

Dr. SAMEER SHARMA, I.A.S.,



1st Floor, Block No. 1,
A.P. Secretariat, Velagapudi,
Guntur District,
Amaravati - 522 238.
Tel. : +91-863-2441024/1025
Fax : +91-863-2441029
E-mail : cs@ap.gov.in

CHIEF SECRETARY

Lr. No.NGT/MAUD/CDMA/2022

dated 05.11.2022

To
The Registrar,
National Green Tribunal,
New Delhi.
(judicial-ngt@gov.in)

Sir,

Sub: State of Andhra Pradesh –Sewage and Solid Waste Management
- Hon'ble NGT orders dated 07.09.2022 in O.A.No.606/2018 –
Issue of Notice- Furnishing of Response to the Notice in the
form of Affidavit – Reg.

Ref: Hon'ble NGT orders dated 07.09.2022 in O.A.No.606/2018.

In response to the notice issued by the Hon'ble National Green Tribunal vide reference cited, I am here with filing the affidavit narrating measures taken by the State of Andhra Pradesh, since last hearing held on 04.08.2022, with a request to exempt the state of Andhra Pradesh from levy of environmental compensation, in the light of compliance with directions of Hon'ble NGT in respect of Processing of Solid Waste and Treatment of Sewage. I have personally guided the stakeholder departments/agencies by conducting review meetings every week by involving experts and ensured bridging of entire gap of 3161 TPD in solid waste processing by adopting cluster approach, treatment of sewage by adopting in-situ bioremediation technology as interim measure, starting of bio mining in all ULBs and also tied up funds to the tune of Rs. 1445 Crs for completion of ongoing and planned STPs and to the tune of Rs.352 Crs for completion of bio-mining of all legacy dump sites.

I would like to appraise and make a presentation to the Hon'ble NGT on measures taken by the state of Andhra Pradesh in Sewage and Solid Waste Management during scheduled hearing on 11.11.2022.

Yours faithfully,


Chief Secretary

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH AT NEW DELHI
ORIGINAL APPLICATION NO. 606 OF 2018**

IN THE MATTER OF :

In re: Compliance of Municipal Solid Waste Management Rules, 2016 and other environmental issues.

INDEX

S.No.	Particulars	Page Nos.
1.	THE AFFIDAVIT BY THE CHIEF SECRETARY TO THE GOVERNMENT OF ANDHRA PRADESH - RESPONDENT	
2.	The Govt. of A.P., Memos dated 23.08.2022 & 20.09.2022 - Annexure-I.	
3.	The status of Greater Visakhapatnam, Kakinada & Tirupati Municipal Corporations, identified as model towns in the State of A.P. - Annexure - II.	
4.	The Government Memo No.1872299/UBS/2022 dated 17.10.2022 of Municipal Administration & Urban Development Department - Annexure - III.	
5.	The Government Memo No.4329936/UBS/2021 dated 15.06.2021 - Annexure- IV.	
6.	The Government, Municipal Administration & Urban Development Department -Memo No.1862385/UBS/2022 dated 07.10.2022 - Annexure- V.	
7.	The Government have issued orders vide U.O Note No.REV01_ LANA0MISC/613/2022-LANDS-I, dated 21.10.2022 with certain exemptions to expedite acquisition of land for construction of Sewage Treatment Plants by the Urban Local Bodies.- Annexure - VI.	
8.	Photographs showing Waste to Compost Plants, Waste to Bio-CNG Plants, Windrow Composting Units, Material Recovery Facilities, Waste to Energy Plants Legacy Waste Treatment Sites & Bio-remediation of drains. - Annexure - VII.	

ATTESTOR

DEPONENT



**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 606/2018
(in respect of State of Kerala, Tamil Nadu, Lakshadweep,
Puducherry, Andhra Pradesh and Chandigarh)

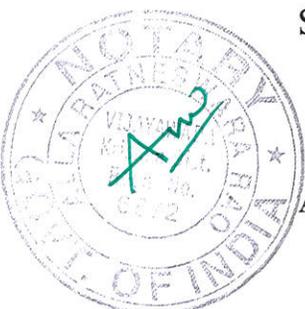
**Re: Compliance of Municipal Solid Waste Management Rules, 2016
and other environmental issues.**

CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIR
PERSON HON'BLE MR. JUSTICE SUDHIR AGARWAL,
JUDICIALMEMBER HON'BLE PROF. A. SENTHIL VEL,
EXPERT MEMBER

AFFIDAVIT OF THE CHIEF SECRETARY, ANDHRA PRADESH

I, Sameer Sharma, S/o. Umesh Chandra Sharma, aged about 61 years, Occ: Chief Secretary to Government, Government of Andhra Pradesh, do hereby solemnly and sincerely affirm and state on oath as follows:

1. I submit that I am the Chief Secretary for Andhra Pradesh and as such I am wellacquainted with the facts of the case to depose this Affidavit.
2. I submit that the Hon'ble National Green Tribunal vide orders dated 04.08.2022 closed the proceedings in relation to State of Andhra Pradesh by directing the Chief Secretary to designate a nodal officer of the rank of Special Chief Secretary for due execution of action plan with definite timelines by tying up with executing agencies and for financial backups to bridge the gap in solidand liquid waste management. The Hon'ble National Green Tribunal also directed the state to monitor at its own level.
3. I submit that the Hon'ble National Green Tribunal vide orders dated 07.09.2022 issued notice to the State of Andhra Pradesh along with other states/ UTs (Kerala, Tamil Nadu, Lakshadweep, Puducherry, and Chandigarh), why further directions on the pattern of order dated 1.9.2022 in the case of West Bengal may not be passed in respect of the said States/UTs also, in the interest of protection of environment and to maintain



ATTESTOR

DEPONENT

consistency and directed to appear by virtual mode or physically through counsel or any other representative and file their response, if any before the next date of hearing on 11.11.2022. The Hon'ble National Green Tribunal when considered the issue of State of West Bengal vide order dated 01.09.2022, held that since serious gaps in compliance were continuing, closure of proceedings may not be in the interest of environment and thus it was directed that six monthly progress reports be filed by the Chief Secretaries with this Tribunal with copies thereof to NMCG, MoUD and CPCB. Further, quantum of compensation was determined to be utilized for restoration measures.

4. I submit that in compliance to the said notice of the Hon'ble Tribunal, I am filing this affidavit bringing the factual position to the kind notice of this Hon'ble Tribunal.
5. I submit that the Summary of the Status report on Solid Waste Processing, in all 123 Urban Local Bodies in Andhra Pradesh State have been submitted earlier on 04.08.2022 to the Hon'ble NGT and the 11th Quarterly Report submitted to the Central Pollution Control Board, New Delhi, is once again reiterated for your kind perusal.
 - The Solid Waste generated in the ULBs is 6890 TPD & 3729 Tons of it is being processed, daily.
 - Details of Processing of Wet & Dry Wastes along with Proposed Projects for processing the remaining Solid Waste (Gap).

ATTESTOR



3


DEPONENT

Existing Wet & Dry Waste Processing

Type of Processing	No of ULBs Covered	Existing Processing Capacity (in TPD)
Existing Waste to Compost Plants	28	1154
Existing Bio-CNG Plants	7	175
Existing Material Recovery Facilities	3	280
Tied up with Functional Waste to Energy & Cement Plants	85	2120
Total		3729

Proposed Wet & Dry Waste Process Projects to bridge the gap

Category	Type of Plant	Process/cover the existing Gap (in TPD)
Awarded Projects	Waste to Compost Plants	300
	Integrated Solid Waste Management Projects	1496
MRFs, Clustering & Independent Solution	Material Recovery Facilities	490
	Clustering with functioning & awarded Projects	155
	Independent Solution	220
	Tie up with Waste to Energy/Cement Plants	500
Total		3161

ATTESTOR


DEPONENT



6. I submit that the Hon'ble Tribunal in its directions dt 04.08.2022 has directed to Designate a Nodal Officer of the rank of Special Chief Secretary for execution of Action Plan with definite timelines and in compliance of the same, the Special Chief Secretary, Municipal Administration & Urban Development Department has been designated as Nodal Officer & the Nodal Officer is regularly monitoring the implementation of the Action Plan for Solid Waste & Sewage Management in all the ULBs.
7. It is further submitted that the Nodal officer has issued specific instructions with timelines to all the Municipal Commissioners in the State to start Wet Waste Processing through Windrow Composting & also to establish Material Recovery Facilities to process the Dry Waste (Recyclable Waste) by end of October, 2022, to comply with the Solid Waste Management Rules & directions of the Hon'ble NGT. This has been complied with.
8. It is submitted that in all the 123 ULB's in the State of Andhra Pradesh, all Tenders for treatment of Legacy Waste (Bio-mining) are finalized and Letter of Acceptances (LOAs) were also issued and the treatment of Legacy Waste (Bio - mining) is successfully commenced and is continuing. Thus, the direction of the Hon'ble Tribunal in tying up with the Executing Agencies is also complied with by the State of Andhra Pradesh.
9. I submit that with reference to the direction of the Hon'ble Tribunal for tying Financial Backups to bridge the Gap in Sewage Management, it is humbly submitted that in the ULBs with above 1.00 lac population funds are tied-up under AMRUT, One Time Special Financial Assistance (OTSFA), Asian Infrastructure Investment Bank (AIIB), HUDCO, SMART CITY etc., and the

ATTESTOR



5


DEPONENT

State Government has consented for release of Proportionate State Share. Similarly, in the ULBs with below 1.00 lac population, an amount of Rs.694.00 crs is sanctioned by Government of India & Rs.751.00 crs sanctioned by State Government for Construction of STPs (Total Rs.1445.00 crs) and thus tying up of Funds is complied with.

10.The Government of India has released Central Share under SBM 2.0 & Andhra Pradesh State Government has consented for release of proportionate State Share for Bio-mining & Construction of STPs in the 91 ULBs with below 1.00 Lakh Population. Funds are already released to the ULBs under 15th Finance Commission and are also tied up for this purpose, as per the norms given.

11.I submit that the below mentioned are the other important activities taken up by the State of Andhra Pradesh in compliance with the directions of Hon'ble NGT on Solid Waste Management Rules & directions and all such activities are constantly monitored by conducting weekly meetings to achieve the intended results within the timelines stipulated and by reviewing the progress achieved during the week and guiding them suitably to achieve the targeted results.

(i) That as directed by the Hon'ble National Green Tribunal, an Environment Monitoring Cell has been established, with Senior Officers having subject knowledge i.e., Sri M. Siva Reddy, Joint Chief Environmental Engineer from Pollution Control Board, Sri S. Venkata Krishna, Municipal Commissioner from Municipal Administration Dept., and Smt. G. Lakshmi Alivelu, Assistant Secretary from Environment & Forest Dept., in the Office of the Chief Secretary for guiding, regular monitoring and to oversee the different activities taken up in the ULBs in Waste Management activities. The Govt. Memos dated 23.08.2022 & 20.09.2022 in this regard are filed as **Annexure-1**.

ATTESTOR

6

DEPONENT



- (ii) A State Level Review Meeting cum Workshop was also conducted on 12.10.2022 with all Municipal Commissioners in the State, Engineers, Contractors of Waste to Compost Plants, Bio-CNG Plants, Executing Agencies/Contractors of Sewage Treatment Plants etc., and a detailed review was conducted on the project wise status, suitable directions were issued for early completion of the Projects with certain timelines.
- (iii) I further submit that Weekly Video Conferences & daily Tele Conferences are being conducted with the Municipal Commissioners by the HoDs of Municipal Administration Department besides Video Conferences with the Managements of Cement Plants & Officials of State Pollution Control Board on receipt of Combustible Waste by the Cement Plants, from the ULBs.
- (iv) I further submit that Meetings are also conducted with the District Collectors to review implementation of all Waste Management Rules in the Urban Local Bodies of their respective jurisdictions and have also directed them to monitor the status of compliances by the ULBs fortnightly and guide the ULBs, suitably.
- (v) With respect to making the identified Model Towns compliant with implementation of Waste Management Rules, I submit that Greater Visakhapatnam, Kakinada & Tirupati Municipal Corporations, have been identified as the Three Model Towns in the State and thus have complied with the directions issued by the Hon'ble NGT in this regard and the status in these Towns is filed as Annexure - II.

