Legacy Waste

Why in News

Recently, the **National Green Tribunal (NGT)** has directed a committee to assess the amount of damage caused to the environment due to the dump sites (legacy waste) in Delhi.

> The committee comprises representatives from the **Central Pollution Control Board**, **National Environmental Engineering Research Institute (NEERI)** and IIT Delhi.

Key Points

- Legacy wastes are the wastes that have been collected and kept for years at some barren land or a place dedicated for Landfill (an area to dump solid waste).
- This waste can be roughly grouped into **four categories:**
  - Contained and/or stored waste(contained or stored waste are wastes in tanks, canisters, and stainless steel bins).
  - Buried waste.
  - Contaminated soil and groundwater
  - Contaminated building materials and structures.
- **Biomining method** has been proposed by the Central Pollution Control Board (CPCB) for the effective disposal of legacy wastes.
- **Environmental Impact of Legacy Waste**
  - Legacy wastes not only **occupy large space,** but also become a **breeding ground** for pathogens, flies, malodours and generation of leachate, which may lead to **water contamination.**
  - They also contribute to generation of **greenhouse gases** and **pose risk of uncontrollable fire.**

Biomining

- Biomining is the process of **using microorganisms (microbes)** to extract metals of economic interest from rock ores or mine waste.
- Biomining techniques may also be used to **clean up sites** that have been polluted with metals.
- It is usually used for old dumped waste that remains in a **partly or fully decomposed state with no segregation in existence between wet and dry waste.**
- In the cost effective method of biomining, treatment is done by dividing the garbage heap at the site into suitable blocks to let the air percolate in the heap.
- As a result, the leachate which is the water in the heap with suspended solid particles is drained off and microbes are sprayed in the heap to initiate biological decompositions.
- The waste is turned over several times in order to devoid the waste to leachate as much as possible.
- This biological decomposition of the waste **decreases the volume of the waste by 40%.**

Source: TH