



Hazardous Waste Management and Pollution Prevention: Classification, Storage and Disposal



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Introduction:

Hazardous waste that is misclassified, poorly stored or handed to an unlicensed carrier exposes an organisation to pollution incidents, enforcement action and clean-up costs long after the waste has left the gate. Many sites still run hazardous waste management from incomplete inventories, faded labels and missing transport documents. This Core Concept course gives site practitioners the methods to classify, segregate, store, dispatch and record industrial and hazardous waste correctly, and to prevent spills and releases to air, water and soil. Participants inspect realistic facilities and produce a Site Hazardous Waste and Pollution Prevention Plan.

Course Objectives:

- Classify industrial and hazardous waste streams and build a characterised site waste inventory with a waste profile for each stream
- Set up segregation, labelling, container selection and storage area controls that keep incompatible wastes apart and releases contained
- Prepare transport documents and verify licensed carriers and receiving facilities to maintain an unbroken chain of custody
- Select treatment, recovery and disposal routes by applying the waste management hierarchy and waste minimisation options
- Plan spill prevention, secondary containment and spill response arrangements for storage, loading and process areas
- Run environmental monitoring, inspections and record keeping for waste, emissions, effluent and soil, and compile a Site Hazardous Waste and Pollution Prevention Plan

Target Audience:

- Staff responsible for day-to-day handling, storage and dispatch of hazardous and industrial waste at a site
 - Environmental and HSE coordinators who maintain waste inventories, permits and environmental records
 - Facilities and maintenance supervisors whose activities generate oils, solvents, sludges and contaminated materials
 - Production and utilities supervisors responsible for effluent, emissions and spill containment in their area
 - Contractor and logistics coordinators who arrange waste collection and check carrier and receiving-site documentation
 - Laboratory and stores supervisors who manage off-specification chemicals, expired materials and used containers
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Course Outline:

Day 1: Hazardous Waste Foundations and Site Baseline

- Waste Definitions: Industrial, Hazardous, Non-Hazardous and Inert Streams
- Hazard Properties for Waste Classification: Flammable, Corrosive, Reactive and Toxic
- Waste Management Hierarchy: Prevention, Reuse, Recycling, Recovery and Disposal
- Producer Duty of Care and Extended Producer Responsibility Principles
- Site Waste Baseline Walkthrough Checklist

Day 2: Classification, Characterisation and Legal Frameworks

- Waste Inventory Register Design by Source, Quantity and Frequency
- Waste Characterisation: Sampling Plans, Safety Data Sheets and Laboratory Analysis
- Waste Profile Sheet Preparation for Each Hazardous Stream
- Basel Convention Controls on Transboundary Movement of Hazardous Wastes
- Environmental Permit Conditions for Waste, Emissions and Discharges

Day 3: Segregation, Storage, Transport and Disposal Routes

- Chemical Compatibility Matrix for Waste Segregation
- Container Selection, Hazard Labelling and Storage Area Layout Standards
- Waste Transport Document and Chain-of-Custody Procedure
- Licensed Carrier and Receiving Facility Due Diligence Checklist
- Treatment and Disposal Options: Recycling, Energy Recovery, Incineration and Engineered Landfill

Day 4: Pollution Prevention, Spill Control and Monitoring

- Waste Minimisation Assessment: Source Reduction, Substitution and Reuse Options
- Secondary Containment and Bund Capacity Checks
- Spill Response Plan, Spill Kit Specification and Incident Reporting
- Air, Wastewater and Soil Pollution Control Basics: Emission Points, Effluent Treatment and Leak Detection
- Environmental Monitoring Programme, Records Retention and Nonconformity Tracking

Day 5: Site Inspection Practice and the Pollution Prevention Plan

- Petrochemical Plant Walkthrough: Waste Storage Yard and Loading Bay
 - Hospital Support Services Walkthrough: Chemical and Clinical Waste Rooms
 - Waste Documentation Audit: Inventories, Transport Records and Disposal Certificates
 - Site Hazardous Waste and Pollution Prevention Plan Drafting
 - Peer Review Panel and Corrective Action Priorities
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Skills You Will Gain:

- Hazardous Waste Classification
- Waste Stream Characterisation
- Chemical Segregation Planning
- Chain-of-Custody Documentation
- Waste Contractor Vetting
- Waste Minimisation Analysis
- Spill Containment Planning
- Environmental Compliance Monitoring

Why Attend This Course:

- Return with a Site Hazardous Waste and Pollution Prevention Plan built from structured walkthroughs of realistic facilities
- Cut disposal costs by moving waste streams up the hierarchy toward reuse, recycling and recovery
- Spot the mislabelled drums, missing documents and weak bunds that routine rounds overlook before they become incidents
- Compare site waste practice with peers from energy, manufacturing, utilities and healthcare support in other countries

Conclusion:

Controlled waste and clean discharges come from routine discipline at the point where waste is generated, stored and handed over. This course moves from waste definitions and the hierarchy, through inventories, characterisation and permit conditions, to segregation, storage, transport and disposal routes, and then to minimisation, containment, spill response and monitoring. The final day applies structured walkthroughs to realistic facilities and turns the findings into a Site Hazardous Waste and Pollution Prevention Plan that participants can put into use on their own site.
