



Sanitation, Solid Waste Management

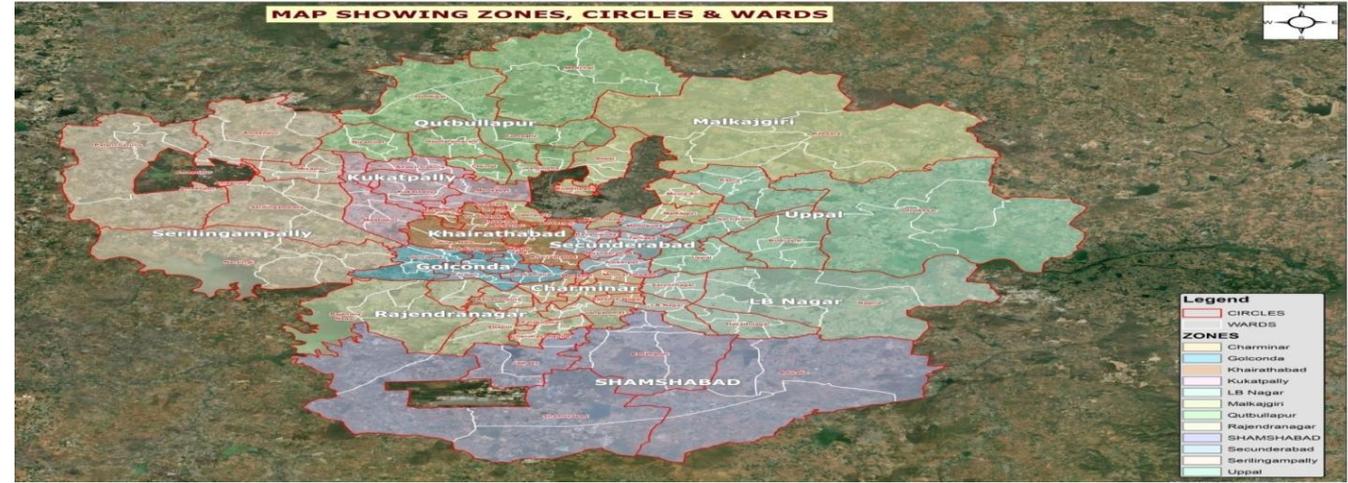
16.02.2026



Sanitation at a Glance

GHMC which spanned 625 sqm was re-organized to 2053 sq km on 24.12.2025. Subsequently, for strengthening field-level administration and provide responsive civic services to residents, it was reorganized into (03) municipal corporations viz.,

- i. Greater Hyderabad Municipal Corporation
- ii. Malkajgiri Municipal Corporation
- iii. Cyberabad Municipal Corporation

