

Chapter VII

Monitoring and Evaluation

7.1 Monitoring by State Level Advisory Body

Rule 23(2) & (3) of SWM Rules, 2016, mandates that the SLAB shall meet at least once in every six months to review the matters related to implementation of these rules, State Policy and Strategy on Solid Waste management and give advice to the State Government for taking measures that are necessary for expeditious and appropriate implementation of these Rules. The copies of the review report shall be forwarded to the State Pollution Control Board or Pollution Control Committee for necessary action.

State Level Advisory Body in the State was constituted¹⁷⁰ in July 2017 and it was mandated that it shall meet at least once in every three months (four meetings in a financial year).

Audit observed that after SLAB constitution, only two meetings (October 2017 and March 2018) were held during 2017-22 against mandatory 19 meetings (3 meetings in 2017-18 and 4 meetings each in a year from 2018-19 to 2021-22).

Non-conduct of periodical meetings by SLAB even after a lapse of five years of the last meeting in March 2018, indicated lack of monitoring by SLAB on SWM activities in the State.

7.2 Monitoring by Telangana State Pollution Control Board

Rule 16(1) of SWM Rules, 2016, stipulates that SPCB should enforce the Rules in the State through ULBs and review implementation of these Rules at least twice in a year in close coordination with concerned Directorate or Municipal Administration or Secretary in charge of State Urban Development Department.

Rule 24 (3) of the SWM Rules, 2016 stipulates that each State Pollution Control Board or Pollution Control Committee as the case may be, shall prepare and submit the consolidated annual report to the CPCB and MoUD on the implementation of these rules and action taken against non-complying local body by the 31st day of July of each year in Form-V.

Annual Reports on implementation of SWM, Rules 2016 were submitted by TSPCB to CPCB during 2017-22 and the latest Report for the year 2021-22 was submitted to CPCB on 23 July 2022.

Audit observed the following on monitoring by TSPCB:

- a. Monitoring the performance of MSW T&D facility set up at Jawaharnagar was not carried out for compliance with standards specified in Schedules-I and II of SWM Rules, 2016.

¹⁷⁰ G.O. Rt.No.447 dated 26 July 2017 of MA&UD Department

- b.** Telangana State Pollution Control Board is the competent authority for levying the environmental compensation for open waste burning done by ULBs/GPs. However, burning of MSW in dumpsites was noticed during JPV of four ULBs (Khanapur, Mahabubnagar, Mancherial and Nagaram, *Table-5.6, Para 5.3.3 refers*). However, penalties levied by TSPCB were not on record.

Further, dumping of MSW by Yellareddy ULB at a water body also indicated laxity on the part of monitoring by TSPCB (*Table- 5.6/Sl.No.6, Para 5.3.3 refers*).

- c.** As per Schedule-I(A)(vii) of SWM Rules, 2016, the habitations should be 200 meters away from landfill site. However, in the Jawaharnagar landfill site, the habitations were only 100 m away, as per the data furnished by GHMC.

The State Government replied (September 2023) that subsequent to the establishment of Jawaharnagar T&D facility in the year 2012, encroachments happened and habitations came out near to the site.

The reply underscores the fact that declaration of buffer zone by the State Government could have prevented encroachments (*Para 5.3.2 refers*).

- d.** Schedule-I(E)(i) of SWM Rules, 2016 stipulates that groundwater quality within the landfill site should not be contaminated. The Concessionaire had conducted ground water tests on 798 samples collected from the Jawaharnagar landfill site during 2017-18 to 2021-22 and none of the samples tested met the prescribed standards. Even the ground water sample test reports¹⁷¹ of TSPCB furnished to Audit showed that the test results did not meet the prescribed standards.

The State Government replied (September 2023) that contamination of the ground water was due to legacy waste dumped in the site before establishment of T&D facility for long time since 2000. It was stated that after establishing the T&D facility plant in 2012, measures were taken up to reduce the pollution.

The tests were conducted on samples collected during 2017-18 to 2021-22 and despite establishing LCS and capping of legacy waste, the ground water samples tested did not meet the acceptable limits.

