Management of E-Waste

Audit objective 5

Whether assessment, management and disposal of E-Waste generated in railway establishments as per applicable rules

Indian Railways is one of the major producer of E-Waste on account of computerization of the related IT infrastructure at passenger reservation centers, EDP centers, unreserved ticketing systems, offices as also extensive IT infrastructure used for signaling and telecom services. These discarded items including computers/laptops, e-monitors, T.V. sets, electronic equipment; servers etc. are defined as electronic waste or E-Waste. It is therefore imperative that the E-Waste is properly identified, segregated, stored and disposed of in a manner, which is not hazardous to human health and is in harmony with the environment.

Central Government had notified E-Waste (Management) Rules, 2016 that superseded the E-Waste (Management and Handling) Rules, 2011. These rules aim to enable the recovery and/or reuse of useful materials from E-Waste, thereby reducing the hazardous wastes that destined for disposal and to ensure environmentally sound management of all types of waste of electrical and electronic equipment.

Scrutiny of the records in selected 86 units (EDP/PRS/UTS/GSD) revealed deficiencies such as storage of E-Waste beyond permissible limits, non-submission of prescribed information to SPCB and these are covered in succeeding paragraphs.

6.1 Absence of consolidated instructions and training for handling of E-Waste

The rules regarding E-Waste were issued in October 2016. E-Waste Rules has, however, distinct procedure for handling and storage of E-Waste. Audit observed that procedure of condemnation as prescribed for the other office items such as furniture etc. were followed in respect of E-Waste. Further, no specific training module was devised/ implemented for impressing upon awareness for effective storage and disposal of E-Waste in any of the Zones. Hence, the mechanism for storage and disposal of E-Waste was weak and inadequate.

6.2 Submission of stipulated Form 3 to SPCB

SPCB had prescribed recording quantity of E-Waste generated per year in metric ton (MT) and the required information to be furnished to SPCB in Form 2. Based on Form 2 records, a consolidated data comprising of quantity of E-Waste generated, recycled and sold during the year to the dismantler was required to be sent to the SPCB in the prescribed form 3. The status of compliance with SPCB's directives and findings are indicated in Table 6.1.

Particulars	Status of compliance of SPCB's directives		
	EDP Centres	PRS/UTS Centres	Scrap Depots (GSD)
Information in respect of generation of category wise E-Waste not recorded in the prescribed Form 2 specified in the E-Waste rules	46 (53)	16 (16)	16 (17)
Consolidated data on quantity of E-Waste generated, recycled and sold during the year to the dismantler and details sent to SPCB in the prescribed Form 3 .	Since the details were not recorded in Form 2, the information for Form 3 hence could not be assessed.		

Table 6.1: Status of compliance of SPCB's directives

Figures in bracket represent total units checked.

The information in prescribed Form 2 & 3 was meant for monitoring the quantum of E-Waste generated and disposed. In absence of the requisite information that was required to be recorded in Form 2 and Form 3, neither the actual quantum of E-Waste generated was assessed nor the same was monitored. (*Annexure 6.1 and 6.2*)

6.3 Storage of the E-Waste beyond permissible limit

The E-Waste rules prescribed a period of 180 days for its storage. Approval of SPCB was required for storage beyond 180 days (up to maximum of 365 days). Scrutiny of records⁶⁷ revealed huge quantities of E-Waste awaiting disposal for periods beyond 180 days as indicated below:-

- 1. In 12 Zones E-Waste was stored beyond permissible 180 days and records made available did not indicate if SPCB's approval was sought for storage beyond the prescribed period of 180 days.
- 2. The quantity of E-Waste stored beyond 180 days without seeking permission ranged between 0.034 MT to 30.5 MT during the period from 2015 to 2020.

6.4 Conclusion

IR lacked mechanism for dealing with the E-Waste in compliance to the Rules. Training programmes for creating awareness for handling of E-Waste were not conducted. Important aspect pertaining to maintenance of records, submission of stipulated forms to the SPCBs as also seeking approval of SPCB for storing E-Waste beyond 180 days were not taken care of.

⁶⁷ condemnation reports, sale and auction registers kept at the scrap depots and the divisional stores

Summary of Audit findings

Railway Board did not initiate measures to conduct training programmes to sensitize the officials for handling E-Waste in conformity with E-Waste Management Rules.

6.5 **Recommendation**

IR needs to initiate measures for creating awareness on the issue of handling E-Waste besides devising monitoring mechanism for ensuring effective compliance with E-Waste Management Rules.

New Delhi Dated: 29 June 2022

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New Delhi Dated: 01 July 2022