ATTESTOR



DEPONENT

(vi) It is further submitted that to ensure more Greenery, as directed by the Hon'ble National Green Tribunal, Andhra Pradesh State has initiated the Project "Jagananna Haritha Nagaralu" (CM Jagan Mohan Reddy's Green Cities Project), a Green City Challenge which was thrown to the ULB 's where're prize money of Rs.10.00 crores has been offered for the best projects executed. The said initiative was commenced and will be completed by 30th November, 2022. Under this Programme, a total Road Length of 1500 kms (224 kms in Central Medians & 1276 kms Avenue Plantation) will be covered with 3.00 lakh Plants (45,000 in Central Median & 2,55,000 Avenue). The entire programme is being monitored through a comprehensive IT Solution including Geo Tagging of Plants.

(vii) A Mobile App (CLAP OFFICERS App, placed in Google Play Store) (CLAP means Clean Andhra Pradesh) has also been developed for monitoring by the Municipal Commissioners, In-charges of Waste to Compost Plants, Waste to Energy Plants, Cement Plants etc., the activities involved in the processing of Wet & Dry Wastes in the ULBs. Following are the main features of the Mobile App.

- Shows the data relating to the No. of House-holds covered under Door to Door Garbage Collection, ULB wise.
- Shows the data relating to the No. of House-holds with Segregated Waste Collection, ULB wise.
- Shows the data relating to Quantity of Wet Waste Processed at Waste to Compost Plants, Waste to Bio-CNG Plants & by Windrow Composting, Plant-wise & ULB wise.

ATTESTOR


DEPONENT



- Shows the Quantity of Dry Waste Sorted Out at Material Recovery Facilities, ULB wise.
- Shows the data relating to Combustible Waste transported to Waste to Energy Plants & Cement Plants, ULB wise & Plant wise.

(viii) Andhra Pradesh State Pollution Control Board (APPCB) is also independently monitoring the Solid Waste Management Activities taken up by the ULBs thro' this CLAP OFFICERS Mobile App.

(ix) It is also to submit that in addition to awarding Integrated Solid Waste Management Projects for 38 ULBs, awarded Waste to Compost Plants for 17 ULBs & proposed Independent Solutions for 15 ULBs, as submitted to the Hon'ble NGT on 04.08.2022, we have also prepared an Action Plan to provide immediate solution to the Solid Waste Management in all ULBs, as quickly as possible and started Windrow Composting & established MRFs at ULB level duly giving instructions to the Urban Local Bodies. The Government Memo No.1872299/UBS/2022 dated 17.10.2022 of Municipal Administration & Urban Development Department issued in this regard is filed herewith as Annexure – III.

(x) To obviate the concerns involved in acquisition of land & also to reduce the time for establishment of ISWM/WtC Projects by the Agencies/Contractors, Windrow Composting has been commenced by the ULBs themselves for Wet Waste Processing & for establishment of MRFs for Dry Waste (Recyclables) Management.

ATTESTOR

DEPONENT



(xi) Two Waste to Energy Plants of 15MW each on PPP Model have been established and commissioned in Collaboration with Jindal Company at Vishakhapatnam and Guntur. State Government has Power Purchase Agreements to buy the energy generated by these Waste to Energy Plants. It is to submit that 27 ULBs have been mapped to the Waste to Energy Plant at Visakhapatnam, 45 ULBs are mapped to Waste to Energy Plant at Guntur & 51 ULBs have been mapped to nearby Cement Plants for sending Combustible Waste by using 480 Big/Small Compactors (6 cu.mtr/14 cu.mtr capacity). Thus, all the 123 ULBs are mapped for disposal of Combustible Waste generated.

12. It is most respectfully submitted that with the best efforts made by all Departments concerned in the State & Municipal Commissioners at field level, **we have achieved 100% processing of Solid Waste Generated in the ULBs**, in different kinds within the scheduled timeline i.e., October, 2022. The present status is mentioned hereunder:

- (i) The Total Solid Generated is 6890 TPD from all 123 ULBs. We have ensured 100% source segregation at household level.
- (ii) 1.21 crores Dust Bins in Three Colours (3 bins to each household) have been distributed, free of cost to encourage Segregation at Source.
- (iii) The Wet Waste in the total waste generated is 3790 TPD & the Dry Waste is 3100 TPD.
- (iv) We have ensured 100% collection of garbage with door to door collection. For this;
 - a) 2737 Compartmentalized Auto Tippers have been deployed for collection of Wet, Dry & Domestic Hazardous Wastes, separately.

ATTESTOR

DEPONENT



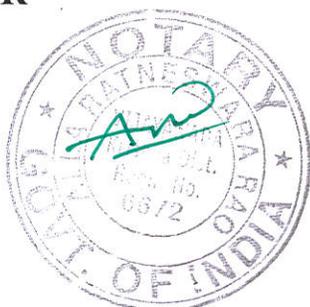
- b) 250 e-autos have been pressed into operation.
- c) Another 880 Trucks, Tippers, Tractors etc., & 480 Compactor Vehicles are already in operation for Secondary Transportation.
- d) For the 2737 diesel autos we are collecting User Fees from 45 ULBs successfully for the first time in India. We collect Rs.12.00 crores towards User Fees from 45 ULBs, every month. Government Memo No.4329936/UBS/2021 dated 15.06.2021 is filed herewith as **Annexure- IV.**
- (v) Since 28 Waste to Compost Plants & 4 Bio-CNG Plants are already established covering 42 ULBs, in all other 81 ULBs, Windrow Composting has been commissioned.

Thus, all the Wet Waste generated is being treated.

I. Wet Waste Processing

Type of Processing Facility	No of Plants/Units Commenced	No of ULBs covered	Processing Capacity (in TPD)
Waste to Compost Plants	28	34	1280
Bio-CNG Plants	4	8	175
Windrow Composting Units	81	81	2335
Total	113	123	3790

ATTESTOR



DEPONENT

II. Dry Waste Processing Recyclable Dry Waste

Type of Processing Facility	No of Units established	No of ULBs covered	Quantity(in TPD)
Material Recovery Facilities	123	123	94 5

Combustible Waste

Type of Processing Facility	No of Plantsto which ULBs are mapped	No of ULBs covered	Quantit y(in TPD)
Waste to Energy Plants	2	72	1800
Cement Plants	7	51	355
Total		123	2155

13. I submit that thus, by the establishment of 123 Material Recovery Facilities & mapping all the 123 ULBs with the Waste to Energy Plants & Cement Plants, the total Dry Waste (Recyclable & Combustible) generated i.e., 3100 TPD is being treated/disposed.

ATTESTOR


DEPONENT



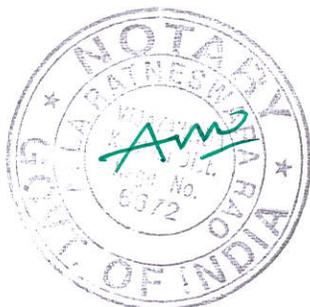
14. I further submit that with the above concerted efforts, the State of Andhra Pradesh is processing total 6890 TPD Waste being generated in all 123 ULBs and the Compost Generated from the Waste to Compost Plants & Compost from Bio-CNG Plants is also sold to the Farmers by the Plant Developers. The CNG produced in the Bio-CNG Plants is being sold to the Commercial establishments like Hotels, Restaurants etc., by the Plant Developers. Further, the Compost generated from the Plants run by the ULBs is being utilized by the ULBs themselves in the Parks, Greenery in Central Dividers, in Avenue Plantation etc. Also, the sorted- out recyclables in the MRFs are being sold to the Recyclers concerned by the ULBs.

15. I submit that the below is the status on the Legacy Waste Management:

- (i) It was submitted to the Hon'ble NGT on 04.08.2022, that the Legacy Waste in 123 ULBs is quantified @ 85.00 Lac Tons & Bio-mining is completed in 2 ULBs i.e., Vijayawada & Tirupati Municipal Corporations and cleared 8.52 Lac Tons of Legacy Waste.
- (ii) It is also submitted that in 4 ULBs i.e., in Visakhapatnam, Kurnool, Dharmavaram & Ananthapur, the Bio-mining is in progress.
- (iii) In this connection, I now submit that to speed up the Bio-mining, 91 small ULBs are made into 10 Clusters & LoAs were issued to these Agencies besides LoAs to another 26 bigger ULBs also.
- (iv) Thus, in all remaining 121 ULBs, Bio-Mining is started & about 8.10 Lac Tons Legacy Waste is, so far, treated and Treatment is in progress.
- (v) It is further to submit that month-wise timelines are also scheduled to complete the Bio-mining in all 121 ULBs by March, 2023 and as directed by the Hon'ble National Green Tribunal.

ATTESTOR


DEPONENT



In this connection it is submitted that an amount of Rs.136.00 crs is released by Government of India & Rs.216.00 crs tied up by the State Government and thus, with a total amount of Rs.352.00 crs, Bio-mining taken up in all ULBs.

It is also submitted that the reclaimed sites will be used for setting up of Waste Processing Plants to Process Day to day Waste Generated, as directed by the Hon'ble National Green Tribunal.

16. I submit that Two (2) Sanitary Landfill Sites are developed at Waste to Energy Plants, for safe disposal of Residual Solid Waste & Inert Wastes of 72 ULBs as these ULBs are mapped to Waste to Energy Plants. Suitable Sites have been identified & Regional Sanitary Landfills will be setup for disposal of Residual Waste from the balance 51 ULBs.

17. I submit that the below is the status on the Sewage Management:

- (i) It is submitted that in the 11th Quarterly Report & on 04.08.2022 presented to the Hon'ble National Green Tribunal, the Quantity of Sewage Generation in all 123 ULBs is 1503.20 MLD.

Quantity of Sewage Generation (in MLD)	Treatment Capacity (in MLD)	Current Gap in Treatment (inMLD)
1503.20	Existing Capacity : 535.45 Being Treated : 382.81 Under construction : 507.17	967.75 (After completion of 507.17 MLD ongoing STP works and tendering & execution of STPs with 35.60 MLD the residual gap will be 424.98 MLD only)

ATTESTOR

DEPONENT



(ii) It is further to submit that following is the present status of Construction of STPs & Treatment Capacities in the ULBs of the State:

- Capacity of Existing STPs is 614.45 MLD

(Speeded up & Completed Construction of 3 STPs in 3 ULBs i.e., Visakhapatnam, Ongole & Pulivendula with capacities of 54 MLD, 15 MLD & 10 MLD respectively, after the directions of the Hon'ble NGT on 04.08.2022)

- Capacity of STPs under construction is 545.92 MLD
- Capacity of STPs under Tender Stage is 35.60 MLD
- Capacities of STPs for which Tenders already floated under SBM 2.0 is 670 MLD.

As already stated funds have been tied- up for construction of STPs.

18. I submit that the Hon'ble NGT in its direction dated 04.08.2022 has suggested to brainstorm with the experts and stakeholders and evolve models for treatment of Sewage generated and therefore, the Models being adopted in different States have been studied.

19. I submit that we have interacted with the Central Public Health & Environmental Engineering Organization (CPHEEO), New Delhi on different methods to ensure the Gap in Sewage Generation & Treatment is bridged at the earliest, adoption of alternative measures for Treatment of Sewage etc., they advised us to consider Bi-remediation of drains till the construction of STPs under construction, tendered etc., is completed.

ATTESTOR

DEPONENT



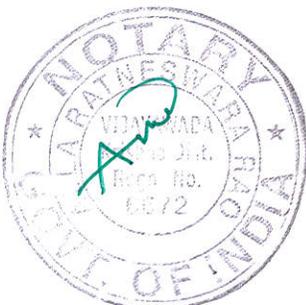
20. I submit that in view of the above current status in the Gap, to enhance the Sewage treatment capacities in the ULBs & in view of the directions of the Hon'ble NGT, we have taken up the process of Bio-remediation of Drains to treat the Sewage Generated in the ULBs & orders are issued by the State Government for In-situ Treatment of Sewage for Gap in treatment of Sewage generated in all ULBs. The Government, Municipal Administration & Urban Development Department has issued a Memo No.1862385/UBS/2022 dated 07.10.2022 in this regard is filed herewith as **Annexure- V**.

21. In accordance with the orders issued for supply, installation & testing of Bio-remediation of drains, as per SBM Guidelines issued by Government of India in October 2021 and also as per guidelines of Central Pollution Control Board & Andhra Pradesh State Pollution Control Board all used water is being processed, bio-remediated and only then disposed off. A proper record of the Quantity of the Used Water treated in each ULB, is being maintained on a weekly basis.

22. It is further submitted that Five (5) Polluted River Stretches are identified in 5 Urban Local Bodies, by the Central Pollution Control Board. Action has already been taken for construction of Sewage Treatment Plants in those ULBs. With specific focus on the Outfall drains, Bio-remediation of drains is now taken up to bridge the gap in treatment of Sewage and to bring back the water in those stretches, to make it fit for bathing purpose, as directed by the Hon'ble NGT.