- e.** Though Consent for Operations of Composting Facility and Leachate collection & treatment system in Jawaharnagar T&D facility was accorded by TSPCB in February 2015 (*Para 4.4.2, Table-4.6 refers*), GHMC started its operations of the two Waste Processing Facilities in February 2012 and April 2013 respectively, which was more than one year before permission given by TSPCB.

The State Government replied (September 2023) that in view of Hon'ble High Court orders in 2011 to start the T&D facility immediately, the Concessionaire started T&D facility for fresh waste coming from the GHMC area duly reclaiming the land in phases without waiting for the Consent for Operation from the TSPCB.

¹⁷¹ January to March 2019 (5 sample reports), May to September 2019 (10 sample reports), June 2021 (3 sample reports) and November 2021 (3 sample reports)

The reply was not in consonance with the fact that the said Hon'ble High Court orders pertain to the Writ Petition No.2546 of 2011 filed by the Greater Hyderabad Municipal Employees Union against the GHMC for entrustment of work and operation of T&D facility at Jawaharnagar to the Concessionaire through the CA. This petition was dismissed by the Hon'ble High Court.

Hence, starting of T&D facility operations by the Concessionaire before TSPCB approval/permission indicated lack of monitoring by TSPCB.

- f. There were instances of transfer of MSW in open vehicles instead of in closed manner in the test-checked other 14 ULBs (*Para 4.3.1 refers*), which was not properly monitored by the TSPCB.

The above Audit observations clearly indicated that there was laxity and ineffective monitoring by TSPCB on implementation of SWM Rules, 2016 in the State.

7.3 Environmental Monitoring by Telangana State Pollution Control Board

Solid Waste Management Rules, 2016 stipulate regular monitoring of soil, water, and air quality around the municipal waste processing, treatment, and disposal facility. Schedules-I and II of SWM Rules, 2016 stipulate environmental norms for treatment, processing, and disposal facilities. Operators of MSW treatment, processing, and disposal facilities are responsible for regular monitoring of these parameters. The SPCB should monitor the compliance of standards for groundwater, ambient air, leachate, compost quality, and incineration as specified under Schedules-I and II (Section 6.5.1 of MSWM, Manual, 2016, Part-II).

Audit observed that Environmental Monitoring of the Jawaharnagar T&D facility was not done by TSPCB and there were no inspection/monitoring reports on compliance to the standards for groundwater, ambient air, leachate, compost quality, and incineration as specified under Schedules-I and II. Further, reply of the GHMC that three ULBs-Dammaiguda, Jawaharnagar and Nagaram nearby Jawaharnagar T&D facility were affected, underscores the fact that Jawaharnagar T&D facility was not maintained as per prescribed environmental standards, which indicated lack of adequate monitoring by TSPCB.

The State Government replied (September 2023) that TSPCB Regional office was inspecting regularly and collecting the ground water samples and monitoring the ground water.

The reply of the State Government confirms that the monitoring by TSPCB in Jawaharnagar T&D facility was only to the extent of testing ground water samples and evident from the documents furnished to Audit. The monitoring was not with regard to compliance of the standards of all parameters as specified in Schedules-I and II under the Rules and the MSWM Manual, 2016 *ibid*.

7.4 Monitoring and Evaluation System and Ward Level Committees in the Urban Local Bodies

Section 6.1 of MSWM, Manual, 2016 (Part-II) stipulates that a comprehensive Monitoring and Evaluation (M&E) system should be adopted for proper implementation of the MSWM plan and for assessing progress toward meeting the targets of the plan. The head of the MSWM department should be responsible for M&E. A dedicated M&E Team should be constituted from amongst the MSWM department staff, with distinct roles and responsibilities.

Rule 12 of SWM Rule, 2016 stipulates that at District level, District Collector should review the performance of ULBs on waste segregation, processing, treatment and disposal and take corrective measures in consultation with the CDMA. Audit observations in this regard are as follows.

In GHMC: Though GHMC created a separate SWM Department (*Para 2.8 refers*), a dedicated M&E Team was not constituted from amongst the SWM Department. There were no Ward Level Committees for reviewing the performance of SWM activities during the audit period 2017-22.

