شركة ميرك العربية السعودية
MEIRC Saudi Arabia

HAZARDOUS MATERIALS MANAGEMENT (HAZMAT)

Duration 5 Days

Objectives:

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

Recognize hazardous materials by type
Recognize hazards associated with hazardous materials.
Read material data sheets
Store, move and handle hazardous materials safely.
Manage hazardous materials waste properly.

Who should attend?

The Training is intended for all staff from regular employee to senior management with roles and responsibilities for the safety of employees and environment of such a hazardous material. In addition, the gained information could also be used as awareness of the dangers of hazardous materials to all members of family and society.

Course Outlines:

1) Introduction

a) Definitions: hazardous chemicals, toxic materials, hazards, and characteristics
b) Classifications:
c) Terminology and methods

2) Overview

a) Regularity overview
b) Regulations: EU directives, Basel Convention.
c) Storage, transportation, handling, and treatment.
d) Worker right.
e) Safe condition limits
f) Hazardous waste health effects.
g) Biological abnormalities.
h) Permanent Vs non-permanent damage, cumulative affects.

3) Hazardous materials

a) Transboundary movement of hazardous materials.
b) Hazardous waste characteristics.
c) Identification of hazardous materials
d) Analytical methods overview, sampling
e) Company hazardous waste strategy
f) Components of hazardous waste system
g) Hazardous waste surveys
h) Minimization of hazardous waste.
i) Implementing the Basel convention.

4) Hazardous waste facilities

a) Storage, transfer stations, and treatment plants
b) Environmental impact assessments, audits, risk assessments.
c) Storage site design
i) Landfill design and construction
ii) Linings
iii) Environmental impact of storage

iv) Subterranean injection, mine storage
v) Leaching and leach treatment
vi) Monitoring and sampling of storage sites.

5) Hazardous waste treatment

a) Recovery Vs neutralization/destruction
b) Unit process/operation specific to hazardous waste (activated carbon, distillation, adsorption, ozonation, advanced oxidation process)
c) Solidification: (cementation, incineration and other thermal processes)
d) Biological Processes: Composting, vitrification, aerobic, anaerobic digestion, soil remediation.
e) Special waste –case study
i) Waste lubricating oil
ii) PCB waste-Transformer oil
iii) Dioxins
iv) Infectious waste

v) Household hazardous wastes