ATTESTOR


DEPONENT



23. It is therefore submitted that with the above sincere efforts, the State of Andhra Pradesh would be able to achieve 100% treatment of Liquid Waste Generated by bridging the Gap between Generation and Treatment.
24. It is further submitted that we have started Utilization of Treated Water & in 9 ULBs viz., Visakhapatnam, Rajamahendravaram, Tirupati, Narsaraopeta, Tadipatri, Puttaparthi, Kurnool, Kadapa, Pulivendula, about 119.90 MLD of treated water is being used for Industrial, Plantation, Ground Water Recharge, Street Washing etc., & this will be scaled up in other ULBs also.
25. I further submit that the Government have issued orders vide U.O Note No.REV01_LANA0MISC/613/2022-LANDS-I, dated 21.10.2022 with certain exemptions to expedite acquisition of land for construction of Sewage Treatment Plants by the Urban Local Bodies. The said U.O Note dated 21.10.2022 is filed herewith as **Annexure – VI**.
26. I respectfully submit that in addition to strengthening the existing infrastructure , by taking innovative interim measures on top priority as explained above, the State of Andhra Pradesh ensured 100% segregation, collection and processing of Solid Waste (6890 TPD) in all 123 ULBs , started Bio-mining in all remaining 121 ULBs and also taken up Treatment of Sewage by Bio-remediation Technology in 109 ULBs, where functional STPs are not existing , thereby ensuring treatment of Sewage to discharge standards.

ATTESTOR

DEPONENT



27. I further submit that the purpose of levy of compensation by the Hon'ble NGT is to Utilize the said compensation for Restoration Measures and since the State of Andhra Pradesh has complied with all the directions passed by the Hon'ble NGT, with reference to Bio-mining (Legacy Waste Treatment), Sewage Treatment and Solid Waste Processing and as afore mentioned ,there are no violations of what so ever that are being continued and there is absolutely no continued damage of whatsoever to the environment.

28. I sincerely hope that the Hon'ble National Green Tribunal may appreciate tremendous progress made by the State of Andhra Pradesh since last hearing held on 4.08.2022 ,by bridging gap of 3161 TPD of solid waste processing; increasing capacity of STPs from 535.45 MLD to 614.45 MLD ; planning construction of 1251.52 MLD STPs to meet present gap and future requirement; tying up of Rs. 1445 Crs for completion of ongoing STPs; implementation of bioremediation for treatment of sewage ,as interim measures to treat sewage to meet the norms, by considering gestation period needed for STPs construction; bio-mining of 8.10 lakh tons of legacy waste; starting of bio- mining of legacy waste in all remaining 121 ULBs and tying up Rs. 352 crs for completion of bio-mining by 31.03.2023 . I humbly request the Hon'ble Tribunal to treat state of Andhra Pradesh differently compared to non performing states particularly in respect of levy of Environmental Compensation by considering the compliance made in respect of processing of solid waste and treatment of sewage.

ATTESTOR


DEPONENT



29. I respectfully submit I will submit that six monthly progress reports to the Hon'ble Tribunal by marking copies to MoUD and CPCB .

30. I most respectfully submit that the delay occurred, if any, in the process of complying with the directions of the Hon'ble NGT is neither willful nor wanton and it is humbly prayed that the Hon'ble NGT may condone the said delay on the facts and circumstances mentioned above.

It is, therefore, prayed that in view of the facts and circumstances stated above and considering the factual report on implementation of various measures by complying with all the orders passed by the Hon'ble NGT, the Hon'ble NGT may not levy any environment compensation on the State of Andhra Pradesh and may be pleased to pass such other order or orders as are deemed fit and proper in the circumstances of the case.

Solemnly affirmed and signed
in my presence on this the day of
November, 2022, at ...*V.V. Jayaswada*

BEFORE ME ATTESTOR


DEPONENT

VERIFICATION STATEMENT

I,, S/o., Occ: Chief Secretary to Government, Government of Andhra Pradesh, deponent herein do hereby verify and state that the facts stated in the above paragraphs are true and correct to the best of my knowledge and believed to be true and correct on the legal advice of my counsel.

Hence, verified on this the *08* day of November, 2022 at ...*V.V. Jayaswada*

Counsel for the State of Andhra Pradesh


DEPONENT

19 *Amo*
08/11/2022
Alla Ratneswara Rao
B.Com., LL.B
ADVOCATE - NOTARY
Appointed by Central Govt.
VIJAYAWADA, Krishna Dt. A.P.



**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT
Memo No.EFS01-ENV/106/2022-SEC-I Dated: 23.08.2022
Computer No: 1809044**

Sub :- EFS&T - NGT Case O.A.No.606 of 2018 - Establishment of Environment Monitoring Cell (EMC) for monitoring of Solid & Liquid Waste Management and other Environmental issues as per NGT guidelines - Orders - Issued.

Ref :- 1.Note from E.A. to Chief Secretary to Govt., Note No.154 /CSEA/2022, dated : 05.08.2022
2. Govt.Lr.No.EFS01-ENV/106/2022-SEC-I, dated: 11.08.2022

In pursuance of the directions of the Hon'ble NGT in OA No.606 of 2018 during the Video Conference (VC) held on 4.8.2022, Government hereby create a Monitoring Cell in the office of Chief Secretary to Government with the following composition:

1. Sri M. Siva Reddy, Joint Chief Environmental Engineer, APPCB
2. Sri P. Poorna Chandra Rao, Joint Director , CDMA
3. Smt. G. Lakshmi Alivelu, Assistant Secretary to Govt., E.F.S. & T. Department, AP Secretariat, Velagapudi.

2. The members of the Monitoring Cell so constituted shall report before the Chief Secretary to Government and take instructions with regard to the monitoring of the solid & liquid waste management and other environmental issues.

3. The Member Secretary, Andhra Pradesh Pollution Control Board and the Commissioner & Director Municipal Administration, Andhra Pradesh shall take further necessary action.

**NEERABH KUMAR PRASAD
SPECIAL CHIEF SECRETARY TO GOVERNMENT**

To
The Members of the Cell through respective HODs.
The Member Secretary, APPCB, Vijayawada.
The Commissioner & Director Municipal Administration, A.P.

Copy to:-
The PS to CS.
The PS to Spl. CS (EFS&T).

//FORWARDED::BY ORDER//

P. Poorna Chandra Rao
SECTION OFFICER

**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT**

**Memo No.EFS01-ENV/106/2022-SEC-I
Computer No: 1809044**

Dated : 20.09.2022

- Sub :- EFS&T Dept. - NGT Case - O.A. No.606 of 2018 - Establishment of Environment Monitoring Cell (EMC) for monitoring of Solid & Liquid Waste Management and other Environmental issues as per NGT guidelines - Appointing Sri S.Venkata Krishna, Municipal Commissioner Grade - I, as Member / expert replacing with P.Poornachandra Rao, Joint Director, O/o. the C&DMA - Orders - Issued.
- Ref :-
1. Note from E.A. to Chief Secretary to Govt., Note No.154/ CSEA/ 2022, dated 05.08.2022.
 2. Memo No.EFS01-ENV/106/2022-SEC-I, E.F.S. & T(Sec.I) Dept., Dated: 23.08.2022.
 3. From the Commissioner & Director of Municipal Administration, A.P., Guntur, Roc.No.12057/19/2022/Lsec, dt : 02.09.2022.

In pursuance of the directions of the Hon'ble National Green Tribunal in O.A.No.606 of 2018 during the video conference (VC) held on 04.08.2022, the Government in the reference 2nd cited, have created a Monitoring Cell in the office of the Chief Secretary to Government with the following composition:

1. Sri M. Siva Reddy, Joint Chief Environmental Engineer, APPCB
 2. Sri P. Poorna Chandra Rao, Joint Director, CDMA
 3. Smt. G. Lakshmi Alivelu, Assistant Secretary to Govt., E.F.S. & T.Department, AP Secretariat, Velagapudi.
2. In the reference 3rd cited, the Commissioner & Municipal Administration, has stated that Sri P.Poornachandra Rao, Joint Director, O/o. the C&DMA is looking after several issues/matters in their office and requested to replace Sri P.Poornachandra Rao, Joint Director, O/o. the C&DMA with Sri S.Venkata Krishna, Municipal Commissioner Grade - I, as Member / Expert in the Monitoring Cell O/o. the Chief Secretary.
3. After careful examination of the matter, the Government hereby appoint Sri S.Venkata Krishna, Municipal Commissioner Grade - I, as Member / Expert by replacing Sri P.Poornachandra Rao, Joint Director, O/o. the C&DMA in the Environment Monitoring Cell in the Office of the Chief Secretary to monitor Solid & Liquid Waste Management & other related issues.
4. The Commissioner & Director Municipal Administration, Andhra Pradesh shall take further necessary action in the matter.

**NEERABH KUMAR PRASAD
SPECIAL CHIEF SECRETARY TO GOVERNMENT**

To

- 1.The Commissioner & Director Municipal Administration, Andhra Pradesh
2. The Member Secretary, APPCB, Vijayawada.

Copy to :-

The Members of the Environment Monitoring Cell :

1. Sri M. Siva Reddy, Joint Chief Environmental Engineer, APPCB
2. Smt. G. Lakshmi Alivelu, Assistant Secretary to Govt., E.F.S. & T.Department, AP Secretariat, Velagapudi.
3. Sri S.Venkata Krishna, Municipal Commissioner Grade -I (for information and necessary action).
- 4.Sri P. Poorna Chandra Rao, Joint Director, O/o. the C&DMA(through CDMA)
- 5.The EA to CS.
- 6.The PS to CS
- 7.The PS to Spl.CS(EFS & T)

//FORWARDED::BY ORDER//


SECTION OFFICER

Model Towns – 3 Municipal Corporations in the State compliant with Waste Management Rules

S.N	Activity	Visakhapatnam	Kakinada	Tirupati
1	Source Segregation	100%	100%	100%
2	Door to Door Collection	100%	100%	100%
3	Secondary Transportation (Covered Vehicles with GPS Tracking)	100%	100%	100%
4	Garbage Transfer Stations Constructed	8 Nos	2 Nos	2 Nos
5	Processing of Wet Waste	100 % thro' Waste to Compost & Bio-CNG Plants	100 % thro' Waste to Compost Plant	100 % thro' Waste to Compost & Bio-CNG Plants
6	Processing of Dry Waste	100 % thro' MRF	100 % thro' MRF	100 % thro' MRF
7	Combustible Waste	Tied up with Waste to Energy Plant Visakhapatnam	Tied up with Waste to Energy Plant Visakhapatnam	Tied up with Ultra Tech Cement Plant, Tadipatri
8	Onsite Processing by Bulk Waste Generators	189 BWGs Processing the waste, on-site	33 BWGs Processing the waste, on-site	87 BWGs Processing the waste, on-site
9	Legacy Waste Treatment	Bio Mining in Progress	Bio Mining in Progress	Bio Mining Completed
10	Sanitary Landfill	Complied (established by WtE Plant Developer)	Complied (established by WtE Plant Developer)	Scientific Landfill established by the ULB
11	C & D Waste Management	80 TPD is being Processed	20 TPD Crushing & Storage Unit Established	20 TPD is being Processed
12	Plastic Waste Management	Ban on Single Use Plastic, Collection Centre Established under EPR, Usage in construction of roads	Ban on Single Use Plastic, Collection Centre Established under EPR, Usage in construction of roads	Ban on Single Use Plastic, Collection Centre Established under EPR, Usage in construction of roads
13	Sewage Treatment	Sewage Generation - 280 MLD Capacity of Existing STPs - 177 MLD STP Under Construction -- 54 MLD Balance 103 MLD sewage is being treated thro' Bio-remediation of drains	Sewage Generation -- 36 MLD STP under construction - 5 MLD Total sewage is being treated thro' Bio-remediation of drains	Sewage Generation - 47.47 MLD Capacity of existing STP - 50 MLD. 100% Sewage generated is being treated

6499388/2022/M SECTION-CDMA

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT DEPARTMENTMemo No.1872299/UBS/2022Dated:17.10.2022

Sub: MA&UD Department - SAC – CDMA - Compliance of Hon'ble NGT directions on solid waste management in the State – Implementation of interim plan – Issue of instructions to ULBs – Regarding.

Ref: From the Managing Director, SAC, Vijayawada, Lr. No. SAC/MD/F. No. NGT/D. No. 261/22, Dated 17-10-2022.

