

## **GOVERNMENT OF PUDUCHERRY**



DEPARTMENT OF SCIENCE, TECH. & ENVT.

Puducherry Pollution Control Committee



#### **PREFACE**

E-waste is one of the potential environmental hazards. Post 90s witnessed revolution in IT sector. It boost establishment of Software units, Tidal park, IT corridor etc. Office automation has been taken place in large scale. As a result, huge volume of e-waste got generated and disposed haphazardly. India generates about 3 million tonnes (MT) of e-waste annually and ranks third among e-waste producing countries, after China and the United States. Reports state that it might rise to 5 million tonnes by 2021 E-waste constitutes many heavy metals which has ability to affect Central nervous system besides causing other health implications.

The e-waste (Management) Rules, 2016, were notified by Ministry of Environment, Forest and Climate Change, Government of India inorder to give a legal frame work for scientific management of e-waste. These rules is applicable to every manufacturer, producer, consumer, bulk consumer, dealer of electrical and electronic equipments/components and e-waste collection centres, dealers, e-retailer, refurbisher, dismantler and recycler. Puducherry Pollution Control Committee is the authority to implement the provisions of these Rules in the U.T. of Puducherry.

This e-waste Policy is prepared to highlight commitment of Government of Puducherry towards scientific management of e-waste in the U.T. of Puducherry.

# 1. Introduction

Electronic waste or e-waste is generated when electronic and electrical equipment become unfit for their originally intended use. Computers, servers, mainframes, monitors, compact discs (CDs), printers, scanners, copiers, calculators, fax machines, battery cells, cellular phones, transceivers, TVs, iPods, medical apparatus, washing machines, refrigerators, and air conditioners are examples of e-waste when it became unfit for use. These electronic equipments get fast replaced with newer models due to the rapid technology advancements and production of newer electronic equipment. This has led to an exponential increase in e-waste generation. People tend to switch over to the newer models and the life of products has also decreased.

E-waste typically consists of metals, plastics, cathode ray tubes (CRTs), printed circuit boards, cables, and so on. Valuable metals such as copper, silver, gold and platinum could be recovered from e-wastes, if they are scientifically processed. The presence of toxic substances such as liquid crystal, lithium, mercury, nickel, polychlorinated biphenyls (PCBs), selenium, arsenic, barium, brominated flame retardants, cadmium, chrome, cobalt, copper, and lead, makes it very hazardous, if e-waste is dismantled and processed in a crude manner with rudimentary techniques. E-waste poses a huge risk to humans, animals, and the environment. The presence of heavy metals and highly toxic substances such as mercury, lead, beryllium, and cadmium pose a significant threat to the environment even in minute quantities.

In the absence of an effective method for collection of e waste and managing the hazardous constituents, some e-waste end up at the scrap market which recycles them, using high polluting technologies. Some other E -waste is being disposed off in landfills resulting in high environmental risk and health hazards to humans and animals. E-waste collection, transportation, processing, and recycling is dominated by the informal sector. The sector is well networked and unregulated. Often, all the materials and value that could be potentially recovered is not recovered. In addition, there are serious issues regarding leakages of toxins into the environment and workers' safety and health.

# 2. Objective

- 1. To promote scientific disposal of e-waste in the U.T. of Puducherry
- 2. To Integrate informal sector in e-waste collection into a transparent recycling system
- 3. To ensure Extended Producer Responsibility (EPR) in establishing network of e-waste management
- 4. To guide the Bulk Consumer for effective e-waste management practices
- 5. To encourage entrepreneurship in e-waste circular economy

### 3. Principles

- 1. The guiding principles of this policy would be "Extended Producer Responsibility" and Polluter pay principle
- 2. Effective governance will be ensured through PP mode to the maximum possible extent
- 3. Feasibility, Sustainability and Productivity are ensured in the system

#### 4. Statements

- 1. Inventorization of e-waste generation in domestic, commercial and industrial sectors will be carried out through reputed institutions.
- 2. Identification of environmental hazards caused by the current e-waste non formal collection system
- 3. Creating awareness among the stakeholders for scientific e-waste disposal system.
- 4. EPR is the environmental protection strategy that makes the producer of electrical or electronic equipment responsible for the entire life cycle of his product including the "end-of-life management" of the product through it buyback, recycle and final disposal.
- 5. It will be achieved by setting up of Used Electrical and Electronic Collection Centres at various designated places by the Electrical and Electronic component manufacturer association or Dealer.
- 6. Possibility of establishment of Dismantling Centres and Recycling Centres under PP mode will be explored
- 7. E-waste generated in domestic sector will be deposited in the domestic Hazardous Waste Centre set up by Local Bodies.

- 8. E-waste recycling only in authorized units
- 9. Ensure use of environmentally sound technologies to maximize recovery and minimize waste generation
- 10. Appropriate Technologies for recycling e-waste to be accessible to recyclers
- 11. Training and skill development to be encouraged for using environmentally safe operations in handling e-waste.
- 12. Refurbisher of electrical/electronics equipments will be brought under purview of Puducherry Pollution Control Committee.
- 13. Government departments are bulk consumer of electrical and electronic components. A paragraph on E-waste generated and disposal will be included as part of their annual policy note and Audit Statement.
- 14. Fluorescent Lamp sector is one of the major source of release of mercury into the environment. Hence the used Fluorescent lamp need to be disposed safely.
- 15. Used Fluorescent lamp will not be collected along with MSW.
- 16. A exclusively Fluorescent collection centre will be established. All the used fluorescent lamps from Govt. building, Commercial establishment and Households

will be collected and send to the neighboring Common processing facility located at Bangalore.

17. Association of e-waste generator will be formed to facilitate environmentally sound e-waste management.

