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EMPOWERING ADULTS  
WITH DISABILITIES

WITH FLOWERS MADE  
FROM WASTE

# TYPES OF WASTE AND THEIR CLASSIFICATION





# *Why Classify Waste?*

**Waste classification enables effective management, environmental protection, and health safety. It ensures proper treatment, recycling, and disposal methods are applied.**

Classification supports policy development and regulatory frameworks for sustainable waste handling.

# *Waste Classification Systems Overview*

By Source: Origin of Waste Generation

By Physical & Chemical Properties: Composition and State

By Environmental Impact: Potential Harm Caused

By Management Requirements: Handling and Disposal  
Needs



# *Classification by Source*

**Waste origin dictates how materials should be handled, treated, and disposed of properly.**

Key sources include industrial waste from factories, domestic waste from households, agricultural waste from farming, and medical waste from healthcare facilities.



# *Classification by Physical & Chemical Properties*

**Waste is classified by its physical state—solid, liquid, or gaseous—and by its chemical composition, which determines appropriate treatment methods.**

Chemical properties influence disposal: biodegradable materials like food waste decompose naturally, while synthetic plastics persist for centuries and require specialized recycling or containment.



# *Classification by Environmental Impact*



**Waste is classified by how it affects our environment, considering toxicity, persistence, and pollution potential.**

Hazardous waste contains toxic substances that contaminate soil and water, while compostable waste breaks down naturally, enriching the earth rather than harming it.



# *Classification by Management Requirements*



**Different waste types demand specific handling and disposal approaches based on their risk level and recovery potential.**

Hazardous and radioactive wastes require specialized containment and disposal facilities. Meanwhile, metals and plastics offer significant recycling potential, reducing the need for virgin materials and minimizing environmental impact.



Eight main categories define how we classify and manage different waste streams.

# *Major Types of Waste*

From biodegradable to radioactive, each type requires unique handling approaches.



# *Biodegradable Waste*

**Biodegradable waste consists of organic materials that can be broken down naturally by microorganisms such as bacteria and fungi.**

Common examples include food scraps, garden waste, paper, and wood. These materials can be composted to create nutrient-rich soil, significantly reducing landfill volume and environmental impact.



# *Non-Biodegradable Waste*

**Non-biodegradable waste consists of materials that do not decompose easily or take extremely long periods to break down naturally.**

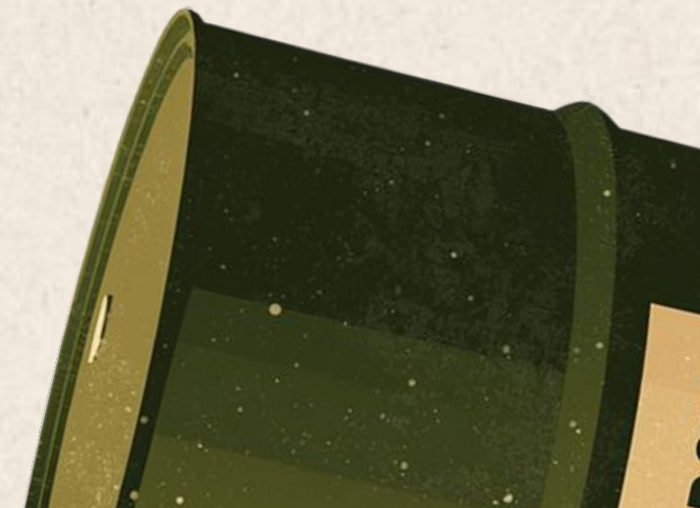
Common examples include plastics, metals, glass, synthetic materials, and rubber. These materials persist in the environment for decades or centuries, requiring special disposal methods such as recycling or controlled landfills.



# *Hazardous Waste*

**Hazardous waste refers to materials that pose significant danger to human health or the environment due to their toxic, corrosive, flammable, or reactive properties.**

Common examples include industrial chemicals, batteries, medical waste, pesticides, and solvents. These materials require specialized handling, storage, and disposal methods to prevent contamination and harm.



# *Industrial Waste*



**Industrial waste originates from manufacturing and industrial processes, encompassing chemical byproducts, scrap materials, and effluents.**

**This waste category can be hazardous or non-hazardous, often produced in large volumes requiring specialized treatment, proper disposal protocols, and regulatory compliance.**

# *Domestic/Municipal Waste*

**Domestic waste refers to everyday household refuse generated from residences and daily living activities.**

Common examples include food scraps, packaging materials, paper products, and general refuse. This waste is typically collected by municipal services through regular pickup schedules and managed through mixed waste streams.



# *Radioactive Waste*



**Radioactive waste contains materials that emit harmful radiation. It originates from nuclear power plants, medical facilities, and research institutions.**

Classified by radiation level (low, intermediate, high), this waste requires specialized containment, long-term storage solutions, and strict regulatory oversight to protect human health and the environment.



# *Electronic Waste (E-Waste)*

**E-waste refers to discarded electronic devices such as computers, smartphones, televisions, and household appliances that have reached the end of their useful life.**

These items contain both valuable materials like gold, copper, and rare earth metals, as well as hazardous substances including lead, mercury, and cadmium. Proper recycling and safe disposal are essential to recover resources and prevent environmental contamination.



# *Construction and Demolition Waste*

**Construction and demolition waste consists of debris generated from building, renovation, and demolition activities.**

This includes concrete, bricks, wood, metals, drywall, and asphalt. These materials are produced in large volumes but have high potential for reuse and recycling in new construction projects.



# *Additional Waste Categories*

Agricultural Waste

Medical and Biomedical Waste

Liquid Waste and Wastewater

Solid and Gaseous Waste





## MULTIPLE CLASSIFICATION SYSTEMS

Various classification approaches—by source, properties, impact, and management needs—work together to help us effectively manage diverse waste streams.

## UNDERSTANDING WASTE TYPES

Knowledge of different waste categories enables proper treatment, safe handling, and appropriate disposal methods for each type.

## SUSTAINABILITY THROUGH ACTION

Waste reduction, recycling, and responsible disposal are critical for environmental protection and building a sustainable future.

# *Summary and Conclusion*



# THANK YOU!



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