The State Government replied (September 2023) that GHCM had formed (May 2023) Ward Level Committees for monitoring of Solid Waste Management.

In test-checked other 14 ULBs: There was no separate SWM Department in the 14 ULBs and hence no dedicated M&E Team. Further, documentary evidence for having constituted dedicated Ward Level Committees for reviewing the performance of SWM activities and also detailed reviews conducted by the District Collectors were not furnished to Audit.

Hence, there was no dedicated M&E Team in all the test-checked ULBs to monitor the SWM activities indicating no Monitoring mechanism.

7.5 Submission of Annual Reports by Urban Local Bodies

Rule 24(2) of SWM Rules, 2016 mandates that the local body shall submit its annual report in Form-IV to State Pollution Control Board or Pollution Committee and the Secretary-in-Charge of the Department of Urban Development of the concerned State or Union Territory in case of metropolitan city and to the Director of Municipal Administration or Commissioner of Municipal Administration or Officer in-charge of Urban local bodies in the State in case of all other local bodies of State on or before the 30th day of June every year.

In GHMC: Annual Reports for the years 2018-19 to 2021-22 were submitted by GHMC to TSPCB in the month of July of each succeeding year. Documentary evidence for submission of Annual Report for the year 2017-18 to TSPCB and copy of the same were not furnished to Audit. Further, the MSW transported & processed and disposed figures as per Annual Reports for the year 2018-19 to 2021-22 and the corresponding data furnished to Audit were at variance as detailed in **Table-7.1**.

Table-7.1: Statement showing MSW transported & processed and disposed figures between Annual Reports of GHMC on SWM for the year 2018-22 and the corresponding data furnished to Audit

(Figures in MT)

Year	As per Annual Reports of GHMC		As per data furnished to Audit		Difference in MSW [Excess (+)/Less (-)]	
	Transported and Processed*	Disposed	Transported and Processed*	Disposed	Transported and Processed*	Disposed
2018-19	20,24,290	3,17,477	20,00,120	3,17,500	24,170	(-)23
2019-20	21,06,050	3,17,915	22,23,793	3,34,370	(-)1,17,743	(-)16,455
2020-21	20,69,185	3,61,715	21,92,926	3,83,385	(-)1,23,741	(-) 21,670
2021-22	24,60,465	3,69,015	24,23,637	3,67,441	36,828	1,574

Source: Annual Reports on SWM for the years 2018-22 of GHMC and data furnished by GHMC

*The above figures Include MSW from other ULBs transported with the permission of GHMC to Jawaharnagar T&D facility for processing & disposal

Greater Hyderabad Municipal Corporation did not furnish a reply to the differences pointed out by Audit. Hence, the correctness or otherwise of the data furnished by GHMC to Audit could not be vouchsafed.

In test-checked other 14 ULBs: Nine ULBs¹⁷² stated that they had prepared and submitted to TSPCB Annual Reports for the years 2017-22 but documentary evidence was not produced to Audit. The remaining five ULBs¹⁷³ stated that they had not prepared Annual Reports for the years 2017-22.

7.6 Submission of Annual Reports by the Concessionaire

Rule 24(1) of SWM Rules, 2016 mandates that the operator of facility¹⁷⁴ shall submit the annual report to the local body in Form-III on or before the 30th day of April every year.

The Concessionaire operating the Jawaharnagar T&D facility had submitted Annual Reports for the years 2017-18 to 2021-22 to GHMC. However, Audit observed that the figures of MSW transported and processed at Jawaharnagar T&D facility as reported in the Annual Reports 2018-19 to 2021-22 submitted by GHMC to TSPCB were at variance with the corresponding figures mentioned in the Annual Reports submitted by the Concessionaire to GHMC as detailed in **Table-7.2** and **Table-7.3**.

