#### Chapter II

#### Audit framework

## 2.1 Audit objectives

The objectives of the Performance audit were to ascertain whether:

- the strategy and planning envisioned for SWM by the ULBs were in accordance with the extant provisions and supported by an adequate institutional mechanism;
- management of Municipal solid waste and Special waste<sup>3</sup> (segregation, collection, transportation, processing and disposal) was effective, efficient, and carried out economically and scientifically; and
- the risks to environment posed by waste were identified and minimised.

# 2.2 Audit criteria

The criteria for evaluating the performance of SWM were derived mainly from:

- The Municipal Solid Waste (Management and Handling) Rules, 2000 and Solid Waste Management Rules, 2016 and respective Manuals (Ministry of Urban Development);
- The Bio-medical Waste (Management and Handling) Rules, 1998 and Biomedical Waste Management Rules, 2016;
- The Plastic Waste (Management and Handling) Rules, 2011 and Plastic Waste Management Rules, 2016;
- The E-Waste (Management and Handling) Rules, 2011 and E-waste Management Rules, 2016;
- The Construction and Demolition Waste Management Rules, 2016;
- The State Policy on Integrated Solid Waste Management, 2004; and
- Central Pollution Control Board (CPCB)/Karnataka State Pollution Control Board (KSPCB) guidelines issued from time to time and National Green Tribunal (NGT) orders and other Court orders.

## 2.3 Audit scope

The performance audit on 'Solid Waste Management in Urban Local Bodies' was carried out during April to November 2017. The period of audit coverage was from April 2012 to March 2017. It involved examination of the records relating to SWM in the Directorate of Municipal Administration, District Urban Development Cells (DUDC), KSPCB and its Regional Offices and 35 ULBs<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Special waste includes e-waste, BMW, slaughterhouse waste and plastic waste, *etc*.

<sup>&</sup>lt;sup>4</sup> This office conducted a performance audit on SWM in BBMP which featured in the Audit Report on Local Bodies for the year ended March 2013 (Paragraph 4.1 of Report No. 5 of the year 2014). Hence, BBMP was kept outside the scope of this performance audit. The report was discussed by the Committee on Local Bodies and Panchayat Raj Institutions during April-May 2016 and the Report (19<sup>th</sup> Report) containing the recommendations thereof was placed in the Legislature on 18.7.2016. There were no recommendations with reference to the process of SWM.

(Exhibit 2.1) across all the four strata in 19 districts as shown in Table 2.1. The list of selected ULBs is given in Appendix 2.1.

Sl.	Category of ULBs	Total number of ULBs in the	Number of ULBs
No.	Category of ULBs	State	selected for test-check
1	City Corporations	10 excluding Bruhat Bengaluru Mahanagara Palike (BBMP)	4 (40%)
2	City Municipal Councils	57	11 (19%)
3	Town Municipal Councils	114	12 (11%)
4	Town Panchayats	89	8 (9%)

 Table 2.1: Number of ULBs selected for test-check

We adopted simple random sampling method on each tier of ULBs under each Revenue division to select the sample. The selected ULBs accounted for approximately 28 *per cent* of waste generated in the State during the review period.

# 2.4 Audit methodology

An entry conference was held on 17 May 2017 with the Secretary, Urban Development Department (UDD), in which the audit methodology, scope, objectives and criteria were explained. The audit methodology involved document analysis, responses to audit queries, joint physical verifications (JPV) with municipal staff and collection of photographic evidence. While framing the conclusions and recommendations, good practices regarding waste management in Karnataka and in other states have also been quoted to illustrate the fact that these practices are possible in the field of waste management and can serve as examples to policy makers while framing policies. The results of the performance audit were discussed with the Secretary, UDD in an exit conference on 23 April 2018. Replies of the State Government were received on 16 May 2018 and have been suitably incorporated.

Audit also consulted Mrs. Almitra Patel, Member of the Supreme Court Committee on Solid Waste Management, and engaged Centre for Environmental Education, Research and Advocacy (CEERA), National Law School of India University, Bengaluru, for their domain knowledge and inputs on issues pertaining to SWM (Brief profile of Mrs. Almitra Patel is given in **Appendix 2.2**).

## 2.5 Acknowledgement

Audit acknowledges the cooperation and assistance extended by the State Government, all the ULBs, KSPCB and Regional Pollution Control Boards (RPCBs) in conducting the performance audit.

#### **Audit findings**

Audit findings are organised into three sections and are discussed in the following chapters.

# **EXHIBIT 2.1 - SAMPLE SELECTION FOR SWM**