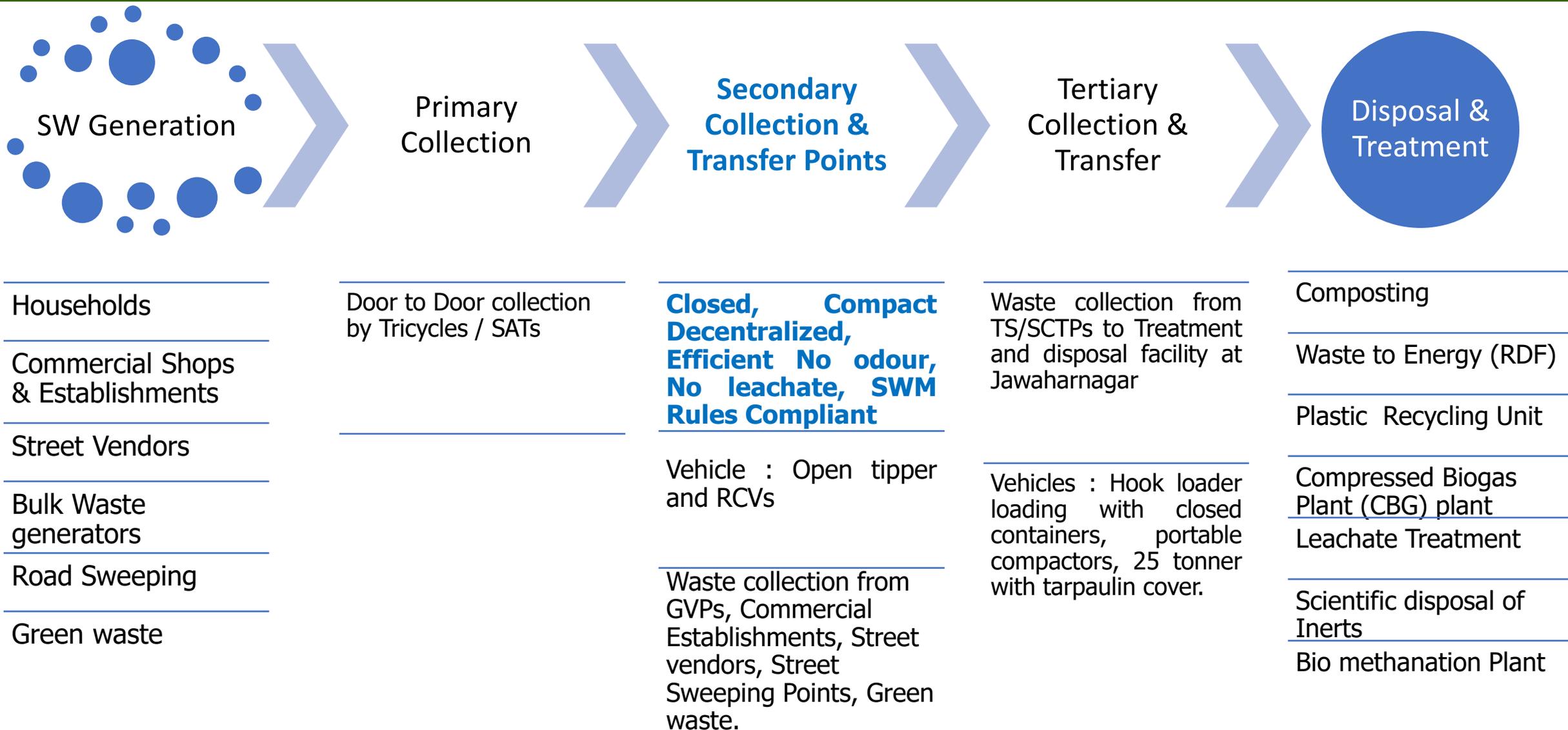


Sl.no	Zone names	Area (Sq Km)	Population (Lakhs)	Zones	Circles	Wards	Annual Average MSW (MT/day) estimated	Sweeping groups (SWG)	SWG Workers	Sanitary Field Asst	Sanitary Jawans /Inspectors	Sanitary Supervisor	AE/AEE (SWM)	DEE (SWM)
1	Shamshabad, Rajendranagar, Golconda, Khairatabad, Secunderabad, Charminar	689	70.11	6	30	150	4772	1590	11184	562	127	10	30	30
2	Malkajgiri, Uppal, LB Nagar	654	32.52	3	14	74	2213	719	5613	241	68	3	14	14
3	Serilingampally, Qutubullapur, Kukatpally	613	31.11	3	16	76	2117	760	5518	212	79	4	16	16

Vehicle and Machinery

Sl.no	Zone names	Tertiary Collection		Secondary Collection		Infrastructure	
		Vehicles (Hook loader, Tipper, Refuse Compactor)	Equipment (Static Container, Portable Compactor, static compactor)	Vehicles (Mini Tippers, RFCs)	Equipment (Bobcat, JCBs)	Transfer Stations	Secondary Collection and Transfer Points
1	Shamshabad, Rajendranagar, Golconda, Khairatabad, Secunderabad, Charminar	120	199	167	50	6	10
2	Malkajgiri, Uppal, LB Nagar	22	66	89	22	6	6
3	Serilingampally, Qutubullapur, Kukatpally	26	100	59	17	3	7

