

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION. No. 3902
TO BE ANSWERED ON 06.04.2023

Action plan for circular economy

3902. SHRI JAGGESH:

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

- (a) whether it is a fact that sustainable and efficient use and processing of all raw materials is required to protect the environment;
- (b) whether it is a fact that India has 11,000 billion tonnes of garbage that can be recycled;
- (c) whether Government has framed any policy to manage e-waste;
- (d) whether Government is focusing on circular economy and on reusing and recycling waste to make it raw material for future use; and
- (e) if so, the details of the steps taken by Government to establish circular economy as a sustainable, future-oriented concept in the industry?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) and (b) Resource efficiency and circular economy has the potential to reduce the extraction of virgin materials, promote use of recycled secondary raw materials and reduce waste generation; thereby help protect environment.

As per the Annual reports of CPCB, Solid waste generated was 584.14 lakh tonnes per annum and 291.84 lakh was treated/recycled (Annual report 2020-21), the plastic waste generated was 34.69 lakh tonnes per annum (Annual report 2019-20) of which approximately 15.8 lakh TPA of plastic waste was recycled and 1.67 Lakh TPA was co-processed in cement kilns. E-waste generated in year 2021-22 was 16.01 lakh tonnes of which 5.27 lakh tonnes (32.92%) of e-waste was collected, dismantled and recycled/disposed. Waste tyres generated in year 2018-2019 was 15.24 lakh tonnes of which 11.36 lakh tonnes (74.5%) was processed.

(c) The Ministry of Environment, Forest and Climate Change on 2nd November 2022, has notified the E-Waste (Management) Rules, 2022 which has come into force from the 1st day of April, 2023, replacing E-Waste (Management) Rules, 2016. A total of 106 electrical and electronic items have the EPR obligations under the new Rules.

(d) and (e): MoEFCC frames policy & regulations for promoting Environmentally Sound Management of wastes. MoEFCC has notified the rules for following wastes:

- i. Plastic Waste: Plastic Waste Management Rules, 2016
- ii. Solid Waste: Solid Waste Management Rules, 2016
- iii. Hazardous Waste: Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016
- iv. E-waste: E-waste (Management) Rules, 2022
- v. Tyre Waste: Extended Producer Responsibility (EPR) for Waste Tyre, 2022
- vi. Construction and Demolition Waste: Construction and Demolition Waste Management Rules, 2016
- vii. Bio-medical waste: Bio-medical Waste Management Rules, 2016
- viii. Battery waste: Battery Waste Management Rules, 2022
- ix. Fly ash: Ash Utilisation Notification, 2021

All these waste management rules provide a framework for safe handling, treatment & processing, recycling and recovery, reuse in feasible avenues and final disposal in environmentally sound manner. Implementation and monitoring of these rules are done through CPCB and SPCB/PCCs.

To promote Circular Economy, MoEFCC through amendments/notifications, has incorporated the Extended Producer Responsibility (EPR) framework in several waste management rules. EPR enables the accountability of producers to manage wastes generated from the products introduced, in environmentally sound manner. Producers are mandated recycling targets.

EPR framework promotes Recycling business. Recyclers can sell EPR certificates to fulfil EPR targets. It promotes:

- i. Recycling & environmentally sound End of Life management
- ii. Use of recycled content
- iii. Creation of new business models for collection and processing
- iv. Increase in recycling infrastructure/ EOL management

Regulations mandating market based Extended Producer Responsibility (EPR) on producers, importers and brand owners following the principle of circular economy have been notified by the Ministry of Environment Forest and Climate Change Government of India in the following four categories of wastes.

- i. “Extended Producer Responsibility (EPR) for Waste Tyre, 2022” on 21.07.2022.
- ii. Guidelines on EPR for Plastic Packaging on 16.02.2022.
- iii. “Battery Waste Management Rules, 2022” on 22.08.2022.
- iv. “E-Waste (Management) Rules, 2022” on 02.11.2022.

The mandatory Extended Producer Responsibility obligations on producers, importers and brand owners for plastic waste, E-waste, Battery waste and tyre waste is based upon reuse and recovery, recycling, and use of recycled content.