Table-7.2: Differences in MSW transported figures between Annual Reports for the year 2018-22 of GHMC and the Concessionaire

(Figures in MT)

Year	MSW transported *		Difference in MSW [Excess (+)/Less (-)]
	As per Annual Report of GHMC	As per Annual Report of the Concessionaire	
2018-19	20,24,290	20,24,254	36
2019-20	21,06,050	21,18,825	(-)12,775
2020-21	20,69,185	21,92,920	(-)1,23,735
2021-22	24,60,465	24,60,465	NIL

Source: Annual Reports on SWM for the years 2018-22 of GHMC and the Concessionaire

*The above figures Include MSW from other ULBs transported to Jawaharnagar T&D facility for processing & disposal

¹⁷² Bollaram, Chandur, Khanapur, Khammam, Kothagudem, Mancherla, Nagaram, Peerzadiguda and Yellareddy¹⁷³ Haliya, Kalwakurthy, Mahabubnagar, Wardhannapet and Zaheerabad¹⁷⁴ According to SWM Rules, 2016, "operator of a facility" means a person or entity, who owns or operates a facility for handling Solid Waste which includes the local body and any other entity or agency appointed by the local body

Table-7.3: Differences in MSW processed figures between Annual Reports for the year 2018-22 of GHMC and the Concessionaire

(Figures in MT)

Year	MSW processed*		Difference in MSW [Excess (+)/Less (-)]
	As per Annual Report of GHMC	As per Annual Report of the Concessionaire	
2018-19	19,88,155	19,88,119	36
2019-20	21,06,050	21,18,825	(-)12,775
2020-21	20,69,185	21,71,020	(-)1,01,835
2021-22	24,60,465	24,26,885	33,580

Source: Annual Reports on SWM for the years 2018-22 of GHMC and the Concessionaire

*The above figures include MSW from other ULBs transported to Jawaharnagar T&D facility for processing & disposal

Greater Hyderabad Municipal Corporation replied (May 2023) that the processed quantities are same as the transported quantities in the prescribed format Form-IV for Annual Report as per SWM, Rules 2016, but TF payment was made on the quantities certified by the Independent Engineer (IE) after deduction of quantities of inert material. It was stated that the figures provided in the Annual Reports were tentative in nature.

Greater Hyderabad Municipal Corporation also replied (June 2023) that Annual Reports were submitted every year to TSPCB based on the certified figures by IE and whenever there was a situation of non-availability of IE certified figures, the monthly report of the Concessionaire was taken for the gap periods.

The reply does not clearly answer the reasons for differences pointed out by Audit. The figures reported in the Annual Reports should be reconciled by GHMC in consultation with the Independent Engineer and with the Concessionaire before its incorporation in the Annual Reports. As the figures are reported to TSPCB for incorporation in CPCB, New Delhi SWM Annual Reports, certified figures only need to be adopted instead of tentative figures.

The State Government replied (September 2023) that regarding preparation of Annual Accounts by GHMC and the Concessionaire, only figures certified by the IE were adopted in the Annual Accounts for the year 2022-23.

The reply confirms the fact that the previous Annual Accounts for the years 2017-22 were prepared based on tentative figures without adopting IE certified figures.

7.7 Complaint redressal system in the Urban Local Bodies

Section 6.4 of MSWM Manual, 2016 (Part-II) provides for a complaint redressal system to voice the citizen complaints and grievances regarding provision of MSWM services and also helps in promoting efficiency and transparency at the ULB level. A complaint redressal system is effectively supported through the introduction of a citizen charter. The citizen's charter is a written voluntary declaration by a ULB with the basic objective to empower the citizens to get public service in a given time frame.

In GHMC: GHMC stated that it had established a Command Control Room to keep track of various complaints/grievances received, to be attended by the respective field staff with their individual Log-in IDs and passwords. The complaints/grievances can be registered by

the citizens through (i) GHMC’s twitter handle, (ii) My GHM mobile app, (iii) Toll free no. and (iv) GHMC official website. Further, it was stated by GHMC that all data was available online.

Audit observed from the year-wise data on redressal of complaints received during 2017-22 that redressal of complaints was done within a minimum time of 48 hours and not within 24 hours as mandated in the SLB Handbook of MoUD, GoI (*Para 2.7.1, Sl.No. (b) refers*).

The State Government replied (September 2023) that redressal of complaints within a minimum time of 24 hours would be taken up as per the observations of the Audit.