Process Outline of Solid Waste Management



Source segregation

- 44 Lakh Twin Bins (12 L capacity) were distributed to 22 Lakh Households in the erstwhile GHMC area to promote Source Segregation.
- Continuous Awareness Programs on segregation of MSW at source are being conducted
- Effective implementation of source segregation is facing challenges due to difficulties in bringing the behavioural change



Primary Collection

- Door to Door collection from households is being done by Swachh Auto Tippers
- Certain areas with narrow lanes are covered by pushcarts and tricycles.
- DCO (Driver cum Owner) scheme

<u>Sl.no</u>	<u>Zone Name</u>	<u>No of Circles</u>	<u>No of Wards</u>	<u>No. of House Holds (HHs)</u>	<u>No. of SATs existing</u>
1	Charminar	5	25	171450	310
2	Golconda	5	26	235486	386
3	Khairatabad	5	25	294966	545
4	Kukatpally	4	23	252709	606
5	LB Nagar	4	24	278088	574
6	Malkajgiri	5	26	351558	599
7	Quthbullapur	7	27	353417	609
8	Rajendranagar	6	29	258383	503
9	Secunderabad	5	28	218368	441
10	Serilingampally	5	26	549388	861
11	Shamshabad	4	17	178916	265
12	Uppal	5	24	339475	547
	Grand Total	60	300	3482204	6246



Integrated Municipal Solid Waste Management Project

Concessionaire - Ramky Enviro Engineers Ltd (now Re-sustainability Ltd through M/s Hyderabad Integrated MSW Ltd (HiMSW) as SPV)

