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SOILD WASTE MANAGEMENT

By

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Contents

- Sources of urban and Industrial wastes
- Effects of solid wastes
- Management of solid wastes

Sources of Urban & Industrial wastes

- Management of solid waste is very important in order to minimize the adverse effects of solid wastes.



Urban Waste

- Medical waste from hospitals
- Municipal waste: Homes, Offices, Markets
- Horticulture waste: Parks, gardens etc.
- Small cottage units

Waste from hospitals



Wastes from homes

- Domestic waste: Polyethylene bags, empty bottles, aluminum cans, scrap metals, waste paper, cloth, food waste, diapers etc...



Waste from shops

- Waste papers, packaging material, bottles, PE bags, tea leaves, eggshells etc...



Biomedical waste

- Anatomical waste, pathological waste, Infectious waste etc.....



Construction wastes



- Debris, Wood, concrete etc....



Horticulture Waste & Slaughter Animal House

- Vegetables parts, residues, Slaughtered animals



Types of waste

- Biodegradable waste

eg. Stale food, tea leaves, vegetable wastes

- Non- Biodegradable waste

eg. PE bags, scrap metals, bottles etc

Effect of solid waste

- Municipal solid waste heap up the roads.



- Dumping of materials
- Industrial wastes
- Toxic substances
- Mixing of hazardous substances with garbages.
- Burning of materials
- Polychlorinated biphenyls,
- Leads cancer and death.

Management of Solid Waste

- Stress about the 3 “R”s



Reduction of Use of Raw Materials

- Decrease the production of waste.



Reuse of waste materials





Recycling of materials



Discarding of waste

- Sanitary landfill
- Composting
- Incineration



Method to discard the waste materials:

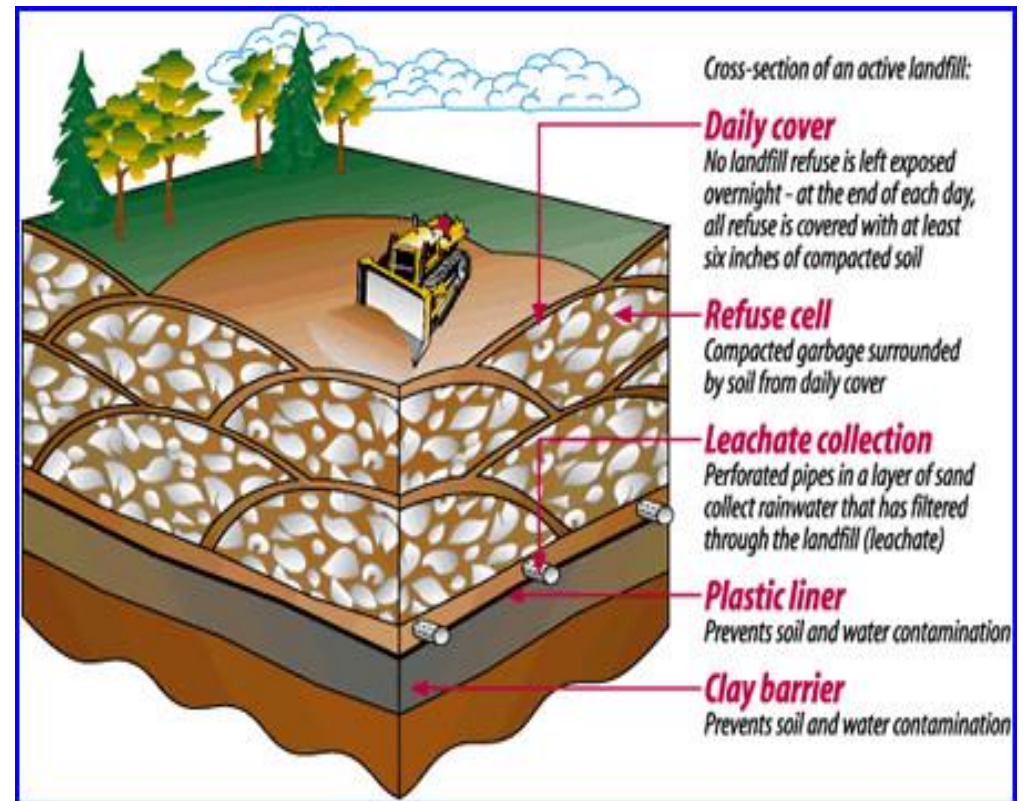
- 1) Sanitary landfill
- 2) Composting
- 3) Incineration

1. Sanitary landfill

Sanitary landfills are sites where waste is isolated from the environment until it is safe.

Advantages:

1. Simple and economic
2. Segregation not required
3. Land can be reclaimed and used for other purpose.



Disadvantages;

1. Large area is required
2. Bad odors, if properly not managed
3. Causes fire hazard due to the formation of methane in wet weather.

2. Composting:

Biodegradable yard waste is allowed to degrade in the oxygen rich medium.

Environmentally friendly manure is formed.

Which improves the soil fertility



Did you know that yard waste (leaves, branches, twigs) makes up over 25% of our waste stream?

By separating your yard waste from your garbage, you can help to save valuable landfill space and reduce the number of trucks going to Michigan.



Incineration:

Burning of large amount of waste at high temperature.

Initial cost is high.

During incineration large amount of dioxin, furans, cadmium and lead will be emitted.

So remove batteries and plastics before burning the materials.



Thank You