GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 2335 TO BE ANSWERED ON 04.08.2025

Disposal of Waste Batteries

2335. SHRI GURJEET SINGH AUJLA:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether unchecked and hazardous growth of electronic waste is increasing in the country, particularly in border districts like Amritsar, if so, the details thereof;
- (b) whether toxic fluid discharged from waste batteries is being diluted, dumped or illegally released into water bodies or soil, causing irreversible environmental and groundwater pollution;
- (c) if so, the details of the monitoring mechanism in place to check the disposal of waste batteries in the country;
- (d) whether the Government has undertaken surveys, inspections or audits of informal dumping grounds, especially in rural and semi-urban areas where scrap handling lacks regulation; and
- (e) the details of recycling measures and pollution control precautions are in place in this regard and the role of certified recyclers towards environment?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI KIRTI VARDHAN SINGH)

(a) The Central Pollution Control Board (CPCB) estimates the e-waste generation at national level based on the countrywide sales data provided by the registered producers, and average life of notified electrical and electronic equipment (EEE), as mandated under the E-Waste (Management) Rules, 2022. As per the CPCB, e-waste generated and percentage of e-waste collected, dismantled and recycled / disposed in the country during the FY 2023-24 and 2024-25 is given below:

Financial Year (FY)	Total e-waste generated [tonnes/annum]
2023-2024	12,54,286.55
2024-2025	13,97,955.59

The Ministry of Environment, Forest and Climate Change (MoEF&CC) has notified the E-Waste (Management) Rules, 2022 to manage e-waste in environmentally sound manner, to have an improved Extended Producer Responsibility (EPR) regime for recycling of e-waste and to facilitate & channelize e-waste from informal sector to formal sector. In the State of Punjab, there are eight e-waste recyclers registered on EPR Portal of CPCB with recycling capacity of 46,450 tonnes per annum.

(b) to (e) MoEF&CC has notified the Battery Waste Management Rules, 2022 on 24th August, 2022 to ensure environmentally sound management of waste batteries. The rules cover all types of batteries viz. Electric Vehicle batteries, portable batteries, automotive batteries and industrial batteries. Under the rules, the producers, including importers, have been given mandatory EPR targets for collection and recycling or refurbishment of waste batteries. EPR framework under the Battery Waste Management Rules, 2022 prohibits disposal of waste batteries in landfills.

Under the Battery Waste Management Rules, 2022, the producers have been mandated to obtain registration with CPCB and file annual returns regarding the waste batteries collected and recycled or refurbished towards fulfilling obligations under EPR, and pre-consumer waste batteries generated in the preceding financial year.

The recyclers have been mandated to generate EPR certificates based on the weight of the battery waste processed. Further, recyclers have been mandated to register with State Pollution Control Board (SPCB)/ Pollution Control Committee (PCC) on the centralized online portal and file quarterly returns, regarding the information on quantity of used batteries collected or received from various producers or entities, recycled quantities, quantity of hazardous and/or other waste including solid waste or plastic waste generated after recycling and disposal of such quantities. The recyclers have been mandated to ensure that recycling processes and facilities for waste batteries comply with the standards or guidelines prescribed by CPCB.

CPCB has issued the Standard Operating Procedure (SOP) for lead acid battery recycling, specifying the measures for safe draining of hazardous fluids and its disposal and repurposing use in other industrial processes. Centralized online EPR portal has been developed for registration of producers and recyclers, exchange of EPR certificates between producers and recyclers to fulfil the EPR obligations of the producer. Currently, there are 437 recyclers registered in the country under the Battery Waste Management Rules, 2022. Out of 437 recyclers, 40 recyclers are from the state of Punjab.

Under the Battery Waste Management Rules, 2022, CPCB has been mandated to verify compliance by producer through inspection and periodic audit. SPCB has been mandated to verify compliance of entity involved in refurbishing and recycling of waste batteries through inspection and periodic audit. CPCB has empanelled third-party auditors for conducting audit of recyclers of e-waste and battery waste as mandated under the respective rules.

As per the information received from the Punjab Pollution Control Board, e-waste facilities are equipped with Effluent Treatment Plants (ETPs), leachate containment systems, dust extraction and filtration units, secured storage for hazardous fractions, and periodic air and effluent monitoring. Battery-waste facilities have Spent Acid Recovery and Neutralization Systems, lined waste storage, ventilated work areas, dust suppression measures, and occupational safety protocols. Further, registered recyclers ensure the safe collection, transportation, dismantling, and recovery of metals from e-waste and batteries, neutralization of acids, and secure disposal of hazardous residues in strict compliance with the E-Waste (Management) Rules, 2022 and the Battery Waste Management Rules, 2022. They also file returns on the EPR portal developed by the CPCB, ensuring accountability and regulatory compliance.