In test-checked other 14 ULBs: It could be observed from *Para 2.7.1, Table-2.5, Appendix-2.5* on SLBs declarations (2021-22), that out of 12 ULBs which furnished data, seven ULBs¹⁷⁵ had declared 51 to 80 *per cent* SLB achievement with regard to efficiency in redressal of customer complaints, four ULBs¹⁷⁶ made SLB achievement declarations ranging from 81 to 100 *per cent* and Zaheerabad ULB made zero *per cent* achievement declaration. However, documentary evidence for total number of MSWM related complaints resolved against total number of MSWM complaints received within 24 hours was not made available to Audit, to assess the efficiency of complaints redressal system against the SLB indicator.

7.8 Compliance to National Green Tribunal directions by the Urban Local Bodies

The National Green Tribunal was established in October 2010 under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

7.8.1 Implementation of Action Plan in the test-checked Urban Local Bodies

The State Government in compliance with the Hon’ble NGT orders (December 2016, February 2017 and March 2017) on implementation of SWM had submitted an Action Plan for SWM to CPCB.

The following comments and recommendations were made by CPCB in March 2017:

- The Action Plan to be prepared for each activity of SWM Rules, 2016 with timeline.
- The detailed road map for implementing action plans was not shown.
- State Policy/Strategy needs to be adopted earlier.
- There was no assessment of waste characteristics.

The extent of implementation of the Action Plan in the test-checked ULBs as observed in audit are given in **Table-7.4**.

¹⁷⁵ Chandur, Haliya, Khanapur, Khammam, Mancherla, Peerzadiguda and Yellareddy

¹⁷⁶ Bollaram, Kalwakurthy, Mahabubnagar and Nagaram

Table-7.4: Extent of implementation of the Action Plan submitted by the State Government in compliance to NGT orders and status in ULBs

Sl. No	Action Plan item proposed by the State Government	Implementation status as observed in GHMC during audit	Implementation status as observed in test-checked other 14 ULBs during audit
1.	IEC and Awareness by March 2017	The IEC and awareness activities conducted by GHMC and test-checked other 14 ULBs were found to be deficient when compared to the suggested IEC activities as per SWM Rules, 2016 and coverage of target stakeholders as per MSWM, Manual 2016 (<i>Para 7.10 refers</i>).	
2.	Inventory of Bulk Generators by March 2017	There are 1,876 BWGs identified in GHMC area. User charges have been fixed and the same are collected. (<i>Para 3.3 refers</i>)	Not furnished to Audit.
3.	Advisory Committee by June 2017	The State Level Advisory Board in the State was constituted in July 2017 (<i>Para 7.1 refers</i>).	
4.	State Policy/ Strategy by June 2017	State Policy and Strategy on Solid Waste Management was issued in September 2018 (<i>Para 2.1 refers</i>) with a delay of 14 months.	
5.	Identification of landfill sites by March 2018	Landfill site set up only at Jawaharnagar T&D facility.	In the test-checked other 14 ULBs, landfill sites are yet to be identified (<i>Para 5.3.1 refers</i>). CDMA replied (June 2023) that establishment of scientific landfill sites was proposed under SBM (Urban)-2.0.
6.	100 per cent door to door waste collection by June 2017	Achieved as per the data furnished by GHMC.	There was inadequate coverage of wards, Hotels, Restaurants, Shops, etc., in three test-checked ULBs in door-to-door collection of waste (<i>Para 4.2.1 refers</i>).
7.	Frame bye-laws by June 2017	GHMC submitted bye-laws to the State Government (December 2019) and it is under review/approval of the Government.	CDMA replied (June 2023) that a Model draft bye-laws was circulated to all the ULBs for framing the bye-laws.
8.	Material Recovery Facility (MRF) by December 2017	In GHMC, out of 17 TS and 28 SCTPs, DRCCs were established in 13 TS and in one SCTP at Auto Nagar (<i>Para 4.1.2 refers</i>).	Dry Resource Collection Centres (DRCCs) were established in 10 out of 14 ULBs (<i>Para 4.1.2 refers</i>).
9.	Onsite composting of horticulture waste by March 2018	GHMC stated that pit composting was established in 482 parks till 2021-22. Compost quantity of 573 MT was generated annually in six Zones of GHMC and the same was utilised in the parks.	CDMA stated that all Bulk Waste Generators were practicing onsite composting including at parks. However, list of Bulk Waste Generators was not furnished to Audit.
10.	DPR/processing and disposal facilities to be developed by March 2018	Processing and Disposal facility set up only at Jawaharnagar. No DPR/additional T&D facility set up till date (<i>Para 5.2.4 refers</i>).	CDMA stated that DPRs for SWM were prepared under SBM-Urban and sample copy of one DPR pertaining to Adibatla Municipality was furnished to Audit. Copies of DPRs of test-checked 14 ULBs were not furnished to Audit.
11.	Reclamation/bio-mining of old dumpsites by March 2019	Reclamation was done at two sites at Jawaharnagar and Fathullaguda. Gandhamguda and Shamshiguda sites could not be reclaimed due to title disputes (<i>Para 2.1.1, Table-2.1, Sl.No.11 refers</i>).	State Government had taken initiative for bio-mining of legacy waste and the process of reclamation/bio-mining was yet to be completed.

