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News: Battery Waste Management Rules, 2022

Battery Waste Management Rules, 2022

➤ Battery Waste Management Rules, 2022 cover all types of batteries, including Electric Vehicle batteries, portable batteries, automotive batteries, and industrial batteries.

Extended Producer Responsibility (EPR)

- 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. Rules prohibit 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.

Online Portal for exchange of EPR Certificates

➤ 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.

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.

Recovery Target

➤ There is a target for recovery of the battery material — 70% by 2024-25, then 80% by 2026, and 90% after 2026-27 onwards.

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.

Gaps in Battery Waste Management Rules, 2022

Labeling and Information Deficiency

- Current battery labels lack comprehensive information about their chemical composition, impeding effective recycling.
- Lack of data on metals in lithium-ion batteries hampers recyclers' ability to recover valuable materials efficiently.

Design Complexity

- ➤ Battery packs often have intricate assembly methods involving welding, adhesive, and screws, making disassembly challenging.
- Standardizing joining techniques could facilitate automated disassembly.

EPR Implementation and Budgeting

- The rules lack a clear directive on the budget that manufacturers should allocate for collecting and recycling spent batteries.
- ➤ This ambiguity may result in low rates paid to recyclers, impacting the efficiency of waste collection and processing.

Informal Sector Competition

As the volume of spent batteries increases, informal collectors might outprice formal collectors, potentially leading to hazardous recycling practices and safety concerns.

Chemical Composition Changes

The shift towards safer but less valuable lithium iron phosphate (LFP) batteries poses a challenge. Recyclers might struggle to recover value due to the minimal lithium content in LFP cells.

Safety Standards and Handling

Absence of rules governing the storage, transport, and handling of electric vehicle batteries could pose safety risks, especially if the informal sector becomes more involved.