TYPES OF SOLID WASTES

MAJOR TYPES OF SOLID WASTES

- » Municipal Solid Wastes (MSW)
- » Hazardous Wastes
- » Industrial Wastes
- » Agricultural Wastes
- » Bio-Medical Wastes

1. MUNICIPAL SOLID WASTES (MSW)

MUNICIPAL SOLID WASTES

The term municipal solid waste (MSW) is generally used to describe most of the non-hazardous solid waste from a city, town or village that requires routine collection and transport to a processing or disposal site.



Domestic wastes and their disintegration time

Common Domestic Wastes	Approximate time taken for disintegration
Organic Kitchen Waste Vegetables, fruits	1-2 Weeks
Paper, Cardboard Paper	15 days-1 month
Cotton Clothes	2-5 Months
Woolen Clothes	About a year
Metal Cans, tin, Aluminum	100-500 years
Plastics	1 Million years



Whoa! That's a big number.

Municipal Solid Waste Managment Process



2. HAZARDOUS WASTES





Hazardous wastes are those that can cause harm to human and the environment.



Classification of hazardous wastes on the basis of physical and chemical properties

- » Toxic Wastes
- » Reactive Wastes
- » Ignitable Wastes
- » Corrosive Wastes
- » Infectious Wastes



Sources

- »Chemical Munufacturing Companies
- »Petroleum Refiniries
- »Paper Mills
- »Plastic Industries
- »Etc...etc...etc...

Effects

- »Contaminated
 Groundwater
- »Kidneys and liver damages
- »Reproduction fallure in birds and animals

Control

- »Land Disposal
- »Less generation of hazardous wastes
- »Etc...etc...etc...

3. INDUSTRIAL WASTES



These contain more of toxic and require special treatment.





Sources

- »Food Processing Industries
- »Metallurgical, Chemical and pharmaceutical units.
- »Sugar mills
- »Paper and pulp industries
- »Fertilizers and pesticides.
- »Etc...etc....etc....

Hfects

- »Disorder of nervous system
- »Genetic defects
- »Skin diseases
- »Cancer

Control

- »Hazardous Wastes should not be mixed up with general waste.
- »Local Communities shouldand voluntary organizations should educate the industries as well public about danger of pollution

4. AGRICULTURAL WASTES

ACRICULTURAL WASTES

The waste generated mainly by agriculture practices are called agricultural wastes. In developing countries, this waste does not pose a serious problem as most of it is used e.g., dung is used for manure, straw is used as fooder.





- »Wastes from crops and live stock.
- »Agro based industries produce wastes...eg..rice milling, production of tea, tobaco etc.
- »Rice husk, degasses, ground nut shell, maize cobs, straw of cereals etc.

Effects

- »More C:N ratio wastes like paddy husk or straw may cause immobilization of nutrients if applied on the fields.
- »It occupies to large land areas if not properly disposed.

Managment of Agricultural Wastes

- » Waste to energy
- 1. Gasification
- 2. Pyralysis
- » Bio-Gas Production

5. BIO-MEDICAL WASTES

BIO-MEDICAL WASTES

Bio-medical waste means any waste, which is generated during the diagnosis, treatment or immunisation of human beings or animals or in research activities pertaining thereto or in the production or testing of biological.



Segregation, Packaging, Transportation and Storage:

- » Bio-medical waste shall not be mixed with other wastes.
- Bio-medical waste shall be segregated into containers/bags at the point of generation prior to its storage, transportation, treatment and disposal. The containers shall be properly labelled.
- » No untreated bio-medical waste shall be kept stored beyond a period of 48 hours. Provided that if for any reason it becomes necessary to store the waste beyond such period, the authorised person must take permission of the prescribed authority and take measures to ensure that the waste does not adversely affect human health and the environment.

THANKS!