@@@

A copy of the reference cited together with its manual on interim plan for Solid Waste Management in the ULBs is herewith sent to the Commissioner & Director of Municipal Administration, A.P. Vaddeswaram. He is informed that the Managing Director, SAC, Vijayawada has stated that a follow-up meeting was conducted by Chief Secretary, A.P to review the implementation of Hon'ble NGT directions based on O.A 606 of 2018 for compliance of Solid and Liquid waste management rules. Chief Secretary has reviewed the progress of implementation of all the projects planning/implementation and instructed to prepare cluster wise interim plan and regular plan for solid waste management. Entire State is divided into 3 clusters (Visakhapatnam, Guntur & Rayalaseema). The interim plan focuses on clustering the ULBs with no processing facilities with the existing nearby facilities in the Cluster. This interim plan will provide solution for dry waste management till the projects get grounded in the respective ULBs, by transporting the waste generated in the ULB's to nearby waste to energy projects or cement industries.

2. In this regard, an interim plan for providing solution to solid waste management in all ULBs of the state is prepared. The same was detailed to all the ULB commissioners and other staff during the workshop conducted on 12.10.2022.

3. The following are the major components covered in the interim plan:

- i. A total of 27 ULBs are clustered with Visakhapatnam WtE project. Out of the 27 ULBs, 9 ULBs have wet waste treatment plants and the dry waste shall be transported to Visakhapatnam WtE. In the balance 18 ULBs, wet waste processing must be started immediately either by the developer (if project awarded) or by the ULB on their own if the projects are not awarded. The dry waste generated must be transported to the Visakhapatnam WtE.
- ii. A total of 45 ULBs are clustered with Guntur WtE project. Out of the 45 ULBs, 17 ULBs have wet waste treatment plants and the dry waste shall be transported to Guntur WtE. In the balance 28 ULBs wet waste processing must be started immediately either by the developer (if project awarded) or by the ULB on their own if the projects are not awarded. The dry waste generated must be transported to the Guntur WtE.

[Contd...2...]

:2:

- iii. A total of 51 ULBs are linked to Cement industries. Out of the 51 ULBs, only 14 ULBs have functional wet waste treatment plants. In the balance 37 ULBs, wet waste processing must be started immediately either by the developer (if project awarded) or by the ULB on their own if the projects are not awarded. All the 51 ULBs must transport the dry waste generated to the nearby cement industries.
 - iv. The ULBs while transporting the waste shall not mix C&D waste with the Municipal Solid Waste.
 - v. The transportation cost must be borne by the respective ULBs.
4. The CDMA, A.P. Vaddeswaram is therefore requested to issue instructions to the Commissioners of all ULBs for implementation of the interim plan without any deviation for complying with the Hon'ble NGT directions. Further, he is informed that separate instructions will be issued for providing toll tax exemption for the Municipal Vehicles.

Y.SRILAKSHMI
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
All the Municipal Commissioners in the State through the Commissioner & Director of
Municipal Administration, A.P. Vaddeswaram (w.e)
Copy to
The Managing Director, SAC, Vijayawada
Sc

//FORWARDED BY ORDER//


SECTION OFFICER

Interim Plan for Solid Waste Management in the ULBs



Municipal Administration & Urban Development Department

Table of Contents

1.	Profile of the State	2
2.	CLAP (Clean Andhra Pradesh Program)	2
3.	Swachh Bharat Mission Urban – 2.0	3
4.	Directions of Hon'ble NGT & Implementation of SWM Rules 2016	4
4.1.	Important Directions of Hon'ble NGT:	4
4.2.	SWM Rules, 2016.....	4
5.	Waste Management	6
5.1.	Source Segregation:.....	6
5.2.	Collection & Transportation.....	7
5.3.	Processing and Disposal	8
5.4.	Waste to Energy Plants	8
6.	Interim Plan for Solid Waste Management	10
6.1.	Strategy for Interim Solid Waste Management	10
6.2.	Visakhapatnam Cluster	11
6.2.1.	Existing Status of Waste Management facilities in the ULBs.....	11
6.2.2	Interim Measures for Wet Waste Management	11
6.3.	Guntur Cluster:	13
6.3.1.	Existing Status of Waste Management facilities in the ULBs.....	13
6.3.2.	Interim Measures for Wet Waste Management	14
6.4.	Rayalaseema Cluster:	16
6.4.1.	Existing Status of Waste Management Facilities in the ULBs	16
6.4.2.	Interim Measures for Wet Waste Management.....	16
6.5.	Responsibilities of ULBs for compliance of SWM Rules & NGT directions 18	
7.	Annexures	

List of Maps

Map 1 ULBs tied up with WtE Visakhapatnam.....	13
Map 2 ULBs tied up with WtE Guntur	15
Map 3 ULBs tied up with Cement Plants	17

- Deploying Compartmentalized Garbage Tippers
- Distribution of 3 Dust-bins with different colours to all H/Hs
- Construction of Garbage Transfer Stations
- Scientific Treatment & Disposal of 100 % Solid Waste Generated
 - Wet Waste Processing Plants
 - Dry Waste Processing Plants
 - Material Recovery Facilities
 - Waste to Energy Projects / Cement factories
 - Sanitary Landfills
- Comprehensive Used water management and treatment
 - Sewerage Treatment Plants
 - Fecal Sludge Treatment Plants
- Elimination of Legacy Waste and Dumpsite remediation



3. Swachh Bharat Mission Urban – 2.0:

Ministry of Housing & Urban Affairs has launched Swachh Bharat Mission Urban 2.0 with an objective to achieve the Mission's vision of creating a "Garbage Free" Urban India. Further under Swachh Bharat Mission Urban 2.0 the following components would be eligible for funding:

- Sustainable Solid Waste Management
 - setting up of waste processing facilities such as MRFs, transfer stations, composting plants, bio methanation plants, RDF processing facilities, plastic waste processing facilities, waste to electricity, sanitary landfill, etc.

- procuring mechanized sweeping equipment and setting up processing facilities for effective management of Construction and Demolition (C&D) waste in NCAP Cities
- bio-remediation/ capping of all legacy dumpsites in all ULBs
- Sustainable Sanitation
 - construction of Individual Household Latrines (IHHL),
 - construction of Community and Public Toilet (CT & PT) seats, and
 - construction of urinals, along with retrofitting of insanitary toilets.
- Used water management
 - desludging equipment, for scheduled and need-based desludging of all septic tanks;
 - interception and diversion of drains (I&D) (including last mile connectivity for nearest sewer network);
 - Construction of Sewage Treatment Plants (STPs)/ STP cum Faecal Sludge Treatment plants (FSTPs) for used water treatment.
- Information Education Communication / Behaviour Change Communication for Public awareness
- Capacity Building (CB)

4. Directions of Hon'ble NGT & Implementation of SWM Rules 2016

4.1. Important Directions of Hon'ble NGT:

The Hon'ble National Green Tribunal under **O.A.No.606/2018** and **O.A.No.673/2018** has issued the following directions:

- 100% segregation of waste at source and 100% Door to Door Collection
- Collection of User Fee
- Setting up of Transfer Stations instead of Secondary Storage Bins
- Establishment of Wet Waste Treatment Plants for Composting/Bio-CNG
- Establishment of Dry Waste Processing Facilities
- Elimination of Legacy Waste by Bio-mining/Bio- Remediation/Bio-Capping
- Collection & Processing of Plastic Waste
- 100% treatment of Liquid Waste (Grey Water) generated – STPs
- 100% treatment of Liquid Waste (Black Water) generated – FSTPs
- To bring water in the 5 polluted river stretches at least fit for bathing

4.2. SWM Rules, 2016

The applicability of the Solid Waste Management Rules, 2016 has been increased to cover, besides urban local bodies in the country, all urbanized villages having a population of over 5000 and declared as census towns as per national census 2011. This increases the coverage of urban areas from 4041 to 7935 Nos. Besides the 4041 Nos., of urban local bodies and 3894 nos. of large villages declared as census towns, the applicability of these rules has been extended to notified areas, notified industrial townships, areas under the control of Indian Railways, airports,

airbases, ports and harbours, defense establishments, special economic zones, state and central government organizations, places of pilgrims, places of religious & historical importance as may be notified by respective state government from time to time and to every domestic, institutional, commercial and any other non-residential solid waste generator situated in the areas covered under the rules.

In compliance with the rules and to achieve the vision of Bin Free, Litter Free and Garbage Free Cities, MA&UD Dept., has started the program of Clean Andhra Pradesh (CLAP). Replacement of the existing Pushcart system with Garbage Auto Tippers is introduced to reduce the physical stress on sanitation workers and improve the Door-to-Door garbage collection.

SWM Rules, 2016 mandate every waste generator to discharge his obligations specified in the Rule 4 as under:

Duties of Waste Generators:

Every waste generator shall:

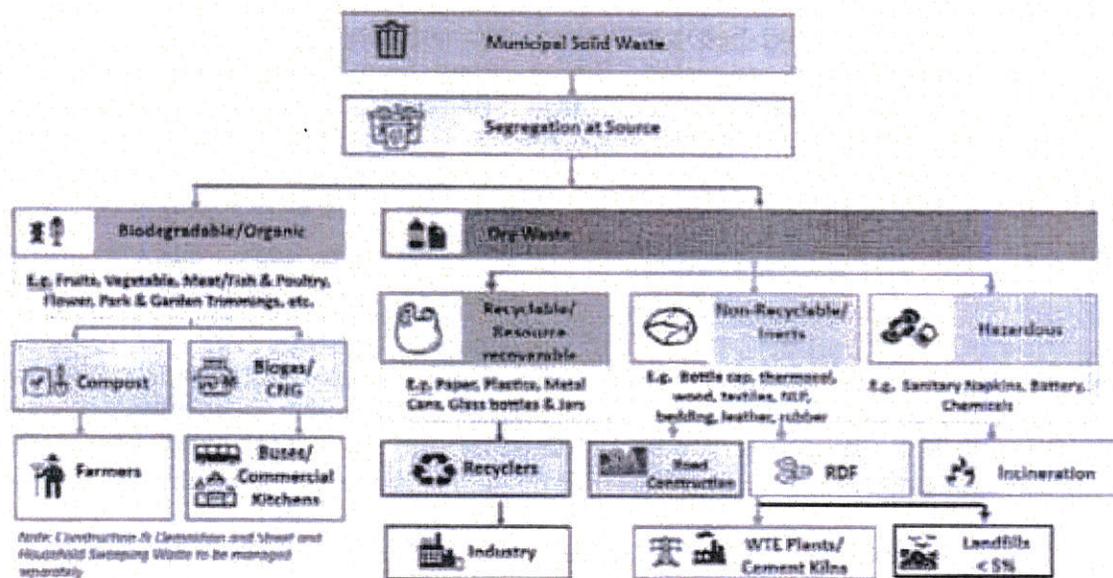
- Segregate and store the waste generated by them in three separate streams namely bio-degradable, non-biodegradable and domestic hazardous wastes in suitable bins and handover segregated wastes to authorised waste pickers or waste collectors as per the direction or notification by the local authorities from time to time;
- Wrap securely the used sanitary waste like diapers, sanitary pads etc., in the pouches provided by the manufacturers or brand owners of these products or in a suitable wrapping material as instructed by the local authorities and shall place the same in the bin meant for dry waste or non-bio-degradable waste;
- Store separately Construction and Demolition (C&D) waste, as and when generated, in his own premises and shall dispose of as per the Construction and Demolition Waste Management Rules, 2016; and
- Store horticulture waste and garden waste generated from his premises separately in his own premises and dispose of as per the directions of the local body from time to time.

Duties of Local Authorities:

- Arrange for door to door collection of segregated solid waste from all households including slums and informal settlements, commercial, institutional and other non-residential premises. From multi-storage buildings, large commercial complexes, malls, housing complexes, etc., this may be collected from the entry gate or any other designated location.
- Establish a system to recognize organizations of waste pickers or informal waste collectors and promote and establish a system for integration of these authorised waste-pickers and waste collectors to facilitate their participation in solid waste management including door to door collection of waste.
- Prescribe from time to time user fee as deemed appropriate and collect the fee from the waste generators on its own or through authorised agency.
- Transport segregated bio-degradable waste to the processing facilities like compost plant, bio methanation plant or any such facility. Preference shall be given for on-site processing of such waste;

- Transport non-bio-degradable waste to the respective processing facility or material recovery facilities or secondary storage facility.
- Involve communities in waste management and promotion of home composting, biogas generation, decentralized processing of waste at community level subject to control of odour and maintenance of hygienic conditions around the facility.
- Bio-methanation, microbial composting, vermi-composting, anaerobic digestion or any other appropriate processing for bio-stabilization of biodegradable wastes.
- Waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns.