Thus, it could be observed from **Table-7.4** that the proposed Action Plan was not fully implemented in the test-checked other 14 ULBs, even after lapse of more than three years.

The State Government replied (September 2023) regarding actionable point at **Sl.No.8** of **Table-7.4** that due to space constraints the DRCCs were not established in other TS/SCTPs in GHMC. However, the waste collectors operating SATs are recovering the material during door-to-door collection of waste and are depositing the recyclables at nearest DRCC/ directly selling to recyclers.

7.8.2 Constitution of Special Task Force to oversee the implementation of Solid Waste Management Rules, 2016

In compliance to the NGT orders dated 16 January 2019, the State Government issued orders¹⁷⁷ for constitution of Special Task Force with the following members in the districts to oversee the implementation of SWM Rules, 2016:

- a. District Collector
- b. Superintendent of Police
- c. Regional Officer, TSPCB and
- d. One person to be nominated by the Chairperson, District Legal Services Authority

Audit enquired about the constitution of Special Task Force, details of year-wise meetings conducted, recommendations made and follow up action taken by the test-checked ULBs.

Greater Hyderabad Municipal Corporation replied (June 2023) that letters were addressed to the District Collectors of the districts in GHMC area calling for the required information and that the same would be submitted in due course on receipt from the District Collectors concerned. The information is awaited as of March 2024.

In case of test-checked other 14 ULBs, reply from CDMA, Hyderabad is awaited as of March 2024.

The State Government replied (November 2023) that seven ULBs¹⁷⁸ Special Task Force headed by District Collector /Additional District Collector (ULBs) were constituted in the respective Districts of the ULBs. The details of year-wise meetings conducted by the Special Task Force, recommendations made and follow up action taken by the above ULBs were not furnished to Audit.

7.9 Swachh Survekshan awards received by the test-checked Urban Local Bodies in the State of Telangana

Swachh Survekshan is an annual cleanliness survey conducted by the Ministry of Housing & Urban Affairs (MoH&UA) (erstwhile MoUD). The primary goal of Swachh Survekshan is to encourage large scale citizen participation and to create awareness amongst all sections of society about the importance of working together towards making towns and cities better places to reside in. Swachh Survekshan has enthused cities with a healthy spirit of competition to improve the status of urban sanitation and ensure best service delivery to

¹⁷⁷ G.O. Rt.No.223 dated 11 March 2019 of MA&UD (T.P & E2) Department

¹⁷⁸ Bollaram, Chandur, Haliya, Mahabubnagar, Mancherla, Nagaram and Peerzadiguda

their citizens. The achievements in implementation of Swachh Survekshan improved the ranking as detailed below.

- a. Greater Hyderabad Municipal Corporation has improved its ranking from 22 in the year 2017 to 10th rank in the year 2022.
- b. Khammam and Mahabubnagar cities also improved their ranking from 236 and 249 in the year 2017 to 156 and 109 respectively in the year 2022.

