk management is not an optional activity; risk management is essential to successful business management.

Risk management is how to handle the uncertain future events that may affect the business and the operation of the organization in order to minimize the bad or negative impact and to increase and enhance the positive effect.

Companies in the oil and gas industry must deal with their own unique set of risks, whether natural, man-made or operational, as part of their daily operations. The approach that works well at an offshore installation may not be the best option for a refinery. An effective risk management and analysis system needs to offer solutions tailored according to the nature of the industry.

This course provides the attendees with required information and knowledge to manage and analyze the risk in the projects within the petroleum industry taking into consideration the special nature of it.

The course will cover the following subjects:

- Basic concepts and definitions of risk and risk management
- Relation between risk management and project management
- Stakeholder and Communication Management
- Risk Management Planning
- Risk Assessment and Analysis
- Risk Response Strategies
- Risk Monitoring
- Overview of 3 Risk standards

At the end of the course the attendees will be able to:

- Differentiate between hazard, risk and risk assessment.
- Develop risk management plan.
- Perform the qualitative and quantitative risk analysis
- Develop the most appropriate risk response strategies

### **Who Should Attend?**

Production managers, project managers, project team, mechanical and control team, maintenance and HSE personnel, and personnel involved in implementing the Company's HSE Management System Oil and Gas Enterprise Architects.

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## Outlines:

### DAY 1: Introduction and Key concepts

- Course opening
- Overview about the course and its objectives
- Pre-assessment exam
- What is risk and risk management
  - a. Definition of risk
  - b. Definition of risk management
- Risk Importance
- Risk management and project management
  - Discussion point: Risk management in project, program and portfolio
- Risk characteristics
- Critical success factors
  - Group Exercise: Key Terms

### DAY 2: Stakeholder Identification, Risk Management Plan and Risk Identification

- What is Stakeholder identification?
- Importance of stakeholder identification
- Group Exercise: Persona Game
- Stakeholder register
  - Group Exercise: Building the stakeholder register
- Communication management plan
- Risk management plan
- Risk management plan components
  - Discussion point: Risk management in real life projects
- Group Exercise: Risk management plan development
- Risk Identification
  - Group Exercise: Risk register

### DAY 3: Risk Analysis

- What is risk analysis and its importance?
  - Discussion point: The difference between qualitative and quantitative analysis
- Risk score
  - Group Exercise: Develop qualitative risk analysis
- Probability theory
- Group Exercise: Single and double dice
- Expected Monetary Value
- Best-case and worst-case scenario
  - Group Exercise: EMV Case study
- Decision tree and its importance
- Simple decision tree
- Complex decision tree
- Group Exercise: Decision tree case study
- Schedule risk
- PERT
- Standard Deviation
- Pair wise comparison
  - Group Exercise: Pair wise comparison

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## **DAY 4: Risk Response and Monitoring**

- What is risk response and its importance?
  - Discussion point: Pre and post response
- Positive response strategies
- Negative response strategies
  - Group Exercise: Response strategies
- What is risk monitoring?
- Effective risk monitoring
- Project plan update
  - Discussion point: What should you do?
- Planning processes
- Executing processes
- Monitoring and controlling processes

## **DAY 5: Risk Management Standard and Enterprise Risk Management**

- Overview of risk management standards?
  - ISO 3100
  - COSO
  - Risk IT
    - Discussion point: Which one should we use?
- Enterprise Risk Management (ERM)
- Importance of ERM
- ERM Components
- Course wrap up
- Post-assessment exam
- Course closure

### **Training Method:**

- Live group instruction
- Use of real-world examples, case studies and exercises
- Interactive participation and discussion
- PowerPoint presentation, LCD and flip chart
- Self-test and group activities
- Each participant receives a binder containing a copy of the presentation slides and handouts

### **Program Support:**

This program is supported by interactive discussions and case studies to highlight the techniques available to the participants.