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SOLID WASTE MANAGEMENT IAT-03

① Define E-waste.

→ E-waste or electronic are the electronic and electrical equipment which has become a waste due to:-

- (i) changes in their physical property.
- (ii) change in the update of electronic equipment which tends everybody to buy new one and discard old one
- (iv) Reaching the end or expiry of an item which can cause harmful radiation or will have environmental effects.

→ There are a lot of health effects due to disposal of E-waste.

- (*) materials which contain lead, mercury, cadmium chromium can cause a lot of health issues like damage in the helical structure of DNA, Asthma, respiratory disorders and majority affecting brain development of children..

→ Sources of E-waste:

- (*) waste generated from data processing computer devices like monitor and mobile devices.

- (*) Electronic devices like TV, DVD, monitor, mobile devices, (eg walkie talkie, earphones)

(*) Household equipments like vacuum cleaners, oven.

(*) Audio, video components.

→ Disposal of E-waste :-

(*) E-waste should be disposed properly, adequately and also in a safe environment.

lot of toxic fumes emit while disposing these materials.

(*) Always consult a certified e-waste recycler while conducting such activities.

→ Disposal of E-waste :-

disposal of E-waste can

happen in various methods but a few certified ones are listed below.

(*) Land fill

(*) Acid bath

(*) Incineration.

(1) Land fill :- This is the most common method of E-waste disposal. Here the soil is excavated in trenches and the waste is disposed in it. During land fill an impervious layer is made out of clay or plastic with leachate basin and then transferring waste to treatment plant.

(2) Acid bath :- Acid bath involves soaking of the electronic circuits in the powerful sulphuric, hydrochloric or nitric acid solution. that free the metals from the

(3) INCINERATION:- This is controlled way of disposing of the waste and it involves combustion of E-waste disposal methods is quiet advantageous as the waste volume is reduced extremely much and the energy obtained is used separately.

2. Define Construction and demolition waste.

→ These waste ~~and are~~ usually accumulated at a construction site is generated from construction, renovation, repair, and demolition, pieces, and debris. C&D waste is made up of wood, steel, concrete, gypsum. C&D waste is notable because it can contain hazardous material such as asbestos and lead.

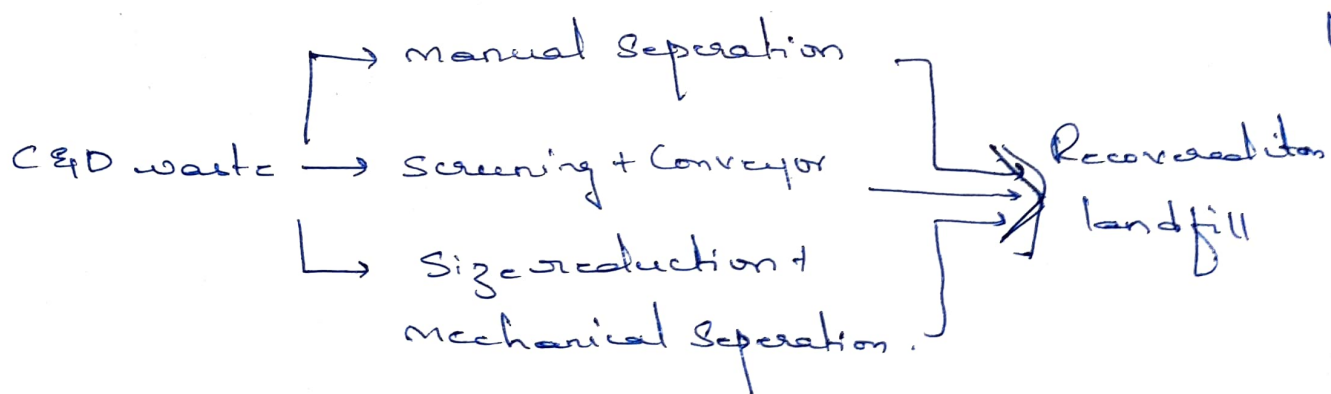
→ Sources of these waste are as given above basic source is construction waste.

* Two types of construction waste are

→ Hazardous

→ Non-hazardous.

* disposal of hazardous and non hazardous waste should happen as a controlled process



~~Disposal of Construction Waste:-~~

→ ~~Disposal of Construction Waste:-~~

→ Disposal of construction waste.

- (*) Being predominantly inert in nature, construction and demolition waste does not create chemical or biochemical pollution.
- (*) The material can be used for filling / leveling of low lying area.
- (*) In the industrialised countries, special landfills are sometimes created for inert waste, which are normally located in abandoned mines.

3(a) Define biomedical waste :-

it is any kind of waste containing infectious materials. it may also include waste associated with the generation of biomedical waste that visually appears to be of medical or laboratory origin.

- Bio medical waste may be solid or liquid.
- infectious waste like discarded blood, sharp unwanted microbiological cultures and stocks, identifiable parts, other human or animal tissue, used bandages.

→ Source of biomedical waste.

- Government hospitals.
- Primary health centres.

- medical college and research centre.

→ Treatment:-

→ Reducing hazardous waste and making it unrecognizable by the following process.

- Incineration
- Non-Incineration systems → Biological
→ chemical
→ Radioactive.

→ Stages of medical waste disposal

1] collecting and segregating.

2] Storage of waste, in different containers.

eg → sharps, Trace chemo, radioactive

Separation like :- general waste.

→ Infected plastics

→ Infected waste

→ glassware

→ Sharps

3] Generation and accumulation.