



Waste Management part 1

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Waste Management

- **Waste control** : is all the behaviors and acts necessary to handle the waste from its inception to its final disposal.

Type of waste

- 1- **Solid** Wastes
- 2- **Liquid** Wastes
- 3- **Gaseous** Wastes



Waste Management involves

- 1-Storage the waste.
- 2-Transport .
- 3- get rid or recycling of waste.



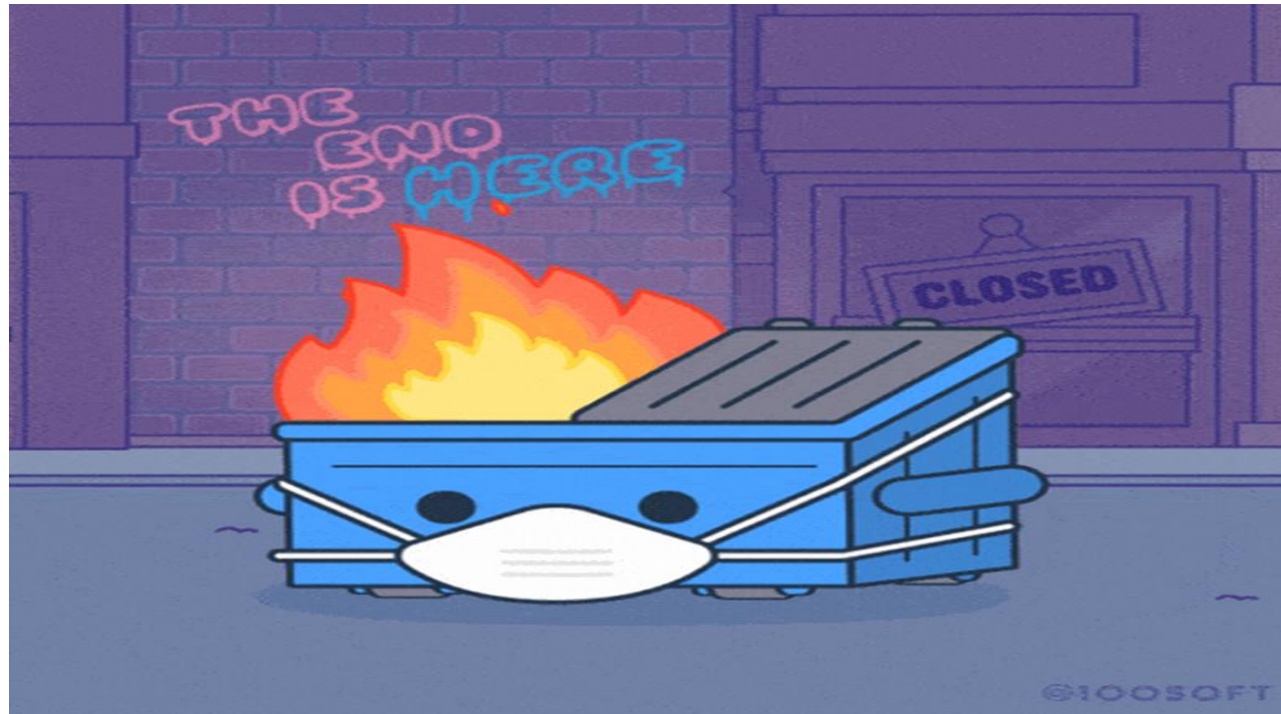
Types of Waste Management

1 –Recycling :



Types of Waste Management

2- Incineration :



Types of Waste Management

3- Landfill :



Types of Waste Management

4- Biological Reprocessing :



Laboratory waste :

During laboratory activities, different contaminated materials and liquids will be generated. Some of the materials such as glassware, equipment, devices or laboratory clothing.

Examples of waste generated in laboratories are shown in table:





SHARPS	CONTAMINATED WASTE	CHEMICAL WASTE	NON-HAZARDOUS OR GENERAL WASTE
Needles, broken glass, Petri dishes, slides and cover slips, broken pipettes, syringes, scalpels	Blood and body fluids, microbiological cultures and stocks, tissue, infected animal carcasses, tubes and containers contaminated with blood or body fluids, liquid effluent	Fixatives; formaldehyde, xylene, toluene, methanol, methylene chloride and other solvents; broken laboratory thermometers	Uncontaminated packaging, paper, plastic containers

Waste management (part 2)

First: on site

Second: off-site

*Proper packaging methods secure the safety of all laboratory staff: For example, sharps should be collected in puncture-proof and closed containers.

A first-aid kit is essential and must exist



Types of treated contaminated Waste

First on site : The following elements need to be considered for treated the contamination :

- 1- **nature of the waste**, for example, liquids, solids
- 2- **volume of the waste** to process.
- 3- **place where waste decontamination takes place** (for example, in the laboratory itself,
- 4- **type of packaging** for storing the waste.



Second: off-site:

The waste transported to an off-site for treatment and final disposal.

The following information must be available to those transporting contaminated waste:

1-waste classes

2- waste type

3-waste producer (for example :laboratory or hospital)

4-The date

5-number of containers and volume



Decontamination waste

A : Decontamination of liquid waste:

- 1- Sewer system
- 2- Chemical disinfection
- 3- Autoclaving



B: Decontamination of solid waste

1-Autoclaving

2-Incineration

3-Alkaline digestion



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