



Oil Spills and Pollution, Prevention,  
Response, and Recovery



# Oil Spills and Pollution, Prevention, Response, and Recovery

## Introduction:

This course discusses the complex nature of petroleum hydrocarbon exploration and production and, the unintended environmental impact consequences of pollution when oil spills occur from refineries, offshore platforms and road and marine transport tankers. Featuring global case studies and best practices, this course provides delegates with an understanding of how oil spills occur and discusses the most effective preventative, response and recovery methods to assess and control these potential environmental impact incidents.

## Targeted Groups:

- Individuals who have responsibilities for assessing and controlling an organisation's potential process and operational risks.
- Production, process, maintenance, health, safety and environment personnel.
- All personnel involved in planning and/or implementing of an organisation's environmental management programme.

## Course Objectives:

### At the end of this course the participants will be able to:

- Learn about various types of oil spills and their environmental effects.
- Learn about relevant environmental treatment options for dealing with pollution.
- Learn to prioritise potential oil spills in establishing preventative control measures.
- Show relationship between health, wildlife and environment affected by oil pollution.
- Discussion of current methods for clean-up and recovery from oil spills and pollution.
- Learn how to establish effective emergency response plans for oil spills.

## Targeted Competencies:

- Overview of Oil Spills and Pollution.
- Environmental Effects of Oil Pollution.
- Oil Spill and Pollution Prevention.
- Oil Spill & Pollution Response and Recovery.
- Management and Prevention Review.

## Course Content:

### Unit 1: Overview of Oil Spills and Pollution:

- Overview of global oil spill incidents
- Types of oil and their different properties
- Historical concerns over oil pollution
- Sources and patterns of oil spills
- Spillage from exploration and production facilities

### Unit 2: Environmental Effects of Oil Pollution:

- Effects of oil pollution on the environment
- Oil seepage Vs Oil Spills
- Routes of oil pollution exposure
- Oil pollution effect differences in freshwater and saltwater
- Ecological effects of oil spills and pollution

### **Unit 3: Oil Spill and Pollution Prevention:**

- Risk identification and analysis of potential oil spill and pollution scenarios
- Establishing effective oil spill and pollution preventative risk controls
- Hazards of Oil transportation - road and sea
- Refinery and Offshore platform oil spills and their impacts
- Modern tanker design single and double hulls
- Case Study - Part 3: Deepwater Horizon Oil Spill

### **Unit 4: Oil Spill & Pollution Response and Recovery:**

- Overview of oil spill response options
- Establishing and activating oil spill contingency plans
- Emergency and medical response procedures during oil spills
- Oil spill pollution treatment options for containment and dispersion
- Conducting oil spill and pollution response emergency exercises and drills

### **Unit 5: Management and Prevention Review:**

- Oil Spill & Pollution workshop
- Review of oil case studies and their cause of oil spill incidents
- Review of conducting an oil spill and pollution risk assessment
- Discussion of preventative, response and recovery of oil spill incidents
- Review of developing emergency procedures for oil spills and pollution incidents
- Review of oil spill and pollution recovery treatment options