

Chapter 1 → Introduction

Parliamentary Standing Committee (1997-98) in their Fourteenth Report on Modernisation and Capacity Utilisation of Workshops in Indian Railways (IR) observed that the working conditions in some of the workshops were very pathetic and hazardous to the health of the workers. The Committee, therefore, strongly recommended that conscientious efforts are required to be made to improve the prevalent working conditions. The Committee also recommended that new facilities should be created so that smoke emission and sewage discharge/disposal standard would conform to environmental requirements.

A review of the management of environment at stations, trains and tracks was undertaken and audit findings were included in the Audit Report No.21 of 2012-13. The present review focuses on the performance of Workshops¹, Sheds and Production Units (PUs) in the management of the environmental impact due to its operations and maintenance activities.

1.1 Organization Setup

At Railway Board (RB) level, there are two Directorates viz. Mechanical Engineering² (ME) and Mechanical Engineering (PU and W) for overseeing the activities of Workshops, Sheds and PUs. Each directorate is headed by an Additional Member reporting directly to the Member Mechanical who is overall in charge of these two Directorates.

At the Zonal Level, Chief Mechanical Engineer (CME) is the head of workshops including coaching depots and sheds.

All the PUs of IR directly report to Mechanical Directorate (PU and W)/Electrical Directorate of the RB. PUs are headed by General Manager and assisted by Principal Officers responsible for overall functioning of departments such as mechanical, stores, electrical, personnel etc. Organisation setup of Workshops, Sheds and PUs are shown in the *Appendix – I*.

¹ Including Coaching Depots.

² Responsible for all issues relating to coaching stock, wagons, locomotives, fuels and safety.

1.2 Audit Objectives

The Review was conducted to verify whether:

- I. The laws, rules and regulations relating to prevention and control of air, water and noise pollution were complied by the workshops, sheds and PUs;
- II. The resources were managed effectively by optimizing the use of renewable sources of energy;
- III. The disposal of wastes generated at the workshops, sheds and PUs were managed in compliance with laws, rules and regulations; and
- IV. The health and safety of workers was monitored as per the requirements of Indian Factories Act 1948 and in accordance with the provisions laid down in the Manuals of Indian Railways.

1.3 Sources of Audit Criteria

The review was based on parameters prescribed under various Acts, Rules, Regulations and Notifications³ issued by the Ministry of Environment and Forests for control of pollution in air and water and also by the Central/State Pollution Control Boards. Guidelines and instructions issued by the IR from time to time were taken into consideration while assessing the performance of workshops, sheds and PUs in addressing environmental concerns.

1.4 Scope and Audit Methodology

Audit examined the measures taken by IR during 2007-12 for prevention and control of air, water and noise pollution, conservation of resources such as energy and water including the use of renewable energy. Audit also examined the management and disposal of hazardous and other wastes, occupational health and safety of employees in workshops, sheds and PUs.

In Indian Railways, there are 66 workshops⁴, 366 sheds⁵ and six PUs as on 31 March 2013. A sample of 49 workshops, 89 sheds (including Coaching and

³ The Environment (Protection) Act, 1986, The Air (Prevention and control of Pollution) Act, 1981, The Water (Prevention and control of Pollution) Act, 1974, The Water (Prevention and control of Pollution) Cess Act, 1977, The Noise Pollution (Regulation and Controls) Rules, 2000, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 issued by the Government of India in the Ministry of Environment and Forest.

⁴ 41 Mechanical Workshops, 10 S&T Workshops and 15 Engineering Workshops including Bridge

⁵ 64 Diesel Loco Sheds, 30 Electrical Loco Sheds, 30 EMU/DEMU/MEMU Car Shed, 94 Wagon Depot and 148 Coaching Depots.

Wagon Depot) and six PUs (selected units) as mentioned in the *Appendix – II and III* were selected for detailed examination.

The Performance Audit commenced with an Entry Conference (October 2012) with the concerned executives of the RB and respective Head of Departments at the Zonal and Production Unit level wherein the audit objectives, scope of study and methodology were discussed. Records of all the 17 Zonal Railways (ZRs) relevant to the scope of this performance review were examined to verify the extent of statutory compliance of State and Central Pollution Control Boards including the status of implementation of the instructions/guidelines issued from time to time by the RB. Records relating to monitoring at the RB level regarding statutory compliance of the ZRs in dealing with the environmental issues at workshops sheds and PUs were also examined.

In addition to obtaining feedback from the workers through survey questionnaire, joint inspection was also conducted with Railway officials at Workshops, Sheds and PUs.

The Draft Review Report was issued to RB in September 2013. The audit findings were discussed in an Exit Conference held in November 2013 with the concerned Executives at the RB. Similar Exit Conferences were also held by the Principal Directors of Audit in the zones with the concerned Head of the departments at the Zonal levels. The views of the RB on the audit findings have been incorporated in the report.

1.5 Acknowledgement

The co-operation extended by the ZRs and also by RB in conducting this Performance Audit is acknowledged.