Flow Chart of Municipal Solid Waste



5. Waste Management

5.1. Source Segregation:

Segregation refers to the process of separation of municipal solid waste into different categories i.e., Wet, Dry, domestic hazardous and E-wastes. Waste Segregation at Source offer far-reaching benefits- optimal utilization of municipal machinery and workforce, efficient infrastructure operations, and enhanced environmental outcomes.

All the ULBs are distributed 3 bins for each household for segregation of waste into Wet, Dry, and Hazardous at the household level. A total of 1.20 Crores of bins are distributed.

A. Wet Waste:

- Vegetables, Cooked food/Leftovers
- Garden Waste etc.

B. Dry Waste

- Plastic, Paper, Rubber, Glass, Leather, Textile etc.

C. Domestic Hazardous Waste

- Expired medicines
- Garden pesticides
- Paints and solvents etc

D. E-Waste

- LED Bulbs, Screens, Monitors, fridges, washing machines, TVs
Chargers & Batteries etc

Benefits of Segregation:

- Waste segregation at source ensures that waste does not get contaminated and it can be collected and transported separately for further processing.
- Segregation of waste optimizes waste processing and treatment technologies.
- It results in high proportion of segregated material that could be reused and recycled, leading to less consumption of virgin material.
- Waste, if not segregated, can pose risks and constraints on the choice of operation of waste processing technologies. Plastic in waste if incinerated could lead to release of dioxins that are toxic and causes severe health hazards. Household hazardous waste if not segregated (e.g., spent batteries, etc.) can result in contaminated compost.
- Waste segregation leads to a reduction in waste transportation, correspondingly the vehicular emissions reduce.
- Due to dumping of lesser quantity of waste, the life of the landfill increases.
- As it is ensured through segregation that no organic or hazardous waste is dumped in the landfill, the risk to the ecosystem is reduced.
- Segregated waste reduces health and safety related risks to waste pickers.
- Proper segregation of waste thus leads to a 'Circular Economy' creating green jobs, reducing consumption of virgin resources and promoting investments and innovations.

5.2. Collection & Transportation**Primary Collection & Transportation**

Primary Collection refers to the process of collection of segregated solid waste from source of its generation including households, shops, offices, hotels, institutions, and residential or non-residential premises and taking the waste to transfer stations or directly to the disposal site.

- It is accomplished using garbage auto tippers in plain areas.
- In hilly areas, many of the houses are accessible only by footpaths or steps, in these areas segregated waste from households should be collected using backpacks having small leak proof containers, wheeler bags, etc.

For the collection of segregated waste 2525 Petrol/CNG autos, 1123 E-autos are being distributed to the all ULBs with separate compartments for wet, dry, hazardous and e-waste.

Secondary Collection and Transportation

Secondary collection includes picking waste from intermediator points or garbage transfer stations and transporting it to waste processing plants.

Garbage Transfer Stations:

A Garbage transfer station is a secondary collection point where the waste from primary collection vehicles is temporarily stored and transported to processing plants using large vehicles to improve the collection efficiency of primary vehicle, save transportation time and fuel.

It is proposed to construct 138 GTS covering 84ULBs for temporary storage & transportation of waste to processing plants

For transportation of waste to processing plants 340 small compactor, 140 big compactor vehicles are provided to the ULBs.

5.3. Processing and Disposal

Processing is to be done differently for different categories of waste.

Wet Waste:

1. Home and decentralized composting facilities
2. Windrow composting method/Vermi composting method
3. Bio-methanation - most suited for large quantities of segregated wet waste

Dry Waste:

1. Material Recovery Facility (MRF)
2. Non-recyclable/ combustible waste is to be sent to Waste to Energy plant/ Cement Kilns as Refuse Derived Fuel (RDF).

Sanitary Landfill: Only the inert waste and process rejects which are not suitable for any of the above dry and wet waste treatment processes can be sent to sanitary landfills.

5.4. Waste to Energy Plants

Non-Recyclable Dry Waste (Combustible) is the major challenge in the Solid Waste Processing cycle and to provide a solution for disposal of the non-Recyclable waste, GoAP established 2 Waste to Energy Plants in the state located at Guntur and Visakhapatnam.

- The projects have established by M/s Jindal ITF Ecopolis under PPP mode with an investment of Rs.680.00 crores each approximately.

The project is used for disposal of dry waste in huge quantities with in radius of 100 KMs from plant location for urban areas regularly and periodically from the rural areas. Andhra Pradesh is the only state to have two operational waste to energy projects successfully.

6499388/2022/M SECTION-CDMA

As a part of Urban and Rural integration, the waste from the nearby villages is also being transported to the Waste to Energy projects. These projects are providing solution for the dry waste generated in the nearby villages a true transformation of visual cleanliness is being maintained.

Mass Incineration technology has been adopted where the dry waste will be feed into boiler for combustion to generate heat energy up to 850 degrees centigrade to generate high-pressured steam for power generation through turbines. The flue gas will be passed through the filters and finally released into the atmosphere duly following the European emission standards.

Currently **28** ULBs are having Waste to Compost plants, **4** Bio-methanation plants covering 7 ULBs. In another 17 ULBs WtC/Bio-Methanation plants are awarded. In balance 71 ULBs tenders are floated for Integrated Solid Waste Management (ISWM) Plants, **37** ULBs received bids and work awarded and remaining **34** ULBs, **5** ULBs are clustered with nearby existing plants and instructed to transport waste, 14 ULBs clustered with awarded ISWM projects. 15 ULBs tenders will be floated. Plants, which are under progress will be completed by December 2022.

To comply with NGT directions, for short term waste management an Action Plan is prepared utilising the capacities of existing plants and clustering of ULBs on temporary basis for the waste management.

As an Interim Measure, until the commissioning of all Plants Proposed, for processing/disposal of the total waste generated in 123 ULBs of Andhra Pradesh, Three Clusters are formed, based on the location of the Waste Treatment Plants.

- I. Visakhapatnam WtE Cluster
- II. Guntur WtE Cluster
- III. Rayalaseema Cluster

6. Interim Plan for Solid Waste Management

A Comprehensive Action Plan for Solid Waste Management is already prepared for the State. But considering the longer timeframe required for establishment of Solid & Liquid Waste Processing Facilities as well considering the technical issues like availability of land for establishment of these facilities, an INTERIM ACTION PLAN is prepared for 100% compliance of SWM Rules, 2016 & to ensure no Environmental damage due to Solid Waste generated from Urban Areas.

For taking up the Interim Measures, all the 123 ULBs in the State are grouped into Three Clusters based on existing Centralized Waste Processing Facilities.

Name of the Cluster	Number of ULBs covered
Visakhapatnam Cluster	27
Guntur Cluster	45
Rayalaseema Cluster	51

6.1. Strategy for Interim Solid Waste Management

Processing of Wet Waste

1. Thro' established Waste to Compost/Bio-CNG Plants in ULBs, where Waste to Compost Plants are established and are functional
2. Thro' tie up functional WtC/Bio-CNG Plants, where the ULBs are tied up with nearby functional Wet Waste Processing Facilities within 20 kms to 30 kms radius
3. Thro' setting up of Windrow Compost Units with the support of Agencies to whom Plants/Projects are already awarded for establishment of WtC/ISWM.
4. Thro' setting up of ULB owned Windrow Compost Units, where work for setting up of solid waste processing facilities are yet to tendered, finalised and awarded.

Processing of Dry Waste

1. Thro' established Material Recovery Facilities
2. Thro' sending dry waste to established Waste to Energy Plants in the respective clusters (Visakhapatnam & Guntur)
3. Thro' sending dry waste to Cement Plants located in Rayalaseema area

6.2. Visakhapatnam Cluster

There are Twenty-Seven ULBs in Visakhapatnam Cluster. They are Srikakulam, Amadalavalasa, Ichapuram, Palasa Kasibugga, Vizianagaram, Bobbili, Rajam, Nellimarla, Palakonda, Parvathipuram, Salur, GVMC, Yelamanchali, Narsipatnam, Tuni, Kakinada, Peddapuram, Yeleswaram, Samalkot, Pithapuram, Gollaprolu, Amalapuram, Ramachandrapuram, Mandapeta, Mumidivaram, Rajahmahendravaram & Kovvur

6.2.1. Existing Status of Waste Management facilities in the ULBs

Of the 27 ULBs in the Cluster, 9 ULBs have functional Waste to Compost Plants. In 5 ULBs Waste to Compost Plants are awarded and 8 ISWM Plants are awarded (covering 13 ULBs), but these Plants are not yet commissioned.

(refer Annexure-I)

6.2.2 Interim Measures for Wet Waste Management

Plant category	No of Plants	Number of ULBs covered	Interim Measures proposed
Functional WtC Plants	9	9	Dry Waste Transportation to WtE Plant, Visakhapatnam
WtC Plants awarded, but not commissioned	5	5	2 ULBs Clustered with Existing WtC Plants at Bobbili & Narsipatnam 3 ULBs start waste to compost plants, on their, own 5 ULBs clustered with WtE Plant, Visakhapatnam for dry waste.
ISWM Plants awarded, but not commissioned	8	13	Till commissioning of these Plants, 13 ULBs start waste to compost plants, on their, own. 13 ULBs clustered with WtE Plant, Visakhapatnam for dry waste
Total	22	27	

Processing of Wet Waste:

9 ULBs with functional Waste to Compost Plants shall process all the segregated wet waste through the established facilities.

Of the 5 ULBs, where work awarded for construction of Waste to Compost Plants, 2 ULBs are tied up with existing Waste to Compost Plants. These ULBs shall process the segregated wet waste by sending to the Waste to Compost Plants with which they are tied up.

Remaining 3 ULBs with awarded Waste to Compost Plants and 13 ULBs with awarded ISWM Plants shall establish Windrow Compost units with the support of Agencies to which Plants are already awarded

Processing of Dry Waste:

ULBs with existing Material Recovery Facilities shall process the dry waste in established MRFs. Remaining dry waste shall be transported to Waste to Energy Plant, Visakhapatnam

ULBs which do not have Material Recovery Facilities shall transport all the segregated dry waste to Waste to Energy Plant, Visakhapatnam

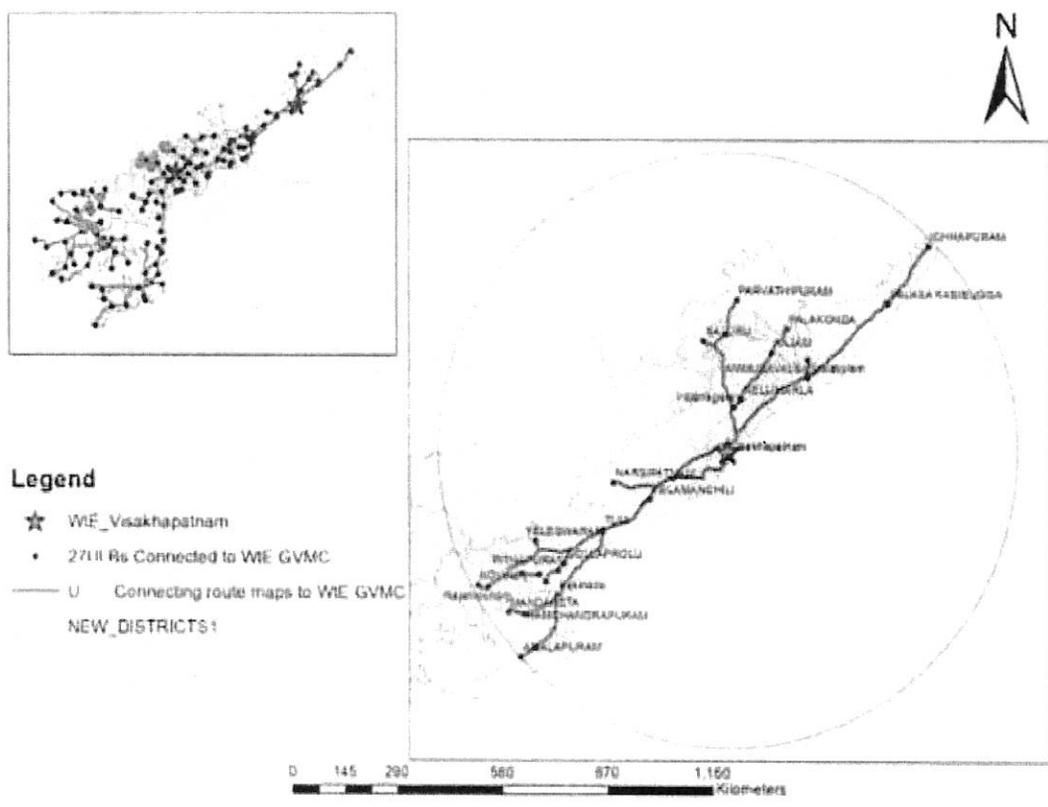
Disposal of Inert and Process Rejects:

The inert and process rejects will be transported to WtE Plant and it is disposed in SLF attached to WtE Plant Visakhapatnam at Visakhapatnam

(For details of ULBs under each category, refer Annexure-I)

Points for consideration while transporting & processing of solid waste

- All the Waste shall be transported in closed container vehicles.
- All the Wet Waste generated should be transported on the same day to the Processing Plant in the ULB or the Processing Plant to which it is tied up
- Dry waste can be stored in a designated place or dumpsite till achievement of Optimum quantity and shall be transported to Waste to Energy Plants at regular intervals
- The collected waste should not be mixed with the existing legacy waste in the dumpsites.
- C&D waste generated and collected in the ULB, should not be mixed with the waste sending to WtE Plant
- All the transportation cost needs to be taken up by the ULB.



