

HAZARDOUS WASTE MANAGEMENT & POLLUTION TRAINING

HSE023

COURSE OVERVIEW

Improper storage of hazardous chemicals- both products and waste-incompatible inspection of containment materials, using hazardous products when non-hazardous products are available and inadequate training of staff are some of the leading causes of environmental contamination.

This five day course will give some details on these various types of contaminants and the new frontiers in eliminating or minimising these contaminants, the use of effective non-hazardous products in your company and also environmentally acceptable methods of disposal for both hazardous and non-hazardous wastes.

COURSE OBJECTIVES

By the end of the course, participants will be able to:

- Identify various types of contamination and which ones are more applicable to your company.
- Learn about the relevant environmental treaties dealing with contamination and pollution.
- Learn how to prioritise contamination problems in dealing with contamination and waste management issues in a logical sequence.
- Show and emphasise the close relationship between human health and the environment that's been directly affected by contamination.
- Discussion of the current methodologies for the cleanup of contaminated soil, ground and surface water, air pollution, construction materials and radioactive materials.

WHO SHOULD ATTEND

This course is intended for those dealing with hazardous materials and chemicals in the workplace such as managers, engineers, and other technical staff. The course is also suitable for health, safety and environmental (HSE) personnel and any one can be handled hazardous chemicals.

COURSE DURATION

5 Working Days





COURSE OUTLINES

1. Brief History of Contamination and Introduction to Hazardous Wastes

- What is contamination and how does it affect us?
- A detailed look at all the various types of contamination
- Global Environmental issues related to contamination
- International Environmental Treaties and Guidelines related to Contamination
- The toxic 12 chemicals and the role of the United Nations Environment Program (UNEP)
- The current watch list for chemicals that soon may be added to the toxic 12
- Environmental Law and its significance
- Definition of hazardous Wastes & Non -Hazardous Wastes
- Connecting the dots between Contamination and Hazardous Wastes

2. Management of Contamination and Hazardous Wastes

- The relationship between Contamination and Occupational Health & Safety
- The importance of documentation in Hazardous Waste Management
- Some typical Hazardous Waste Regulations and the need for harmonization
- The purpose of a Workplace Hazardous Materials Information System (WHMIS)
- The purpose of a Material Safety Data Sheet (MSDS)
- Why a Globally Harmonized System (GHS) is essential for WHMIS and MSDS
- Carrying out a Contamination Audit
- Managing a Waste Disposal Site

3. Contamination and Pollution Prevention

- Exploration & Production-Refining & Transportation
- Oil Spills with special reference to the April 2010 Gulf of Mexico oil slick occurrence
- Modern Tanker design to minimize the occurrence of a major oil spill
- Other oil related sources of pollution
- The common thread amongst many third world countries concerning pollution issues
- The current concepts of Zero Waste (ZW) and Zero Liquid Discharge (ZLD) and their limitations
- The Bird Problem- Pollution from bird droppings and dead birds and the latest available technologies to control this problem

4. Contingency Planning for Major Incidents

- Life Cycle Management of all materials being used in a company
- The 5R's- Reduce, Reuse, Recycle, Recover and Rethink



- Detailed requirements for proper storage of hazardous materials
- The importance of on-going training
- The importance of regular reviews of emergency plans
- Updated information on ISO 14001, 18001 and 9001
- Types of Environmental Audits

5. Big picture review of the Management and Prevention of Contamination and Hazardous Wastes

- HAZID (HAZard Identification)
- HAZOP (HAZard & Operability)
- Environmental Ethics
- Examples of Environmental Ethics from the Instructor's personal experiences
- Climate Change update and its significance for the Gulf Coast Countries

