Hazardous Waste Management and Environmental Safety Training Course



23 - 27 Nov 2026

Cairo

3700 € (Per Person)

Ref: #SUS9281_284312

Course Introduction / Overview:

Effective hazardous waste management is a critical component of corporate responsibility and regulatory compliance, safeguarding both human health and environmental integrity. This comprehensive training course provides a deep dive into the principles and practices of handling hazardous materials, from generation to final disposal. Grounded in the foundational "cradle-to-grave" management philosophy, the curriculum explores the intricate web of regulations set forth by bodies like the Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). Participants will gain insights from established academic literature, such as the principles discussed in "Waste Treatment and Disposal" by esteemed author Dr. Paul T. Williams, to understand the science behind waste treatment technologies and pollution prevention. BIG BEN Training Center has designed this program to move beyond theoretical knowledge, focusing on practical application through real-world scenarios. This course equips professionals with the necessary skills for waste characterization, implementing safe handling protocols, and developing robust emergency response plans, ensuring their organizations not only meet legal requirements but also foster a culture of environmental stewardship and operational excellence in hazardous substance management.

Target Audience / This training course is suitable for:

- Environmental, Health, and Safety (EHS) Managers and Specialists.
- Waste Management Coordinators and Supervisors.
- Industrial Hygienists and Safety Officers.
- Laboratory Managers and Technicians.
- Facilities and Operations Managers.
- Regulatory Compliance Officers.
- Logistics and Transportation Personnel involved with hazardous materials.
- Engineers and Technicians in manufacturing and chemical processing.
- Emergency Response Team Members.
- Consultants in environmental science and engineering.

Target Sectors and Industries:

- Chemical Manufacturing and Processing.
- Oil and Gas Exploration and Refining.
- Pharmaceutical and Biotechnology Industries.
- Healthcare Facilities, Hospitals, and Clinics.
- Manufacturing and Industrial Production.
- Construction and Demolition.
- Automotive and Aerospace Industries.
- Research and Development Laboratories.
- Waste Treatment, Storage, and Disposal Facilities (TSDFs).
- Governmental bodies and regulatory agencies.

Target Organizations Departments:

- Environmental, Health, and Safety (EHS) Department.
- Operations and Production.
- Facilities Management and Maintenance.
- Research and Development (R&D).
- Logistics, Supply Chain, and Transportation.
- Legal and Regulatory Compliance.
- Quality Assurance and Control.
- Emergency Management and Response.
- Corporate Social Responsibility (CSR).
- Procurement and Materials Management.

Course Offerings:

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

- Identify and classify hazardous waste according to federal and state regulations.
- Interpret Safety Data Sheets (SDS) to assess chemical hazards accurately.
- Implement proper procedures for waste segregation, labeling, and container management.
- Develop and execute safe handling, storage, and transportation protocols for hazardous materials.
- Understand the principles of various waste treatment and disposal technologies.
- Formulate effective waste minimization and pollution prevention strategies.
- Create and implement a comprehensive emergency response and spill containment plan.
- Maintain accurate records and complete hazardous waste manifests for regulatory compliance.
- Conduct internal audits of hazardous waste management programs to ensure continuous improvement.
- Promote a culture of safety and environmental responsibility within their organization.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and highly practical, ensuring that participants can directly apply their learning to their professional roles. We move beyond traditional lecture-based formats by integrating a dynamic blend of expert-led presentations, in-depth case study analyses of real-world incidents, and collaborative group discussions. Participants will engage in hands-on workshops and simulation exercises focused on critical tasks like waste characterization, PPE selection, and spill response planning. This active learning approach fosters critical thinking and problem-solving skills. The course structure encourages peer-to-peer learning, allowing professionals from diverse industries to share experiences and best practices. Our instructors facilitate a supportive environment where continuous feedback is provided to reinforce key concepts and address specific challenges faced by participants in their workplaces. The program emphasizes a holistic understanding of hazardous waste management, connecting regulatory requirements with practical operational execution to build lasting competence and confidence.

Course Agenda (Course Units):

Unit One: Foundations of Hazardous Waste Management and Regulations

- Introduction to hazardous waste and environmental safety.
- Historical context and landmark environmental incidents.
- The Resource Conservation and Recovery Act (RCRA) framework.
- Occupational Safety and Health Administration (OSHA) standards for hazardous materials.
- Defining solid and hazardous waste.
- Understanding the "cradle-to-grave" management system.
- Key roles and responsibilities for waste generators.

Unit Two: Waste Characterization, Segregation, and Profiling

- The process of hazardous waste identification and determination.
- Understanding listed wastes (F, K, P, and U lists).
- Analyzing characteristic wastes: ignitability, corrosivity, reactivity, and toxicity.
- Utilizing Safety Data Sheets (SDS) for waste profiling.
- Proper techniques for waste sampling and laboratory analysis.
- Effective waste segregation strategies to prevent incidents.
- Labeling and marking requirements for hazardous waste containers.

Unit Three: Safe Handling, Storage, and Transportation Protocols

- Requirements for Personal Protective Equipment (PPE).
- Best practices for safe chemical and hazardous material handling.
- Hazardous waste accumulation and storage standards.
- Satellite Accumulation Areas (SAAs) versus Central Accumulation Areas (CAAs).
- Container management, inspection, and integrity.
- Department of Transportation (DOT) regulations for hazardous materials transport.
- Preparing shipping papers and the Uniform Hazardous Waste Manifest.

Unit Four: Waste Minimization, Treatment, and Disposal Technologies

- Introduction to the waste management hierarchy.
- Source reduction and pollution prevention (P2) strategies.
- Recycling, reclamation, and reuse of hazardous materials.
- Overview of physical, chemical, and biological treatment methods.
- Principles of incineration and thermal destruction.
- Land disposal restrictions (LDR) and requirements.
- Understanding stabilization, solidification, and landfilling.

Unit Five: Emergency Preparedness, Spill Response, and Recordkeeping

- Developing a comprehensive contingency and emergency response plan.
- Spill prevention, control, and countermeasure (SPCC) planning.
- Chemical spill containment and cleanup procedures.
- Emergency reporting requirements to regulatory agencies.
- Recordkeeping, reporting, and documentation standards.
- Conducting effective environmental audits and site inspections.
- Fostering a proactive safety culture and continuous improvement.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond regulatory compliance, how can an organization leverage its hazardous waste management program as a strategic asset for enhancing corporate social responsibility and achieving sustainability goals?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by adopting a holistic and strategic perspective on hazardous waste management, moving beyond mere regulatory recital. While other programs may focus narrowly on compliance checklists, our curriculum integrates the technical aspects of waste handling with the broader principles of environmental stewardship, operational efficiency, and corporate social responsibility. We emphasize the "why" behind the regulations, empowering participants to make informed, risk-based decisions rather than simply following procedures. The methodology is deeply rooted in practical application, utilizing case studies from a wide array of industries to illustrate the consequences of both failures and successes in waste management. This approach ensures that the learning is not abstract but directly transferable to the participant's work environment. Furthermore, the course content is structured to build a comprehensive skill set, covering the entire lifecycle of hazardous waste from characterization and minimization to emergency response and strategic program auditing. It is designed not just to train technicians, but to develop leaders who can drive a culture of safety and sustainability within their organizations.