Map 1 ULBs tied up with WtE Visakhapatnam

	Qty in TPD
No of ULBs	27
Quantity of Wet Waste Generated	837
Quantity of Dry Waste Generated	555
No of Compactor Vehicles available	137
Quantity of Waste treated at Existing WtC /Bio CNG	442
Quantity of Waste transported to WtE	951
No of Trips per Day	60
Total Cost for Transportation of Waste Per Day	Rs.4.37 lacs

6.3. Guntur Cluster:

There are 45 ULBs in Guntur Cluster. They are Nidadavole, Narsapur, Palacole, Tanuku, Bhimavaram, Akividu, Tadepalligudem, Eluru, Nuzivid, Chinthalapudi, Jangareddygudem, Machilipatnam, Pedana , Gudivada, Vuyyuru, YSR Tadigadapa, Vijayawada, Nandigama, Jaggiahpetta, Tiruvuru, Kondapalli, Guntur , Tenali, Ponnur, Mangalagiri Tadepalli, Bapatla, Repalle, Chirala, Addanki , Gurajala, Dachepalli, Piduguralla, Macherla, Sattenapalli, Chilakaluripet, Narasaraopeta, Vinukonda, Ongole, Markapur, Chimakurthy, Podili, Kanigiri, Darsi, Kavali & Kandukur

6.3.1. Existing Status of Waste Management facilities in the ULBs

Of the 45 ULBs in the Cluster, 11 Waste to Compost/ Bio-CNG Plants are functional (covering 17 ULBs). In 8 ULBs Waste to Compost Plants are awarded and 14 ISWM Plants are awarded (covering 16 ULBs), but these Plants are not yet Commissioned, in 4 ULBs, tenders are yet to be floated for establishment of ISWM Plants (refer Annexure-I)

6.3.2. Interim Measures for Wet Waste Management

Plant Category	No of Plants	Number of ULBs covered	Interim Measures proposed
Functional WtC/Bio CNG Plants	11	17	Dry Waste Transportation to WtE Plant, Guntur
WtC/Bio CNG Plants awarded, but not commissioned	8	8	Till commissioning of these Plants, 8 ULBs start waste to compost plants, on their, own 8 ULBs clustered with WtE Plant, Guntur for dry waste.
ISWM Plants awarded, but not commissioned	14	16	Till commissioning of these Plants, 16 ULBs start waste to compost plants, on their, own 16 ULBs clustered with WtE Plant, Guntur for dry waste.
ISWM Plants to be retendered	4	4	4 ULBs start waste to compost plants, on their, own 4 ULBs clustered with WtE Plant, Guntur for dry waste.
Total	37	45	

Processing of Wet Waste:

17 ULBs with functional Waste to Compost Plants shall process all the segregated wet waste through the established facilities.

Remaining 8 ULBs with awarded Waste to Compost/Bio CNG Plants and 14 ULBs with awarded ISWM Plants shall establish Windrow Compost unit with the support of Agency to which Plants are already awarded

Remaining 4 ULBs where tenders are yet to floated, shall set up Windrow Compost Units, on their, own as an interim measure

Processing of Dry Waste:

ULBs with existing Material Recovery Facilities shall process the dry waste in established MRFs. Remaining dry waste shall be transported to Waste to Energy Plant, Guntur

ULBs which does not have Material Recovery Facilities shall transport all the segregated dry waste to Waste to Energy Plant, Guntur

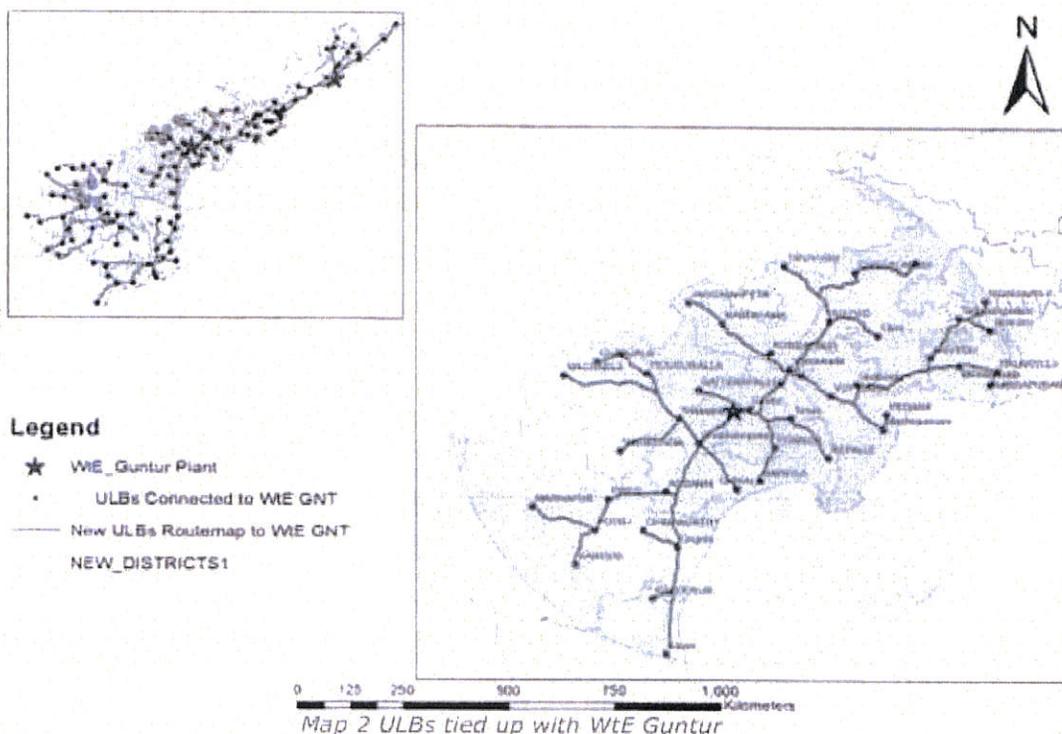
Disposal of Inert and Process Rejects:

The inert and process rejects will be transported to WtE Plant and it is disposed in SLF attached to WtE Plant Guntur at Guntur.

(For details of ULBs under each category, refer Annexure-I)

Points for consideration while transporting & processing of solid waste

- All the Waste shall be transported in closed container vehicle.
- All the Wet Waste generated should be transported on the same day to the Processing Plant in the ULB or the Processing Plant to which it is tied up
- Dry waste can be stored in a designated place or dumpsite till achievement of Optimum quantity and shall be transported to Waste to Energy Plants in regular intervals
- The collected waste should not be mixed with the existing legacy waste in the dumpsite.
- C&D waste generated and collected in the ULB, should not be mixed with the waste sent to WtE plants
- All the transportation cost needs to be taken up by the ULB.



	Qty in TPD
No of ULBs	45
Quantity of Wet Waste Generated	1558
Quantity of Dry Waste Generated	1066
No of Compactor Vehicles Available	179
Quantity of Waste treated at Existing WtC/Bio CNG	554
Quantity of Waste transported to WtE	2051
No of Trips per Day	108
Total Cost for Transportation of Waste Per Day	Rs.5.60 lacs

6.4. Rayalaseema Cluster:

There are 51 ULBs in Rayalaseema Cluster. They are Giddalur, Nellore, Alluru, Buchireddypalem, Atmakur (N), Gudur (N), Kurnool, Gudur (K), Adoni, Yemmiganur, Nandyal, Allagadda, Dhone, Bethamcherla, Atmakur (NDL), Nandikotkur, Ananthapuramu, Rayadurg, Kalyandurgam, Tadipatri, Guntakal, Gooty, Dharmavaram, Penukonda, Hindupur, Madakasira, Kadiri, Puttaparthi, Kadapa, Proddatur, Pulivendula, Jammalamadugu, Badvel, Mydukur, Yerraguntla, Kamalapuram, Madanapalle, B.Kothakota, Rajampeta, Rayachoti, Chittoor, Punganur, Palamaneru, Nagari, Puttur, Kuppam, Tirupati, Srikalahasti, Venkatagiri, Sullurpet & Naidupet

6.4.1. Existing Status of Waste Management Facilities in the ULBs

Of the 51 ULBs in these Cluster, 12 Waste to Compost/Bio-CNG Plants (covering 14 ULBs) are functional. In 4 ULBs Waste to Compost Plants are awarded and 15 ULBs ISWM Plants covering 22 ULBs are awarded. But these Plants are yet to Commission. In 11 ULBs, tenders to be floated for establishment of ISWM Plants (refer Annexure-I)

6.4.2. Interim Measures for Wet Waste Management

Plant category	No of Plants	Number of ULBs covered	Interim Measures proposed
Functional WtC/Bio CNG Plants	12	14	Dry Waste Transportation to Cement Factories
WtC/Bio CNG Plants awarded, but not commissioned	4	4	37 ULBs start waste to compost plants, on their, own, for wet waste processing and clustered with Cement Factories to transport Dry Waste
ISWM Plants awarded, but not commissioned	15	22	
ISWM Plants to be retendered	11	11	
Total	42	51	

Processing of Wet Waste:

14 ULBs with functional Waste to Compost Plants shall process all the segregated wet waste through the established facility.

4 ULBs with awarded Waste to Compost Plants and 22 ULBs with awarded ISWM Plants shall establish Windrow Compost unit with the support of Agency to which Plants are already awarded

Remaining 11 ULBs where tenders are yet to floated for setting up of ISWM Plants, shall set up Windrow Compost Units, on their, own, as an interim measure

Processing of Dry Waste:

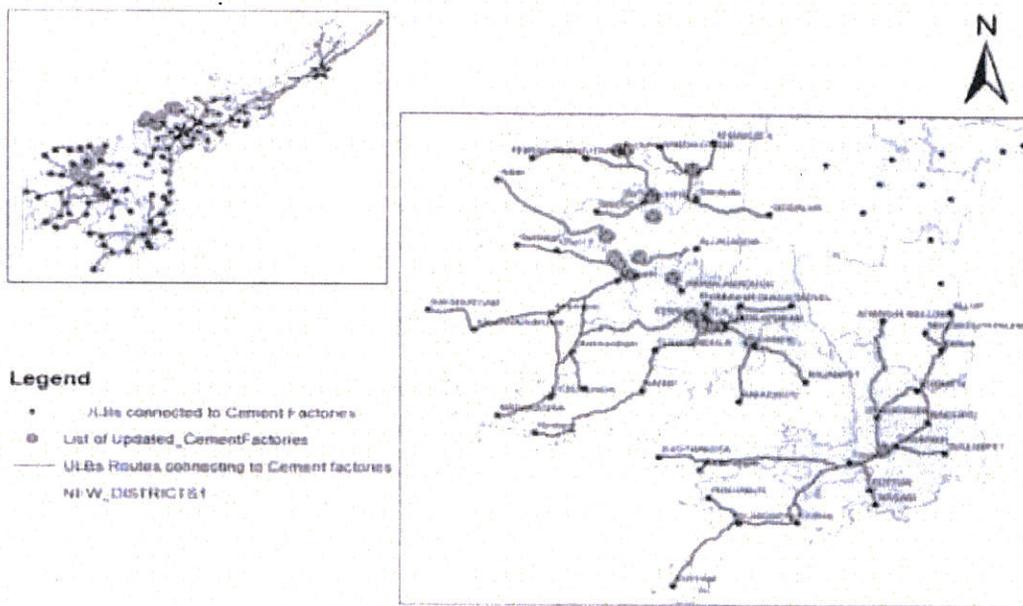
ULBs with existing Material Recovery Facilities shall process the dry waste in established MRFs. Remaining dry waste shall be transported to Cement Plants to which they are tied

ULBs which do not have Material Recovery Facilities shall transport all the segregated dry waste to Cement Plants to which they are tied.

