



Waste Management

What is Waste Management?

Waste management refers to the proper collection, transportation, and disposal of waste materials (like garbage, sewage, and other waste products) in a safe and eco-friendly manner.

It is important for:

- Protecting human and animal health
- Preserving the environment
- Preventing pollution of land, air, and water

Steps in Waste Management Process

i. Segregation at Source

Separate dry waste and wet waste into different bins (green for wet, blue for dry).

ii. Transportation of Waste

Different types of waste (solid, liquid, organic, infectious) require special transport methods.


iii. Disposal of Waste

Waste is treated using one of several disposal methods such as:

- Incineration
- Burying/landfilling
- Composting
- Recycling

Methods of Waste Disposal

i. Incineration (Burning)

- Waste is burned in large furnaces or chambers.
 - Converts waste into ash, gas, and heat.
 - The heat can be used to generate electricity.
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ii. Burying and Composting

- Waste is buried in landfills.
- Organic waste (like food scraps, leaves) can be composted to form natural fertilizer.
- **Disadvantage:** May cause air and water pollution if not managed properly.

iii. Recycling

- Waste is converted into new products instead of throwing it away.
- Saves raw materials, energy, and helps conserve the environment.

The 3 R's of Waste Management

A powerful way to protect the environment is by practicing the 3 R's: Reduce, Reuse, and Recycle

i. Reduce

Create less waste by being careful about what and how much we use.

Examples:

- Use cloth bags instead of paper or plastic bags
- Use cloth napkins instead of tissue paper
- Avoid disposable items (cups, plates, spoons, straws)
- Replace paper mail with emails
- Buy durable products with long warranties

ii. Reuse

Use items again instead of throwing them away after one use.

Examples:

- **Old newspapers:** for wrapping items, cleaning glass, or lining shelves
- **Old jars/bottles:** used to store grains, spices, etc.
- Use rechargeable batteries instead of single-use ones

iii. Recycle

Change an item into new raw material to make new products.



Examples:

- Buy recyclable products
- Use rewritable CDs/DVDs
- Recycle old electronics (TVs, computers) to avoid chemical pollution
- Donate or resell old items so they can be reused

Quick Summary Table

Waste Management Activity	Purpose	Examples
Segregation	To separate waste for proper disposal	Green bin (wet), Blue bin (dry)
Incineration	Burn waste to generate heat and electricity	Burn medical or chemical waste in furnaces
Burying/Composting	Convert organic waste into useful compost	Garden waste, food waste
Recycling	Convert waste into new products	Plastic, paper, metal recycling
Reduce	Minimize waste production	Avoid single-use plastics
Reuse	Use items again creatively	Reusing jars, bottles, old newspapers
Recycle	Use waste to make new items	Recycle electronics, plastics, and glass