The Ministry of Environment, Forest and Climate Change notified the **Guidelines on Extended Producer Responsibility for plastic packaging vide Plastic Waste Management (Amendment) Rules, 2022**, on 16th February 2022. The key highlights are (i) mandatory registration of Producers, Importers, and Brand Owners (PIBOs) and Plastic Waste Processors (PWPs) through centralized online portal, (ii) coverage of four categories of plastic packaging viz. rigid packaging, flexible packaging, multi-layered plastic packaging, and compostable plastic packaging, (iii) clearly defined targets for EPR, (iv) mandatory targets for reuse of rigid plastic packaging, minimum level of recycling of plastic waste and use of recycled plastic content in plastic packaging, (v) centralized online portal to support implementation of EPR, (vi) provision sale and purchase of surplus EPR certificates, (vii) levy of environmental compensation for non-fulfilment of EPR obligations, (viii) provision for verification, audit and monitoring of obligated entities.

Ministry has notified the **E-Waste (Management) Rules, 2022** on 2nd November, 2022. These rules have replaced E-Waste (Management) Rules, 2016 and have come into effect from 1st April, 2023. These rules will launch a new EPR regime for e-waste recycling. The salient feature of new rules is as under:

- i. Applicable to every manufacturer, producer, refurbisher, dismantler and recycler.
- ii. All the manufacturer, producer, refurbisher and recycler are required to register on portal developed by CPCB.
- iii. No entity shall carry out any business without registration and also not deal with any unregistered entity.
- iv. Authorization has now been replaced by Registration through online portal and only manufacturer, producer, refurbisher and recycler require Registration.
- v. Provisions for environment compensation and verification & audit has been introduced.

Ministry has notified '**Extended Producer Responsibility (EPR) for Waste Tyre**' on 21st July, 2022 through amendment in Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to ensure environmentally sound management of waste tyres. These rules cover all types of waste tyre including tubes and flaps that is no longer mounted on a vehicle and is no longer used for its intended purpose. These notification function based on the concept of Extended Producer Responsibility (EPR) where the producers (including importers) of tyres are responsible for recycling/ retreading of waste tyre and use of recovered materials from wastes into reclaim rubber, crumb rubber, crumb rubber modified bitumen, recovered carbon black and pyrolysis oil & char. New rules promote setting up of new industries and entrepreneurship in collection and recycling/ retreading of waste tyres. Salient Features of the Rules are:

- i. All the entities (producer, recycler of waste tyre and retreader) are required to register on the portal developed by CPCB before commencing or continuing their business activities.
- ii. The EPR obligation imposed under the Amendment Rules have been bifurcated basis the entity registering on the CPCB portal, i.e. (a) for producers (manufacturers or importers) of new tyres, (b) for importers of waste tyre, and (c) for retreading.
- iii. Producer is required to fulfill their EPR obligation by purchasing the EPR certificate from registered recyclers and submit it online on the portal by filing quarterly return.

- iv. Recycler is obligated to submit the information regarding the quantity of waste tyres used and end product produced, EPR certificates sold to the producer, and such other relevant information as required by CPCB, on the portal on monthly basis.
- v. Provisions for environment compensation and verification & audit, and prosecution as applicable has been introduced.

Ministry has notified **Battery Waste Management Rules, 2022 (BWMR)** on 22nd August, 2022 to ensure environmentally sound management of waste batteries which include Electric Vehicle batteries, portable batteries, automotive batteries and industrial batteries. As part of EPR framework under BWMR, producers of batteries including importers are responsible for mandatory collection and recycling or refurbishment of waste batteries, and use of minimum percentage of recycled materials in manufacturing new batteries. Recyclers have been mandated to recover minimum percentage of battery materials from the recycling of waste batteries. Producers of batteries have been mandated to use minimum percentage of recycled content in manufacturing of new batteries to ensure circular economy and reduce burden on natural resources. Refurbishers have been mandated to refurbish used batteries for use in secondary life applications to ensure extended the life of products and delay the waste generation.

In regard to Solar PV panel waste, Extended Producer Responsibility (EPR) framework has been incorporated in the E-Waste (Management) Rules, 2022 for environmentally sound management of wastes arising out of Solar PV panels.

Guidelines for Environmentally Sound Facilities for Handling, Processing and Recycling of End-of- Life Vehicles (ELV) have been issued for facilities of dismantling and recycling / recovery activities of ELVs.
