

€ TRAINING

Contamination and Hazardous Waste
Management





Contamination and Hazardous Waste Management

Introduction:

This training program is designed to equip participants with comprehensive knowledge and skills to effectively manage and prevent contamination and hazardous waste issues. It empowers professionals to mitigate environmental and health risks associated with contamination and hazardous wastes.

Program Objectives:

At the end of this program, participants will be able to:

- Gain insights into various types of contamination and their relevance to their respective companies.
- Acquire knowledge about relevant environmental treaties pertaining to contamination and pollution.
- Develop skills to prioritize contamination problems systematically within the context of waste management.
- Highlight the intricate link between human health and environmental integrity, directly influenced by contamination.
- Explore contemporary methodologies for the remediation of contaminated soil, groundwater, surface water, air, construction materials, and radioactive substances.

Targeted Audience:

- Health & Safety and Environmental Professionals.
- Staff responsible for managing Hazardous Wastes.
- Staff responsible for Contamination Issues.
- Laboratory Technicians.
- Staff wishing to reduce risk and liability arising from polluting events.
- Technical Assistants and anyone who has a role to play in environmental matters of the Organization.
- Emergency Personnel.

Course Outlines:

Unit 1:

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.
- International Environmental Treaties and Guidelines related to Contamination.
- The toxic 12 Chemicals and the role of the United Nations Environment Program UNEP.
- Environmental Law and its significance.
- Definition of hazardous Wastes & Non -Hazardous Wastes.
- Connecting the dots between Contamination and Hazardous Wastes.

Unit 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.

Unit 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.
- 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.

Unit 4:

Continuation of Contamination and Pollution Prevention Planning and Contingency Planning:

- 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 regular reviews of emergency plans.
- Updated information on ISO 14001, 18001 and 9001.

Unit 5:

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.