



## Battery Waste Management Rules, 2022

**For Prelims:** Ministry of Environment, Forest and Climate Change (MOEFCC), Battery Waste Management Rules (2022), Extended Producer Responsibility (EPR), Waste Management, Principle of Polluter Pays.

**For Mains:** Management of Waste Batteries.

### Why in News?

Recently, the [Ministry of Environment, Forest and Climate Change \(MOEFCC\)](#) notified the **Battery Waste Management Rules, 2022** to ensure environmentally sound management of waste batteries.

- These rules will replace the **Batteries (Management and Handling) Rules, 2001**.

### What are the Key Highlights of the Rules?

- **Coverage:**
  - The rules cover **all types of batteries, including Electric Vehicle batteries, portable batteries, automotive batteries, and industrial batteries.**
- **Extended Producer Responsibility (EPR):**
  - The rules function based on the concept of [Extended Producer Responsibility \(EPR\)](#) where the **producers of batteries are responsible for the collection and recycling/refurbishment of waste batteries and the use of recovered materials from waste into new batteries.**
    - EPR mandates that all waste batteries be collected and sent for recycling/refurbishment, and it prohibits disposal in landfills and incineration.
    - To meet the EPR obligations, producers may engage themselves or authorise any other entity for the collection, recycling, or refurbishment of waste batteries.
      - It will enable the **setting up of a mechanism and centralized online portal for the exchange of EPR certificates between producers and recyclers/refurbishers** to fulfill the obligations of producers.
- **Waste Management:**
  - They promote the **setting up of new industries and entrepreneurship in the collection and recycling/refurbishment of waste batteries.**
- **New Business Opportunities:**
  - Mandating the minimum percentage of recovery of materials from waste batteries under the rules will **bring new technologies and investment in the recycling and refurbishment industry and create new business opportunities.**
- **Reduce Dependency on Raw Materials:**
  - Prescribing the use of a certain number of recycled materials in the making of new batteries will reduce the dependency on new raw materials and save natural resources.
- **Online Registration:**
  - Online registration & reporting, auditing, and committee for monitoring the implementation of rules and taking measures required for removal of difficulties.
- **Principle of Polluter Pays:**

- Environmental **compensation will be imposed for non-fulfilment of Extended Producer Responsibility targets**, responsibilities and obligations set out in the rules.
- **Environmental compensation Fund:**
  - The funds collected under environmental compensation shall be **utilized in the collection and refurbishing or recycling of uncollected and non-recycled waste batteries.**

## UPSC Civil Services Examination Previous Year Question (PYQ)

### Prelims

**Q. In a dry cell (battery), which of the following are used as electrolytes? (2009)**

- (a) Ammonium chloride and Zinc chloride
- (b) Sodium chloride and Calcium chloride
- (c) Magnesium chloride and Zinc chloride
- (d) Ammonium chloride and Calcium chloride

**Ans: (a)**

**Exp:**

- The most common dry cell, the Leclanche cell, is used in flashlights and transistor radios.
- The anode of the dry cell consists of a Zinc container which is in contact with Manganese Dioxide ( $MnO_2$ ) and an electrolyte.
- **The electrolyte consists of Ammonium Chloride and Zinc Chloride in water to which starch is added to thicken the solution to a paste like consistency** so that it is less likely to leak. **Therefore, option (a) is the correct answer.**

### Mains

**Q. What are the impediments in disposing of the huge quantities of discarded solid waste which are continuously being generated? How do we remove safely the toxic wastes that have been accumulating in our habitable environment. (2016)**

**Source: PIB**

PDF Refernece URL: <https://www.drishtias.com/printpdf/battery-waste-management-rules-2022>