Salient features

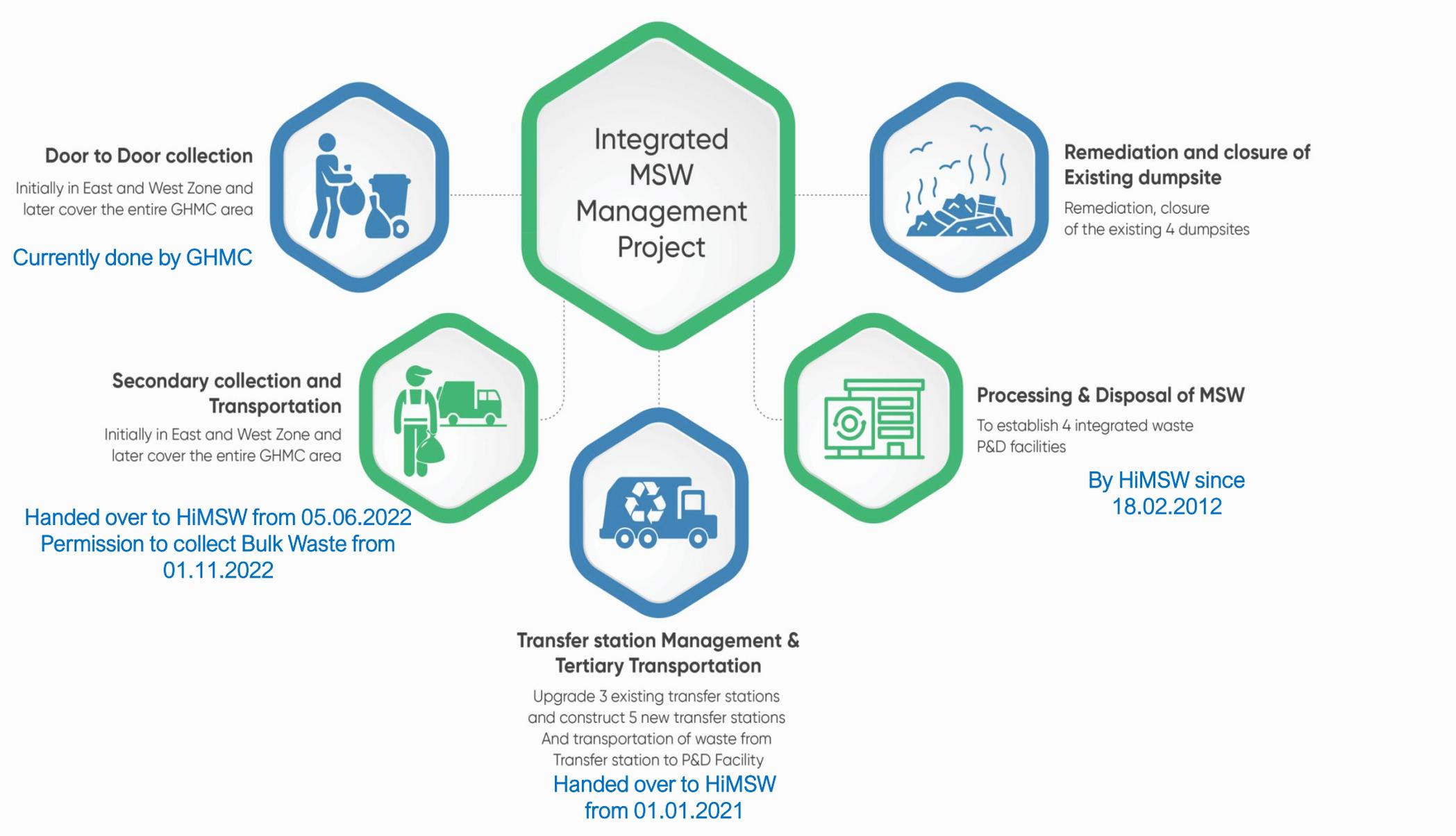
- Project executed through PPP Model
- Entire scope of MSW management except road sweeping in single project for the entire city.
- GHMC grants exclusive right and authority during the term to execute IMSWM project in GHMC area to Concessionaire.
- GHMC to handover existing infrastructure viz., dumper bins, vehicles, transfer stations, dumpsites etc., on “as is” basis.
- GHMC to provide encumbrance free access to project sites.
- Concessionaire Scope – Design, engineer, finance, construct, operate and maintain project facilities
- Concessionaire free to choose technology in compliance with SWM Rules



Project Type	PPP - BOT
Concession Period	25 Years
Date of Agreement	21.02.2009
Commercial Operation Date (COD) (Start Date of Transport & Disposal)	18.02.2012
Concession Period End	17.02.2037

Monitored by EPTRI as Independent Engineer

SCOPE OF WORK AS PER CONCESSION AGREEMENT of IMSWM PROJECT



TRANSFER STATIONS / SECONDARY COLLECTION & TRANSFER POINTS



Mobile SCTP for up to 10 Ton per trip



SCTP up to 100 TPD



SCTP for more than 100 TPD



TS for more than 300 TPD

TERTIARY TRANSPORTATION FLEET



Solid Waste Management (SWM)- Status

Processing & Disposal of MSW

- As a part of the IMSWM project, estimated 12 million MT of MSW spread all over 339 acres was shifted to 125 acres and the processing facility was established in the reclaimed land. The legacy waste was scientifically capped.
- The plant started operation with 2000 TPD processing capacity and subsequently increased phase wise to 10000 TPD due to increase in the waste generation quantities.