(For details of ULBs under each category, refer Annexure-I)

Points for consideration while transporting & processing of solid waste

- All the Waste shall be transported in closed container vehicle.
- All the Wet Waste generated should be transported on the same day to the Processing Plant in the ULB or the Processing Plant to which it is tied up
- Dry waste can be stored in a designated place or dumpsite till achievement of Optimum quantity and shall be transported to Cement Plants in regular intervals
- The collected waste should not be mixed with legacy waste existing in the dumpsite.
- C&D waste generated and collected in the ULB, should not be mixed with the waste sent to Cement Plants
- All the transportation cost needs to be taken up by the ULB.



Map 3 ULBs tied up with Cement Plants

	Qty in TPD
No of ULBs	51
Quantity of Wet Waste Generated	1394
Quantity of Dry Waste Generated	815
No of Compactor Vehicles Available	164
Quantity of Waste treated at Existing WtC/Bio CNG	337

Quantity of Waste transported to Cement Factories	815
No of Trips per Day	82
Total Cost for Transportation of Waste Per Day	Rs.2.92 lacs

6.5. Responsibilities of ULBs for compliance of SWM Rules & NGT directions

- Ensure supply of three dust bins to all H/Hs and its utilization for the purpose intended to i.e., segregation of waste generated at source
- ULBs ensure 100% door-to-door collection of segregated waste from households.
- Create public awareness through Information, Education and Communication campaign and educate the waste generators through Ward Volunteers, NGOs, MEPMA and SHGs.
- Ensure that garbage vehicles collect waste as per designated route plans/transportation plans.
- Till the GTSs are constructed, intermediary points have to be identified.
- ULBs should process 100% waste generated.
- The ULBs clustered with existing plants should transport the waste to the nearby clustered ULB, as directed.
- ULBs with awarded projects are instructed to start the waste processing coordinating with developer, immediately.
- ULBs, where Govt., land is not available shall initiate process for land acquisition.

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT DEPARTMENT

Memo No.4329936/UBS/2021
Computer No.1355976

Dated:15.06.2021

Sub. MA&UD Department – CDMA - MA&UD-SAC- 100 Days preparatory Action Plan for CLAP- Clean Andhra Pradesh Program- Certain Guidelines for levy and collection of User fee in the ULBs for effective implementation of Solid Waste Management Rules in the State - Reg

Ref: From the Commissioner & Director of Municipal Administration,
Guntur, Letter Roc. No.12057/13/2021/L, dated: 09-06-2021

@@@

The Commissioner & Director of Municipal Administration, Guntur in the reference cited has reported that though, all ULBs in the State are incurring huge expenditure on SWM, every year, they could not acquire and position suitable vehicles, modern equipment for door to door garbage collection due to paucity of funds. Therefore, there is every need for levying use fee for Solid Waste Management, to generate revenue for the ULBs. In turn, generated revenue will strengthen the ULBs to fund all or part of the provisions of their services relating to SWM and thus, leads to enhancement in the quality of the services to the residents also. Further, Rule 15(f) of the Solid Waste Management Rules, 2016, issued by Ministry of Environment, Forest, Climate Change, Government of India also stipulates that it is the responsibility of the Urban Local Bodies to prescribe from time to time as deemed appropriate and collect it from the waste generator on their own or through authorized agencies. Government of India has also emphasized certain pre-requisites for release of funds under centrally sponsored schemes like SBM, AMRUT, 15th Finance Commission etc., and to meet this the ULBs need to levy and collect for SWM. To initiate a State wide movement to build Clean Andhra Pradesh, the Clean Andhra Pradesh Programme is envisioned and the core objectives and aims of this Mission are:

- Bin free – Litter free – Garbage free cities
- 100% Door to Door Collection
- 100% Source Segregation with Community Participation
- Encourage Home Composting and Onsite Waste treatment.
- Visual Cleanliness in the ULBs
- 100% Treatment of Solid Waste Generated

Contd...2..

For the above purpose, the ULBs shall position/engage/deploy required No. of vehicles like Auto Tippers, for garbage collection/transportation in all the wards of the ULBs from every house/premises. The Auto Tippers along with necessary equipment will be deployed and the required expenditure for this purpose shall be collected by way of from all households, commercial establishments etc. The CDMA has therefore requested the Government to issue necessary Guidelines for collection of user fees by the ULBs in the State for effective implementation of the Solid Waste Management.

2. Government have examined the proposal of the CDMA and the following guidelines are kept in view by the ULBs while arriving at the rate of user fee for Solid Waste Management Activities.

- **Proportionality** : The User Fee should be in proportion to the quantity of waste generated and level of service provided to waste generators. Households generate much less waste as compared with commercial, institutional, and industrial establishments. Therefore, variable rate may be prescribed for different categories, of waste generators keeping in mind the quantity of waste generated.
- **Capacity to pay User Fee**: Affordability of the citizens/residents may be kept in mind while fixing User Fee. A fair service fee tariff will facilitate better compliance. Moderate rate, least exemptions, and wider coverage of all categories of waste generators will fetch higher revenue.
- The User Fee may be between @ Rs.1/- to Rs.5/- per day, from each household and this may vary from ULB to ULB, basing on its size/grade. Similarly, User Fee from commercial establishments collected per month, shall also be depending upon the size/grade of the ULB and the quantity of garbage lifted by the ULBs from their premises. However, it is the ULB to fix the rate of User Fee to be collected by them for the purpose considering the above conditions.
- The Large number of ULBs have already passed the Council Resolutions/communicated the in-anticipation approval orders intimating their willingness to levy and collect User Fee. It is to note that, as per Sec. 491-A of Municipal Corporations Act, 1955 and Sec. 170-B of A.P. Municipalities Act, 1965, the Government may by notification direct the Municipal Corporations and Municipal Councils, to levy and collect User Fee for Solid Waste Management at such manner or method from all residential and non-residential premises. The User Fee from each household/commercial establishment etc., shall be collected on monthly basis by the ULB. Wide publicity and awareness among the different stakeholders shall be the responsibility of the ULB and the required material for the IEC activities will be supplied by the Swachh Andhra Corporation.

- The Commissioners of all the ULBs shall also publicize and create awareness among the residents/citizens on the duties of the waste generators that the waste generators shall segregate and store the waste generated by them in three separate streams namely bio-degradable, non-bio-degradable and domestic hazardous wastes in suitable bins and hand over segregated wastes to the PH workers or to the authorized agencies, as notified by the ULBs. The ULBs may provide each household, basing on their financial position, three dust bins for temporary storing the waste generated to encourage them, as one time activity, to segregate the waste and hand it over to the PH Workers of the ULB. Further, the collected User Fee shall be maintained as ULB wise separate deposit called as "Swachh Andhra Nidhi". Subsequently, the collected User Fee from households towards door-to-door Solid Waste collection shall be remitted to the earmarked account and later on shall be utilized towards payment of Solid Waste maintenance activities i.e., payment to garbage Auto tippers, IEC activities etc. If any occurrence of deficiency happens to meet the expenditure on Solid Waste maintenance activities from such collected User Fee, balance amount shall be replenished from the General funds of the respective ULB.

Mechanism for collection of User Fee:

- a. **Master Data:** To implement/start the collection of User Fee for Solid Waste Management in the ULBs, the Master Data available with VS&WS Department may be taken into consideration in respect of residential households and the data pertains to Commercial establishments has to be collected by the ULBs.
- b. **Jurisdiction of Auto-Tipper:** Since there are about 1000 Households under each Ward Secretariat, the jurisdiction of the proposed Auto-tipper to be engaged for the purpose of collection of Door-to-Door Garbage, shall be about 1000 Residential Households apart from the Commercial Households thus, One Auto-tipper will cover the households in each Ward Secretariat.
- c. **Employees responsible for collection of User Fee:**
Ward Sanitation & Environment Secretary has to be made responsible for collection of User Fee in the ULBs. Wherever shortfall of such functionaries, the services of the Ward Planning & Regulation Secretaries shall be taken by the Commissioners of the ULBs, and these Ward Sanitation & Environment Secretaries/Ward Planning and Regulation Secretaries shall be responsible for collection of User Fee. The Sanitary Supervisors/Sanitary Inspectors will also be made responsible for overall supervision and ensure the collection.
- d. **Mode of Collection:** User Fee can be collected through Online, UPI, Mobile App, QR code (Scan & Pay) and Cash.

Contd... 4..

- The Municipal Commissioners shall encourage the digital payments only. All the digital payments shall be linked to the existing Bank Accounts being maintained by the ULBs. Further, likewise collected User Fee at ULB level shall be transferred to the CDMA Bank Account on regular basis. Payment by way of Cash is a last option to the Citizens to pay User Fee. Wherever the cash collections are made through Ward Sanitation & Environment Secretary the Municipal Commissioners shall ensure that the daily collections are handed over to the Shroff of the ULB (at main Office) under the supervision of the Municipal Manager in Municipalities (or) Superintendent in Municipal Corporations and shall be remitted to the above Savings Bank Accounts of the ULBs. Wherever there is a deficit either in the first year or in subsequent years, the same shall be met from the General funds of the ULBs and the Municipal Commissioners shall transfer the said funds to the designated CDMA Bank Account on monthly basis. The Municipal Commissioners have to transfer the amount collected by the ULBs towards User Fee from the commercial establishments also to the designated CDMA Bank Account. The Municipal Commissioners have to meet the expenditure from their own General Funds on hiring of vehicles, if any/O&M for the own vehicles etc., which are being used for collection of solid waste from the Commercial Establishments and to continue existing collection and transportation mechanism.
- The successfulness of any program depends on effective participation of Public and inclusivity of all institutions. Enough sensitization needs to be erected among Public / Stakeholders through designed IEC material Pamphlets /Posters /Songs /Videos, etc., for which Swachh Andhra Corporation has to be made responsible and to play pivotal role. Similarly, Resource Persons of MEPMA organization / Village Volunteers shall be utilized to create awareness, sensitization among public on Solid Waste Management including segregation of waste at source, Home Composting etc.

3 The Commissioner & Director of Municipal Administration, Guntur is therefore requested to take necessary action in the matter accordingly and issue suitable instructions to all the ULBs in the State for effective implementation of Solid Waste Management.

Y.SRILAKSHMI
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
The Commissioner & Director of Municipal Administration, Guntur
Sc

//FORWARDED BY ORDER//

G. Sudha Rani
ASSISTANT DIRECTOR

14

GOVERNMENT OF ANDHRA PRADESH
MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT DEPARTMENT

Memo No.1862385/UBS/2022

Date: 07.10.2022

Sub: MA&UD Department – Insitu treatment of Sewerage for Gap in treatment of Sewerage generated in the State to avoid compensatory fines by the Hon'ble National Green Tribunal and successful implementation of Swachh Bharat Mission Urban 2.0 and Clean Andhra Pradesh – Instructions issued.

Ref: From the Managing Director, Swachha Andhra Corporation, Vijayawada, Letter No. 0021/SAC/NGT/D.No.281/2020-21, Dated 04-10-2022

* * * *

A copy of the reference cited is herewith sent to the Commissioner & Director of Municipal Administration, Mangalagiri. He is aware that Swachh Bharat Mission Urban 2.0 Guidelines, Ministry of Housing and Urban Affairs has launched Swachh Bharat Mission Urban 2.0 with an objective to achieve the Mission's vision of creating a "Garbage Free" Urban India. Likewise, the Hon'ble CM has launched CLAP program with a motto of bin free -litter free- garbage free cities for Clean Andhra Pradesh.

2. He is also informed that the Hon'ble National Green Tribunal under O.A.No.606/2018 in its hearing in respect of AP has been instructed to expedite the implementation of the solid and liquid waste treatment along with disposal in time bound manner.