The details of Swachh Survekshan awards received by the test-checked ULBs in the State of Telangana during the audit period 2017-18 to 2021-22 are given in **Table-7.5**.

Table-7.5: Swachh Survekshan Awards in Telangana for test-checked ULBs for the period from 2017 to 2022

Year	Number of cities participated in India	Number of Awards for Telangana	Name of the ULB and its rank	Remarks	
2017	434	Not available	Hyderabad (GHMC) - 22	--	
			Mahbubnagar-249		
			Khammam -236		
2018	4,230	7	GHMC -27	Best Capital City in more than 40 lakh population	
			Khammam -302		
			Mahbubnagar-161	Best city in South India in 25000-50000 population category for innovations and best practices	
			Peerzadiguda		
2019	4,237	8	Hyderabad (GHMC) -35	----	
			Khammam-261		
			Mahbubnagar-180		
			Peerzadiguda		Best city in South India in 25000-50000 population category for "Best City in Citizen feedback"
2020	4,242	18	GHMC- 23	Best Mega City in Citizen Feedback in above 40 lakh population category	
			Khammam-329		--
			Mahbubnagar-200	Fastest Growing City in 50 thousand – one lakh population category	
			Zaheerabad		
2021	4,320	10	GHMC- 13	Best self-sustainable city in more than 40 lakh population category	
			Khammam – 198		---
			Mahbubnagar -189		
2022	4,320	4	GHMC-10	Rapidly developing city – 1 st rank in South India	
			Khammam-156		
			Mahbubnagar-109		
			Chandur		Rapidly developing city – 2 nd rank in South India
			Wardhannapet		Swachhata League Award in 25,000-50,000 population category in South India
			Peerzadiguda		

Source: Information furnished by CDMA

7.10 Implementation of Information, Education and Communication activities

Behavioural change is vital for effective SWM. Information, Education and Communication is a multilevel tool for promoting and sustaining risk-reducing behaviour change in individuals and communities. Provisions of SWM Rules, 2016 (Rule 15 (zg)); Section 1.4.5.13 of MSWM, Manual, 2016 (Part-II) underscores the importance of IEC activities. The ULBs should create public awareness and educate waste generators to achieve the overall objectives of MSWM. The MSWM issues, target audience and objective under IEC activities are given in **Appendix-7.1**.

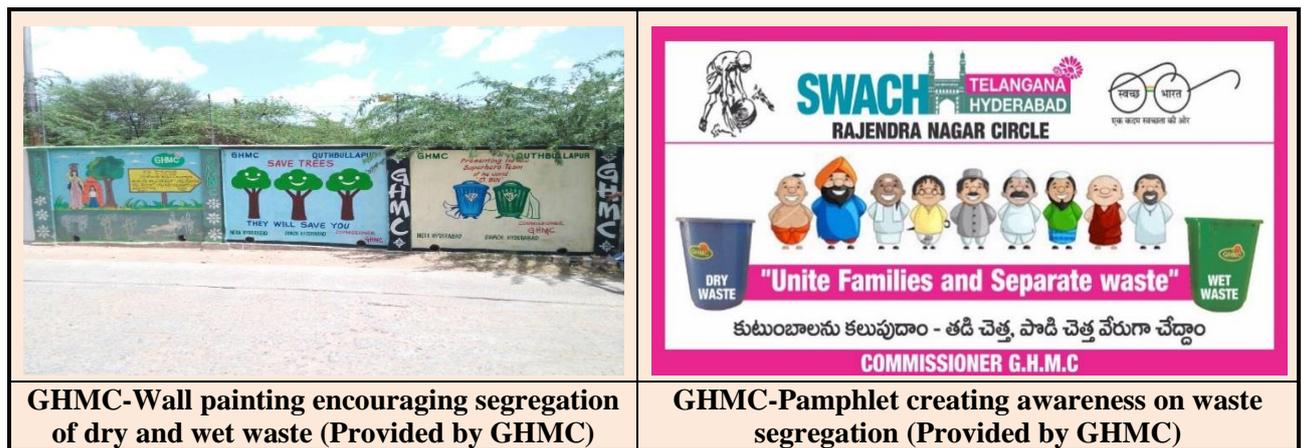
In reply to Audit enquiry, GHMC replied (May 2023) that the following awareness programmes were conducted by them:

- Door-to-Door awareness programmes on cleanliness to citizens and school students
- Meeting with Resident Welfare Associations on Home Composting.
- ‘Stop burning of waste and gain fresh air’- to Sweepers, SAT drivers and sanitary field assistants.
- ‘Let’s segregate’- for citizens
- ‘Reduction of waste’- for citizens

Some of the images showing awareness activities are shown in **Exhibit No.25 (A)**.

Exhibit No.25 (A), Para No.7.10

IEC activities by GHMC



In test-checked other 14 ULBs: The ULBs stated that they had conducted IEC activities, by issue of pamphlets, banners, stickers, wall paintings, mass communication, *etc.* Out of 14 ULBs, documentary evidence for IEC activities conducted were furnished by five ULBs as mentioned below:

- Bollaram ULB conducted IEC campaigns for SWM during Swachh Survekshan 2022.
- Chandur ULB- a wall painting encouraging segregation of dry and wet waste (**Exhibit No.25 (B)**).

- Khammam ULB- pamphlets distributed to households and establishments creating awareness on dry and wet waste segregation (**Exhibit No.25 (C)**).
- Khanapur ULB had conducted IEC campaigns on source segregation.
- Mahabubnagar ULB- pamphlet propagating importance of source segregation of dry, wet and hazardous waste in different bins (**Exhibit No.25 (D)**).

Further, Khammam ULB had also provided documentary evidence regarding conduct of awareness campaign under Swachh Survekshan on dry, wet and domestic hazardous waste segregation (i) through social media-twitter (**Exhibit No.25 (E)**), (ii) on streets, (iii) among women groups, (iv) through rangoli on streets (**Exhibit No.25 (F)**) and (v) in meetings.

However, Audit noticed that there were deficiencies in source segregation, coverage of households, handling and transportation of MSW and disposal of MSW in dumpsites. Hence there is a need to conduct more IEC activities in an effective manner by the ULBs.

Exhibits: Para No.7.10/IEC activities by the test-checked other ULBs

<p>Exhibit No. 25 (B) Chandur ULB-Wall painting encouraging segregation of dry and wet waste (JPV dated 11 January 2023)</p>	<p>Exhibit No.25 (C): Khammam ULB-distribution of pamphlets creating awareness on dry and wet waste segregation (dated 11 December 2021) Source: Provided by Khammam ULB</p>

Exhibits: Para No.7.10/IEC activities by the test-checked other ULBs

<p align="center">Exhibit No. 25(D): Pamphlet propagating importance of dry and wet waste segregation Source: Provided by Mahabubnagar ULB</p>	<p align="center">Exhibit No.25 (E) MSW awareness programme through Social Media-Twitter (dated 03 December 2022) Source: Provided by Khammam ULB</p>
<p align="center">Exhibit No. 25 (F) Khammam ULB-MSW awareness programme through Rangoli art (dated 13 January 2021) Source: Provided by Khammam ULB</p>	

7.11 Conclusion

Monitoring by TSPCB on implementation of SWM Rules, 2016 in the State indicated laxity, was not effective and there was also no monitoring in Jawaharnagar T&D facility of all the prescribed parameters of the standards specified in the Rules. Ward Level Committees were not constituted in the test-checked ULBs for reviewing the performance of SWM activities during the audit period. Dedicated Monitoring & Evaluation Team was not formed for monitoring of SWM activities in the test-checked ULBs.

7.12 Recommendations

- (i) *State Government should direct the TSPCB for ensuring monitoring of the implementation of SWM Rules, 2016 in the State and to take action on ULBs dumping MSW in water bodies.*
- (ii) *State Government should direct the ULBs for constitution of Ward Level Committees for reviewing the performance of SWM activities and also to set up dedicated Monitoring and Evaluation Team in all the ULBs to monitor the SWM activities.*