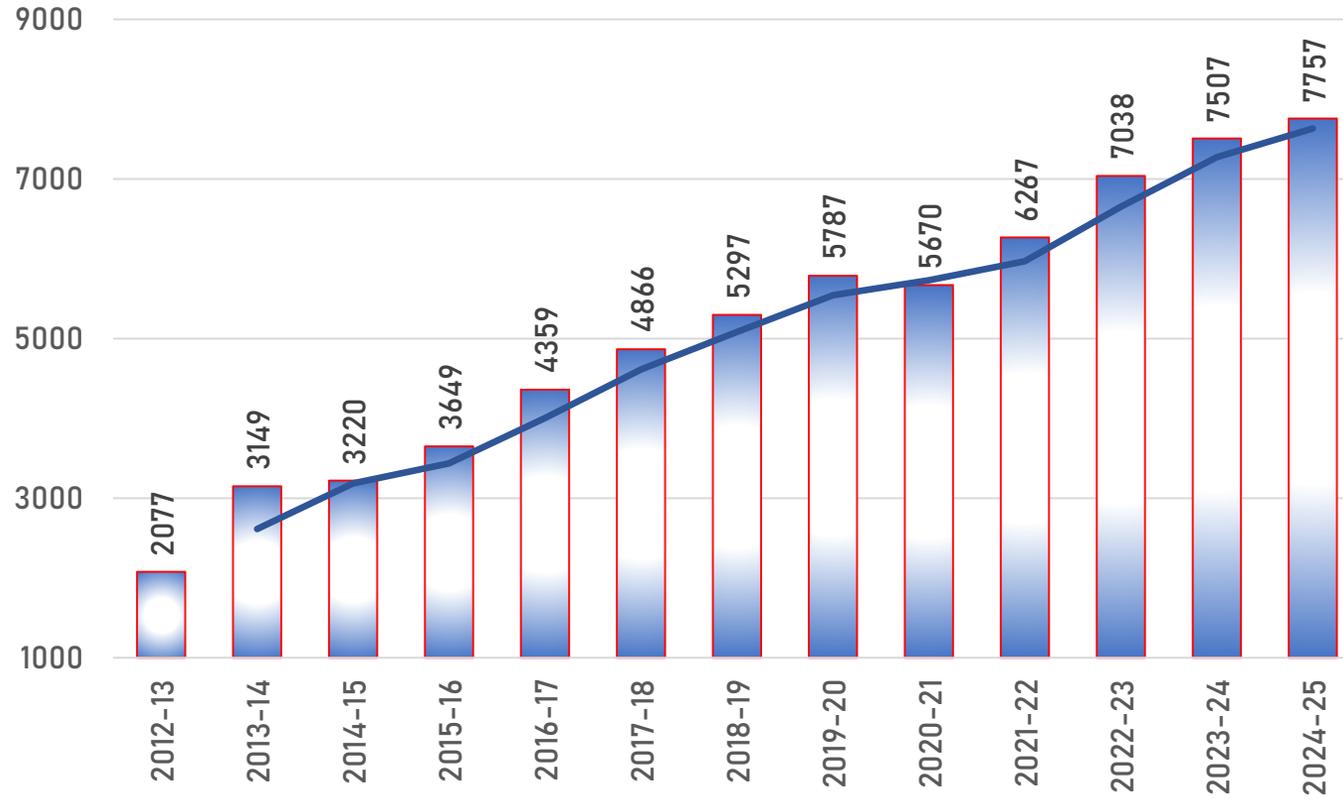
Activities at P&D facility, Jawaharnagar:

- | | |
|--|---------------------------------------|
| • Weigh Bridge Plaza | • Plastic Recyclables Processing Unit |
| • Waste Receiving Platform (Tipping Floor) | • 24 MW Waste to Energy Plant |
| • Pre-sorting stations | • Compressed Biogas (CBG) Plant |
| • Compost Processing stations | • Gas Engine for utilizing CBG |
| • RDF manufacturing Unit | • 1 MW Solar Roof Top plant |
| • Leachate Treatment plant | • Scientific Landfill |

