# ENVIRONMENTAL POLLUTION & CONTROL

# **SOLID WASTE**

Solid waste is the unwanted or useless solid materials generated from human activities in residential, industrial or commercial areas.

Solid wastes are the organic and inorganic waste materials such as product packaging, furniture, clothing, bottles, kitchen refuse, paper, appliances, paint cans, batteries, etc., produced in a society, which do not generally carry any value to the first user(s).

Solid waste means any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining and agricultural operations and from community activities.

Solid waste can create significant health problems and a very unpleasant living environment if not disposed of safely and appropriately.



#### **CLASSIFICATION OF SOLID WASTE**

- Municipal waste
- Domestic/Residential waste.
- Commercial waste
- Garbage
- Ashes
- Bulky waste
- Street sweeping
- Dead animals
- Construction and demolition waste
- Hazardous waste
- Sewage waste
- Hospital waste

# **MUNICIPAL WASTE**

Municipal waste includes waste resulting from municipal activities and services such as street wastes, dead animals, market wastes and abandoned vehicles.



#### **DOMESTIC WASTE**

This category of waste comprises the solid wastes that originate from single and multi-family house hold units.

These wastes are generated as a consequence of house hold activities such as cooking, cleaning, repairs, redecoration, empty containers packaging, clothing, old books, paper etc.



#### **COMERCIAL WASTE**

Included in this category are solid wastes that originate in offices, wholesale and retail stores, restaurants, hotels, markets, warehouses and other commercial establishments.



#### **BULKY WASTE**

In this category are bulky household wastes, which can't be accommodated in the normal storage containers of households.

Residential bulky wastes include household furniture and "white goods" appliances such as stoves, washing machines and refrigerators, mattresses, TV sets, Waters heaters, tires, lawn mowers, auto parts, tree etc.



### **STREET SWEEPING**

This term applies to wastes that are collected from streets, walkways, alleys, parks and vacant lots.



#### **Construction and demolition wastes**

Construction and demolition wastes are the waste materials generated by the construction, refurbishment, repair and demolition of houses, commercial buildings and other structures.



#### **HAZARDOUS WASTE**

Hazardous wastes may be defined as wastes of industrial, institutional or consumer origin which because of their physical, chemical or biological characteristics are potentially dangerous to human and the environment.

In some cases although the active agents may be liquid or gaseous, they are classified as solid waste because they are confined in solid containers.



### **SEWAGEWASTE**

The solid by-products of sewage treatment are classified as sewage wastes. They are mostly organic and derive from the treatment of organic sludge from both the raw and treated sewage.



# **HOSPITAL WASTE**

Hospital waste is generated during the diagnosis or treatment of human beings or animals.

These are in the form of disposable syringes, swabs, bandages, body fluids, human excreta, etc.



# SOLID WASTE MANAGEMENT

Solid-waste management is collecting, treating, and disposing of solid material that is discarded because it has served its purpose or is no longer useful. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process.

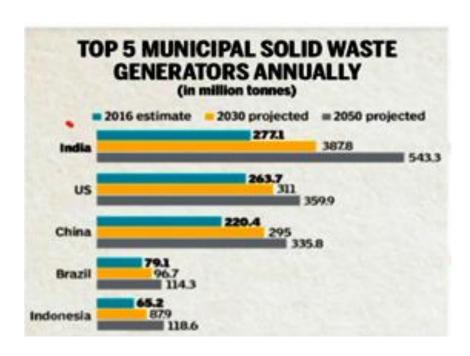


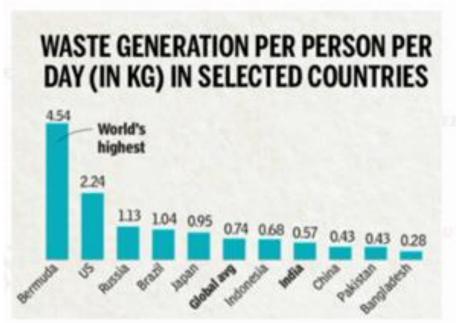
Around the world, waste generation rates are rising.

In 2016, the worlds' cities generated 2.01 billion tonnes of solid waste, amounting to a footprint of 0.74 kilograms per person per day.

This is projected to increase by 70% to reach 3.4 billion tonnes by 2050 due to rapid urbanization, population growth and economic development.

Currently, based on calculation by world bank, india is the largest producer of waste.





# EFFECT OF POOR SOLID WASTE MANAGEMENT

- Impact on human health
- Environmental problems
- Soil and ground water pollution
- Emission of toxic gases
- Impact on land and aquatic Animals