CHAPTER 4

Effectiveness of Monitoring Waste Management





Effectiveness of Monitoring Waste Management

Audit noticed that in 28 test-checked ULBs, water quality testing within 50 meters of the periphery of the landfill site was not done at landfill/dumpsites during 2016-17 to 2021-22. In 32 test-checked ULBs, ambient air quality testing was not done at landfills/dumpsites during 2016-17 to 2021-22. There was a shortfall of 17 per cent in submission of annual reports related to municipal solid waste to MPCB by the test-checked ULBs during 2016-17 to 2019-20. There was no shortfall in 202-21 and 2021-22. None of the test-checked ULBs submitted annual reports under the Plastic Waste Management Rules, 2016 to UDD. The State Level Advisory Committee constituted under the Solid Waste Management Rules was not adequately represented.

The Solid Waste Management Rules, 2016 (SWM Rules) stipulate monitoring of landfill sites for air and water quality by the Maharashtra Pollution Control Board (MPCB). The SWM Rules, prescribed submission of annual report to MPCB containing data on the generation of waste, segregation of waste, collection of waste, processing of waste, dumpsites, and processing facilities. The Plastic Waste Management Rules, 2016 also required submission of annual report to the Urban Development Department, Government of Maharashtra (UDD) containing details of mechanisms put in place for management of plastic waste in the area under jurisdiction, details of agencies involved in door-to-door collection, *etc*.

The fourth objective of the Performance Audit was to assess whether the monitoring mechanism in waste management was adequate and effective. Audit noticed inadequate water and air quality monitoring at landfill/dumpsites in the test checked ULBs and shortfall in the submission of annual reports to State Pollution Control Board and State Government.

4.1 Inadequate water and air quality monitoring

As per Rule 15(y) of SWM Rules, ULBs are required to obtain authorisation from the State Pollution Control Board for setting up sanitary landfills if the volume of waste is exceeding five metric tons per day. Further, as per Schedule I of SWM Rules, the groundwater quality within 50 meters of the periphery of the landfill site was required to be monitored periodically, covering different seasons in a year, to ensure that the groundwater was not contaminated.

The ambient air quality at the landfill site and in the vicinity was also required to be monitored regularly. The ambient air quality was required to meet the standards prescribed by the Central Pollution Control Board for industrial areas.

The State Pollution Control Board was responsible for the monitoring of environmental standards and adherence to conditions specified under SWM Rules for processing and disposal sites.

- **A.** Out of 19 ULBs which had sanitary landfill, 16 ULBs had waste collection more than five metric tons per day. As per the information received (October 2024) from MPCB, 10 out of these 16 ULBs had not obtained authorisation of sanitary landfill from MPCB. Further, only two out of remaining six ULBs had valid authorisation as on date (October 2024).
- **B.** The number of water quality tests done by MPCB during 2016-17 to 2021-22 in the 45 test-checked ULBs is shown in **Appendix 4.1**.

Audit observed the following:

- Testing of water quality within 50 meters of the periphery of the landfill site in 28 out of 45 test-checked ULBs was not conducted by MPCB during 2016-17 to 2021-22.
- In 13²⁶ out of the 45 test-checked ULBs, water quality testing done by MPCB was less than 18 times²⁷ during 2016-17 to 2021-22 and ranged from one (Amalner, Gangapur, Kankavli, Narkhed and Wardha) to 12 times (Chhatrapati Sambhajinagar).
- C. As per paragraph 3.7.7 of MSW Manual 2016, the number of air quality tests required to be conducted on the basis of population ranged from one to six times a year. The number of air quality tests done by MPCB during 2016-17 to 2021-22 in the 45 test-checked ULBs is shown in **Appendix 4.2**.

Audit observed the following in that regard:

- The ambient air quality at the landfill site and in the vicinity of landfill site was not monitored during 2016-17 to 2021-22 in 32 out of the 45 test-checked ULBs; and
- In 11²⁸ (except Brihanmumbai Municipal Corporation and Navi Mumbai Municipal Corporation) out of the 45 test-checked ULBs, testing of air quality was not done regularly.

Amalner, Ballarpur, Chhatrapati Sambhajinagar, Gangapur, Jalna, Kankavali, Khopoli, Lakhandur, Narkhed, Nashik, Pandharpur, Pune and Wardha.

Considering a minimum of three tests corresponding to three seasons in a year \times six years (2016-17 to 2021-22) *i.e.*, 18 tests.

Amalner, Ballarpur, Chhatrapati Sambhajinagar, Ichalkaranji, Muktainagar, Nandurbar, Nashik, Narkhed Niphad, Pandharpur, and Wardha.