S. No.	Description of Item	Area (acres)	%
1.	Dump capping (Passive, Active & SLF)	123.86	36.84%
2.	Compost Plant	18.77	5.58%
3.	New Compost Plant	5.23	1.56%
4.	Sanitary Landfill (SLF area)	27.53	8.19%
5.	RDF Storage area	30.46	9.06%
6.	Leachate Ponds, CBG area, Boulder's area	4.20	1.25%
7.	Waste to Energy (WTE) area	17.10	5.09%
8.	Wastewater Complex	3.43	1.02%
9.	Road & Drains	19.09	5.68%
10.	Greenbelt area	54.59	16.24%
	Total (A):	304.26	90.51%
	Auxiliary Units		
1	Admin Building & Parking	6.69	1.99%
2	Canteen, Workshop, Temple, Bio-methanation, Coconut Shed, Hazardous Stores, Diesel Station etc.	9.25	2.75%
3	Store room, DG Room, Transformer Yard, Plastic Recycling	2.65	0.79%
4	Weigh Bridge Plaza	1.15	0.34%
	Total (B):	19.74	5.87%
	Disputed land (C):	12.20	3.63%
	Total (A+B+C):	336.20	100%

MSW RECEIPT Y-0-Y (In TPD)- erstwhile GHMC

GHMC



FY	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
GHMC	2077	3149	3220	3649	4359	4866	5297	5787	5670	6267	7038	7507	7757

Activities at Treatment & Disposal Facility



Weigh-bridge Plaza:

- Weigh-bridges operations in 3 Shifts
- Equipped with 5 Weigh-bridges
- The weighing process is carried in the presence of staff of Independent Engineer and is automated RFID and synchronized to servers and GHMC database.



Tipping Floor

- The vehicles unload the MSW at the Tipping floor where the waste is allowed to shed its moisture to prevent clogging of machinery.



Pre-sorting

- The MSW from Tipping Floor is moved to the Pre-sorting area for processing at trommels (70 mm dia) in order to mechanically segregate the waste into organic & inorganic fractions

Activities at Treatment & Disposal Facility



Windrow

The organic fraction of the MSW is moved to windrow area.

The waste is rearranged in to Trapezoidal heaps, spread with EM culture and undergoes turning operations to help decomposition and formation of compost.



Compost Production

The waste from windrow area is processed through 20 mm and 4 mm dia holed trommels and the final product is compost which is packed and sold.



Scientific Landfill

The Rejects obtained during the process are disposed in scientific landfill.

Activities at Treatment & Disposal Facility



1 MW Solar Energy Plant

- A 1 MW Solar Energy Plant is established by placing the solar panels on the sheds in pre-sorting area and the electricity generated is used in-house.



RDF Manufacturing plant

A 1000 TPD RDF manufacturing plant is commissioned at Jawaharnagar for better off take of RDF by cement plants aiding its disposal.



Vehicle Maintenance Area

- The vehicles being operated by the Concessionaire are regularly maintained and cleaned at the Vehicle Maintenance area established at the facility.

Activities at Treatment & Disposal Facility

Waste Water Treatment

- The leachate generated from MSW is collected through a network of drains and after pre-treatment process it is further treated at the 600 kLD stage I RO, 500 kLD Stage II RO and 150 kLD MEE- 40kLD ATFD plant.
- The permeate of RO is used for maintaining greenery.
- Condensate from MEE- ATFD is utilized for ash quenching



Plastic Waste Recycling Plant

- A 20 TPD Plastic Waste Recycling plant is established at the site to process recyclable plastics.



Activities at Treatment & Disposal Facility- Compressed Biogas

- The landfill gas (from capped legacy waste) is collected through a network of pipes and is processed at the 760 cum per hour input capacity Compressed Biogas plant operational since Sep' 2021.
- The gas is bottled and is being sold to Bhagyanagar Gas Ltd. under SATAT scheme.
- CNG-based Refuse Compactor Vehicles are being purchased by the Concessionaire for secondary collection & transportation of MSW

