



## Domestic Hazardous Waste

**For Prelims:** Domestic Hazardous Waste, Solid Waste Management Rules 2016.

**For Mains:** Domestic Hazardous Waste and its impact, Need to manage Domestic Hazardous Waste, Solid Waste Management Rules 2016

### Why in News

Segregation of domestic hazardous waste remains a distant dream for most Indian cities in absence of robust framework and infrastructure.

- **Indore is the only city in the country** that safely handles its domestic hazardous waste.

### Key Points

- **About:**
  - Domestic Hazardous Waste is any **chemical or product that can cause serious illness or pose** an environmental or health threat if improperly stored, transported or disposed of.
  - When hazardous waste is disposed of in the trash, down the drain, or on the ground, our water and soils can be contaminated or trash collectors can be harmed.
  - Most products labeled dangerous, flammable, poison, combustible and corrosive are considered hazardous waste.
  - **Examples:** Auto batteries, Fertilizers, Batteries (non-alkaline), Paint.
- **Domestic Hazardous Waste in India:**
  - In 2020, a significant level of toxic heavy metals and persistent organic contaminants like pesticides have been found by the researchers from the Indian Institute of Technology (IIT) Delhi and IIT Bombay.
    - They analysed fine particles from eight dump sites across the country.
- **Governing Household Waste:**
  - Household waste is governed by the rules outlined in the [Solid Waste Management Rules 2016](#).
  - These rules divide household waste into dry and wet waste.
    - Wet waste is categorised as any waste that decomposes or degrades by itself.
    - All other waste falls into dry waste according to the rules.
- **Issues:**
  - **Not Fully Covered in Solid Waste Management Rules, 2016:**
    - The **Solid Waste Management Rules, 2016** define it as “discarded paint drums, pesticide cans, compact fluorescent lightbulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc generated at household levels”.
    - The definition is not exhaustive, and so leaves a lot to the imagination of individual households and local government bodies such as Panchayats and municipalities.
    - For example, the rules **leave out cigarette butts** even though they contain traces of heavy metals and other chemicals.

- **Not in Ground Translation of Rules:**
  - According to the rules, Households must segregate waste into wet, dry and domestic hazardous categories.
  - Local government bodies must collect the hazardous waste, and / or set up collection centres every 20 km so households can deposit it on their own.
  - The local authorities must then safely deliver the collected waste to disposal facilities. The rules also direct the authorities to develop the necessary infrastructure and sensitise people by 2018.
  - But none of these requirements have been translated on the ground.
- **Not Enough Disposal Facilities:**
  - Even if the waste is collected, the country does not have enough disposal facilities to safely treat them.
  - A disposal facility typically has engineered landfills that stop the percolation of toxic leachate into the ground, and / or controlled incinerators.
    - Currently, **there are only 45 of these facilities**, as per the Handbook on Chemicals and Hazardous Waste Management and Handling in India released in 2019 by the Union Ministry of Environment, Forest and Climate Change.

## Way Forward

- Given the poor performance, the country may **consider including hazardous waste under [Extended Producer Responsibility \(EPR\)](#)**.
  - Under Extended Producer Responsibility (EPR), **manufacturers have the responsibility of collecting and channeling** their post-consumer products.
  - India currently has an **EPR policy only for plastic products and electronic and electrical equipment**. In Canada, domestic hazardous waste has been under EPR since the 1990s.
  - The policy has relieved the government and taxpayers of the cost of domestic hazardous waste collection.
- The authorities **must also ensure safe storage of the waste** and its transportation to the hazardous waste disposal facility.
  - Since, it is the **responsibility of the municipal authorities** under the **Solid Waste Management Rules, 2016**, to collect hazardous waste quarterly or periodically, and/or set up deposit centres where such waste can be dropped off by waste generators.

**[Source: DTE](#)**

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