4.2 Non-submission of Annual Reports to MPCB and State Government

SWM Rules and PWM Rules prescribed submission of annual reports to MPCB and UDD. The status of submission of such annual reports is discussed below.

4.2.1 Annual Report under Solid Waste Management Rules

An annual report regarding Solid Waste Management was required to be submitted by each ULB to MPCB. The report inter alia contains data on the generation of waste, segregation of waste, collection of waste, door-to-door collection, processing of waste, dumpsites and processing facilities. The number of test-checked ULBs which did not submit annual reports to MPCB during 2016-17 and 2019-20 is shown in **Table 4.1**.

Table 4.1: Status of submission of Annual Reports by test-checked ULBs

Year	Total no. of annual reports to be submitted by test-checked ULBs	No. of annual reports not submitted to MPCB by test- checked ULBs	Shortfall in submission (percentage)
2016-17	45	14	31
2017-18	45	13	29
2018-19	45	2	4
2019-20	45	2	4
Total	180	31	17

Source: Annual Reports of MPCB

As seen from **Table 4.1**, as against 180 annual reports to be submitted, 31 (17 *per cent*) annual reports were not submitted by 45 test-checked ULBs to MPCB during 2016-17 to 2019-20. However, during 2020-21 and 2021-22, all the 45 test-checked ULBs submitted the annual reports.

4.2.2 Annual Report under Plastic Waste Management Rules

As per Rule 17(2) of PWM Rules all ULBs are required to submit a annual report in Form V to the Secretary, UDD under intimation to MPCB. The Form V contains summary of the mechanisms put in place for management of plastic waste in the area under jurisdiction along with the details of agencies involved in door-to-door collection, details of infrastructure required, quantity of plastic waste generated, collected, channelised for recycling during the year, the difficulties being experienced by the local body in complying with provisions of these rules including the financial constraints, etc. None of the test-checked ULBs submitted such annual reports to the Secretary, UDD, GoM under intimation to MPCB during the period 2016-17 to 2021-22.

During the Exit Conference, the Principal Secretary stated (August 2022) that proactive steps would be taken to obtain information from ULBs.

4.3 Constitution of the State Level Advisory Committee

Rule 23 of SWM Rules, provides for the formation of State level Advisory Board (SLAB) consisting of 22 members²⁹ within six months from the date of notification of the Rules in April 2016. The SLAB was required to review the matters related to the implementation of Rules, State policy and strategy on solid waste management, and advice the State Government for taking measures that are necessary for expeditious and appropriate implementation of the SWM Rules.

Audit noticed that GoM had constituted State Level Advisory Committee (SLAC) consisting of 10 members³⁰ in September 2017, after a delay of 11 months. Further, the SLAC so constituted did not have the following as its members (i) Chief Town Planner of the State (ii) three representatives from the Local bodies (iii) two representatives from Census town or urban agglomeration (iv) one representative from a body representing Industries at the State or Central level (v) two subject experts (vi) one representative each from Agriculture and Labour Department of the State Government and one representative of reputed NGO.

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Secretary, UDD. one representative of Rural Development (RDD), one representative of the Revenue Department, one Department representative of the Ministry of Environment, Forest and Climate Change of GoI, one representative of UDD of GoI, one representative of RDD of GoI, one representative of Central Pollution Control Board (CPCB), one representative of MPCB, one representative of Indian Institute Technology/National Institute of Technology, Chief Town Planner the State, three representative of local bodies, two representatives from Census town or urban agglomeration, one representative of reputed NGO, one representative from a body representing Industries at the State or Central level, one representative from waste recycling industry, two subject experts, one representative each from Agriculture, and Labour Department of the State Government.

Principal Secretary, UDD as President, Director of Swachh Maharashtra Mission as Member Secretary, one member of RDD not below the rank of Joint Secretary, representative of Revenue & Forest Department, representative of Ministry of Environment, Forest and Climate Change of GoI, representative of UDD of GoI, representative of RDD of GoI, representative of CPCB, Member Secretary of MPCB, a representative of IIT/NIT.

During the Exit Conference, the Principal Secretary stated (August 2022) that experts from respective fields would be inducted in the SLAC.

Recommendation 11: The Government may ensure that the State Level Advisory Committee constituted under the Solid Waste Management Rules is adequately represented as prescribed in the Rules.

(C.M. SANE)

Mumbai, Principal Accountant General (Audit)-I,
The 21 January 2025 Maharashtra, Mumbai

Countersigned

(K. SANJAY MURTHY)

Comptroller and Auditor General of India

New Delhi, The 28 January 2025