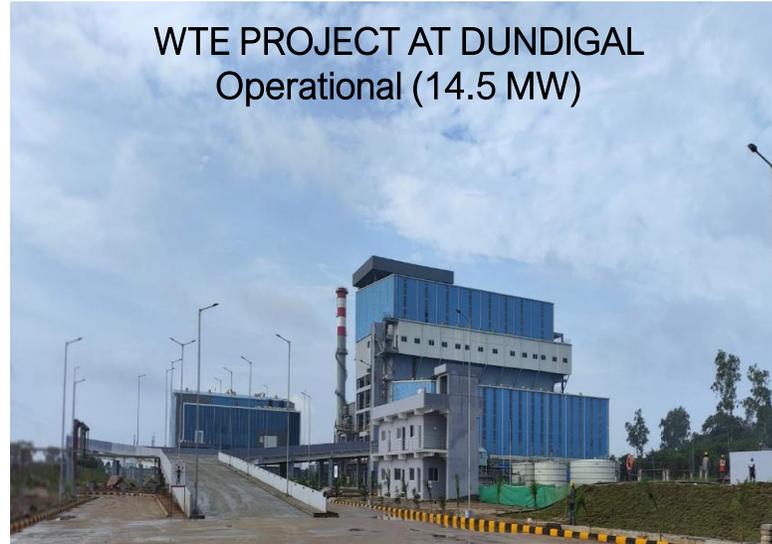


Waste To Energy PROJECT AT JAWAHAR NAGAR & DUNDIGAL

JAWAHAR NAGAR
Phase 1: Operational (24 MW)



WTE PROJECT AT DUNDIGAL
Operational (14.5 MW)



JAWAHAR NAGAR
Phase 2: Operational (24 MW)



Capacity of the Plant	2 * 600 TPD (24 MW)
No. of Boilers :	2
No. of Turbo Generators:	1
Steam temperature :	410 ± 5 deg. C
Steam pressure :	46 Kg/ sq.cm
Condenser :	Air Cooled Condenser
Flue Gas Treatment System	Semidry Flue Gas Treatment System with Lime and Activated Carbon injection followed by Bag filters

Capacity of the Plant	1 * 800 TPD (14.5 MW)
No. of Boilers :	1
No. of Turbo Generators:	1
Steam temperature :	410 ± 5 deg. C
Steam pressure :	46 Kg/ sq.cm
Condenser :	Air Cooled Condenser
Flue Gas Treatment System	Semidry Flue Gas Treatment System with Lime and Activated Carbon injection followed by Bag filters

Capacity of the Plant	2 * 600 TPD (24 MW)
No. of Boilers :	2
No. of Turbo Generators:	1
Steam temperature :	410 ± 5 deg. C
Steam pressure :	46 Kg/ sq.cm
Condenser :	Air Cooled Condenser
Flue Gas Treatment System	Semidry Flue Gas Treatment System with Lime and Activated Carbon injection followed by Bag filters

C & D Waste Management

M/S. HYDERABAD C&D WASTE PVT. LIMITED

Recycling Plant Location	Erstwhile Zone	Erstwhile Circle No & Name)
JEEDIMETLA – 500 MT · Collection started : April 2018 · User fee/ MT · Rs. 398.50 /- for door step collection · Rs. 99.60 /- at plant collection	Kukatpally Serilingampally	All Circles All Circles
FATHULLAGUDA – 500 MT · Collection started : April 2018 · User fee/ MT : · Rs. 388.75 /- for door step collection · Rs. 97.20 /- at plant collection	Secunderabad Charminar LB Nagar	16-Amberpet 6- Malakpet 7-Santhoshnagar 2- Uppal 3- hayath nagar 4 LB Nagar 5 Saroor Nagar

M/S. SOMA SRINIVAS REDDY

Recycling Plant Location	Erstwhile Zone	Erstwhile Circle No & Name)
SHAMSHABAD – 500 MT · Collection started : April 2022 · User fee/ MT · Rs. 405.00 /- for doorstep collection · Rs. 101.25 /- at plant collection	Charminar Khairathabad	8 – Chandrayangutta , 10 – Falaknuma, 9 – Charminar, 11 – Rajendranagar. 12 – Mehdiapatnam, 13– Karwan, 14 – Goshamahahal, 18 – Jubilee Hills
THUMKUNTA – 500 MT · Collection started : Nov 2022 · User fee/ MT · Rs. 435.00 /- for door step collection · Rs. 108.75 /- at plant collection	Kukatpally LBNagar Secunderabad Khairathabad	27 - Alwal 1 - Kapra 28-Malkajigiri, 15- Musheerabad, 29-Secunderabad, 30- Begumpet 17 – Khairatabad,

Secondary Collection & Transfer Points (SCTP) photographs



C & D waste plants



Jeedimetla C&D Waste Recycling Plant



Fathullaguda C&D Waste Recycling Plant



Shamshabad C&D waste Recycling Plant



Thumukunta C&D waste Recycling plant

HH48+22P, Thumukunta, Secunderabad, Telangana 500078, India
Lat 17.555534°
Long 78.565368°
07/08/24 06:36 PM GMT +05:30

Google

GPS Map Camera

SWACHH BHARAT MISSION (1.0) ACHIEVEMENTS & ACTIVITIES

ODF : Open Defecation Free status was first introduced in the year 2016 by the MoHUA, GoI. As part of first phase of SBM- U, Greater Hyderabad Municipal Corporation was declared as “Open Defecation free” by Ministry of Housing & Urban Affairs, GoI through Quality Council of India (the assessment agency) on 28.12.2017.

SWACHH SURVEKSHAN RESULTS – GHMC

Sr. No.	Year of Ranking	Rank achieved	Remarks
1.	2016	19 th rank	Among 73 cities
2.	2017	22 nd rank	Among 434 cities
3.	2018	27 th rank	Among 4203 cities
4.	2019	35 th rank	Among 4273 cities
5.	2020	23 rd rank	Among cities above 10 lakhs population category

SWACHH SURVEKSHAN - SPECIAL CATEGORY AWARDS

Sr. No.	Year	Rank achieved	Remarks
1.	2018	“Best State Capital/ UT in SWM”	Among 4203 cities
2.	2019	1 st rank	Among 5 metropolitan cities
3.	2019	Swachhata Excellence award – 1 st position	For promoting dignified livelihoods for sanitation workers & practitioners
4.	2020	Best Mega city in Citizen feedback	Among cities with above 40 lakhs population

SWACHH BHARAT MISSION (2.0) ACHIEVEMENTS & ACTIVITIES

- **ODF++:** The MoHUA, GoI has introduced Swachh certification protocols such as ODF, ODF +, and ODF++ and water + for evaluation of city sanitation, while incorporating various indicators. Accordingly, Greater Hyderabad Municipal Corporation is declared as ODF ++ on 20.01.2019 and re-certified on 11th February 2021.
- **WATER +:** GHMC has been certified as Water Plus by Ministry of Housing and Urban Affairs (MoHUA) on 20th August, 2021, becoming first local body of Telangana to achieve this remarkable feat. Further in 2024, MoHUA, Govt. of India has re-certified GHMC as Water Plus City in Swachh Survekshan 2024.

SWACHH SURVEKSHAN RESULTS – GHMC		
Year of Ranking	Rank achieved	Remarks
2021	13 th rank	In above 10 lakh population category
2022	10 th rank	In above 10 lakh population category
2023	9 th rank	In above 1 lakh population category
2024-25	6 th rank	In Million plus city category

GARBAGE FREE CITY PROTOCOL – STAR RATING		
Year of Ranking	Rank achieved	Remarks
2021	3 Star city	Garbage Free city Category
2022	3 Star city	Garbage Free City category
2023	5 Star city	Garbage Free City category
2024	7 Star city	Garbage Free City category

SWACHH SURVEKSHAN - SPECIAL CATEGORY AWARDS		
Year	Rank achieved	Remarks
2021	Best Self Sustainable Mega City	In above 40 lakh population category



Thank You