3. The National Mission for Clean Ganga, Ministry of Jal Shakti Under Namami Gange program, sewage handling projects are primarily being taken up in towns along the banks of river Ganga, through construction of Sewage Treatment Plants. These have long gestation period and usually take more than 3 years for commissioning since sanction, besides, being capital-intensive with high operation and maintenance cost. Since during the intervening period, sewage continues to flow into river Ganga and its tributaries, there is a need to manage the pollution load by ex-situ/in-situ treatments through various innovative technologies (such as Modular STP based on Electrocoagulation, Filtration; Eco-Bioblock, Phytoremediation, Geo-Tube etc.) available across the globe. These are significantly less costly and require much shorter time duration of 6-8 months for commissioning and showing results. Implementing these techniques prevent degraded quality of water from flowing directly into river Ganga and its tributaries.

4. The In-situ treatment is simple and easy-to-operate and does not require major modification of the drain. Naturally, occurring Microbial consortia/Nutrient media is used in the treatment process or activated to degrade sewage in flowing conditions without diverting the flow and no additional requirement of land or power is involved. The technology is considered to be cost-effective, relatively cheaper than conventional treatment methods, easy to handle and does not require skilled man-power to operate. Further has Estimated budget is based on generic assessment (@ Rs. 2000/MLD for one year) for an indicative bio- remediation technology. Duration of treatment may change as per the conveyance of project proponent. The budget may vary depending upon level of technology and treatment proposed. This budget may also vary in case of modular kind of in- situ or ex-situ systems.

(P.T.O.)

5. In this connection, the insitu treatment of Sewerage has been calculated in ULB wise for the Gap identified in the treatment as follows:

Category	No.of ULBs	Sewage Gen in MLD	Existing Plant Capacity in MLD	Under Construction in MLD	Gap of treatment in MLD
AMRUT	32	1020	507	438	75
Non AMRUT	91	510	29	68	413
TOTAL	123	1530	536	506	488

6. In the above circumstances, the Commissioner & Director of Municipal Administration, Mangalagiri is requested to direct the ULBs of 1.00 Lakh and above population to take up insitu treatment in the treatment of Sewerage Gap with their own funds and for other cities SAC will provide funds to avoid compensatory fines by the Hon'ble NGT and also to enable the achievement of objectives set forth under Swachh Bharat Mission Urban 2.0 and Clean Andhra Pradesh Programme. Further, due tender/EOI process shall be followed.

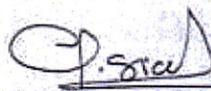
7. The Managing Director, Swachha Andhra Corporation, Vijayawada is also requested to finalise the guidelines for insitu treatment of sewerage as per the CPCB guidelines as approved by the NGT and to communicate to the ULBs to start with the insitu treatment of sewage, immediately. Further, Managing Director, Swachha Andhra Corporation is requested to invite Eoi / RFP for selection of agencies with a standard cost for insitu treatment of sewerage in the drains per MLD for one year.

8. The Commissioner & Director of Municipal Administration, Mangalagiri and the Managing Director, Swachha Andhra Corporation, Vijayawada are therefore requested to take necessary action in the matter accordingly.

Y.SRILAKSHMI
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
The Commissioner & Director of Municipal Administration, Mangalagiri (w.e.)
The Managing Director, Swachha Andhra Corporation, Vijayawada (w.e.)
Sc

//FORWARDED BY ORDER//


SECTION OFFICER

**GOVERNMENT OF ANDHRA PRADESH
REVENUE (LANDS-I) DEPARTMENT**

U.O.Note.No. REV01_LANA0MISC/613/2022-LANDS-I

Dt:21/10/2022

Sub: Lands - Request of MA&UD(J) Dept., for necessary exemptions for land - Acquisition to expedite the implementation of sewage treatment plants in Urban, Local Bodies with population below 1 lakh to avoid compensatory fines by the Hon'ble National Green Tribunal and successful implementation of swachh Bharat Mission Urban and clean Andhra Pradesh - Remarks called for - Submitted - Reg. (C.No.1873401)

Ref:-1.File no.MAU01-MUNA/780/2022-J(Computer No.1862199)
2.Govt.Memo.No.REV01_LANA0MISC/613/2022-LANDS-I,Revenue (LANDS.I)Dept., Dt:12.10.2022 (along with D.O.Lr of Managing Director, SwachhAndhra Corporation Dt:4.10.2022)
3.From the Spl CS & CCLA Lr.REV02-40/1/2022-LA1 SECTION-CCLA, Dt:19/10/2022

With reference to the request of the MA&UD department vide reference 1st cited it is informed that the matter has been examined with reference to the provisions of LARR Act & Rules informed as follows:-

- I) The details of two GOs mentioned in the Government memo are as follows:-
 - a. G.O.Ms.No.562 Revenue (LA) Department dt.13.11.2018-Government have notified the rules to the amended Act 22/2018.
 - b. G.O.Ms.No.487 Revenue (LA) Department dt.29.11.2019-Government have notified amendment to Rule 12 of LARR Rules, 2018.

Hence, it is clear that the above two GOs are not related to taking up for LA for NPI on one hand and on the other hand the letter attached to the memo lacks clarify about what kind of exemptions are required by the MA & UD Department.

- II) However, in view of the urgency, as stated by the MD, SAC in his letter, it is mentioned as follows:-
 - a. GOVERNMENT LAND- The concerned Collector after identification of suitable Government land which is free from all encumbrances has to submit alienation proposals to CCLA for placing it before APLMA for onward transmission to Government.

Contd.

:2:

b. PRIVATE LAND- To acquire private land, the following three categories are available in the LARR Act, 2013:-

- i) General Land Acquisition;
- ii) Consent Award u/s 23-A
- iii) Voluntary Acquisition (Sale) of Land u/s 30-A

It is further submitted as stated by the MD, SAC in his letter, if the requisition department wants to adopt clause (c) above, the procedure as stipulated in the Rules are as follows:-

- a. The requisitioning administrative department of the State Government shall in the first instance, finalize the minimum extent of the land required for the project;
- b. The Requisitioning Administrative Department, after finalizing the extent of land requirement under rule 3, may, give the required proposal in Form-A(1) u/s 10-A of the Act. The Special Chief Secretary Revenue/District Collectors will issue notification accordingly in form (A2) after due examination exempting the project under Social Impact Assessment study ;

Section-10A reads as follows:-

The State Government may, in the public interest, by notification in the Andhra Pradesh Gazette, exempt any of the following projects from the application of the provisions of Chapter II & III of the LARR Act, 2013, namely:-

- i. such projects vital to national security or defence of India and every part thereof, including preparation for defence or defence production;
- ii. rural infrastructure including electrification;
- iii. affordable housing and ~~sanit~~ housing for the poor people;
- iv. industrial corridors set up by the State Government and its undertakings (in which case the land shall be acquired up to one kilometre on both sides of designated railway lines or roads for such industrial corridor); and
- v. infrastructure projects, including projects under public-private partnership where the ownership of the land continues to vest with the Government;

Contd..

3:

Provided that the State Government shall, before the issue of notification, ensure the extent of land for the proposed acquisition keeping in view the minimum land required for such projects.

c. The Requisitioning Agency shall file requisition with the District Collector, furnishing the details of the land required for public purpose in Form-B :

d. On receipt of such requisition, the District Collector or an Authorised Officer after due verification shall, issue a notification in Form-C inviting claims from all the persons interested/affected for settlement by negotiation of the same;

e. The negotiations Committee constituted under rule 8 shall carry out the negotiations. The committee consisting of-

i. District Collector; ii. Joint Collector;

iii. RDO/Deputy Collector - Convener of the Committee;

iv. Executive Engineer of a Works Department (Other than the requisitioning Department);

v. Representative of Requisitioning Department;

f. The negotiations so carried out and the settlement reached thereby shall be entered into an agreement in Form-G3 for land owners, and in Form-G4 for other than land owners;

g. The District Collector or the Authorized Officer shall pass an order as per the agreement entered into which shall be notified in the District Gazette;

Provided that the considerations offered to land owners shall be higher than what could have been arrived under the provisions of LARR Act, 2013 and Rules 2014.

Contd.

6525801/2022/TAPPAL-REV01

:4:

Further it is informed that if the Requisitioning Agency wants to acquire the land at the earliest to avoid the wrath of NGT, the concerned Administrative Department in Government shall accord permission to acquire land under Voluntary Acquisition (Sale) of Land, in accordance with the Act, so as to enable the Requisitioning Agency to acquire the land subject to payment of compensation as per GO to the land owners by depositing the amount into the account of concerned District Collector.

The MA&UD department is requested to take further action accordingly in the matter.

G.SAI PRASAD
SPECIAL CHIEF SECRETARY TO GOVERNMENT(FAC)

To
The MA&UD department

//FORWARDED:BY ORDER//


SECTION OFFICER

Photographs showing
Waste to Compost Plants, Waste to
Bio-CNG Plants,
Windrow Composting Units,
Material Recovery Facilities, Waste
to Energy Plants Legacy Waste
Treatment Sites & Bio-remediation
of drains

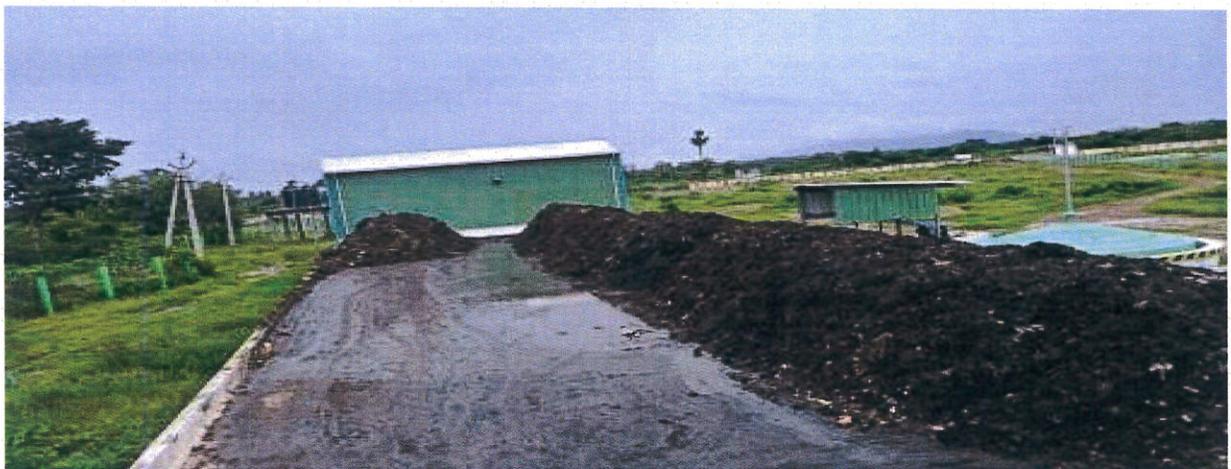
Photographs showing Waste to Compost Plants



Waste to Compost Plant, Tenali Municipality

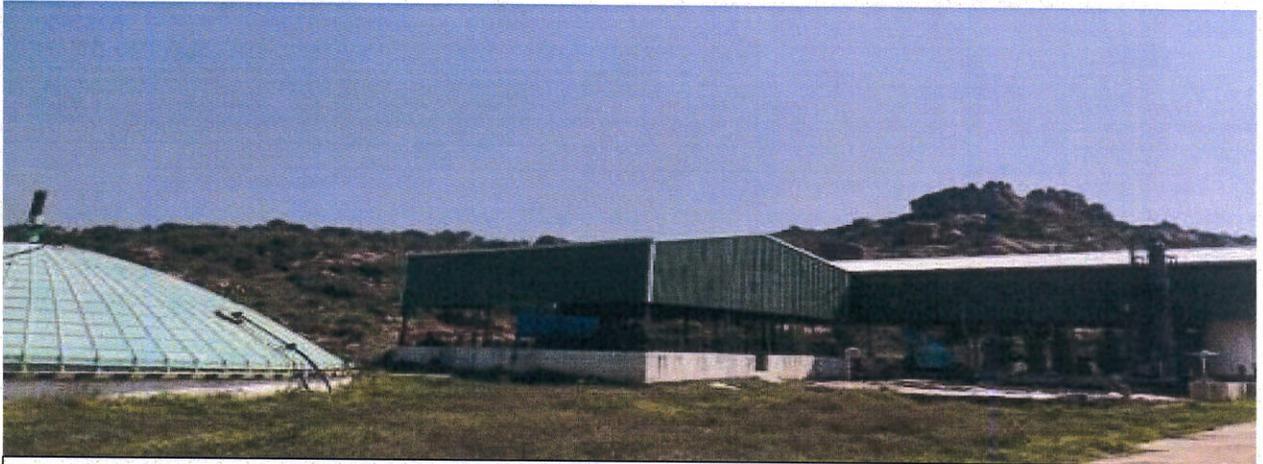


Waste to Compost Plant, Salur Municipality

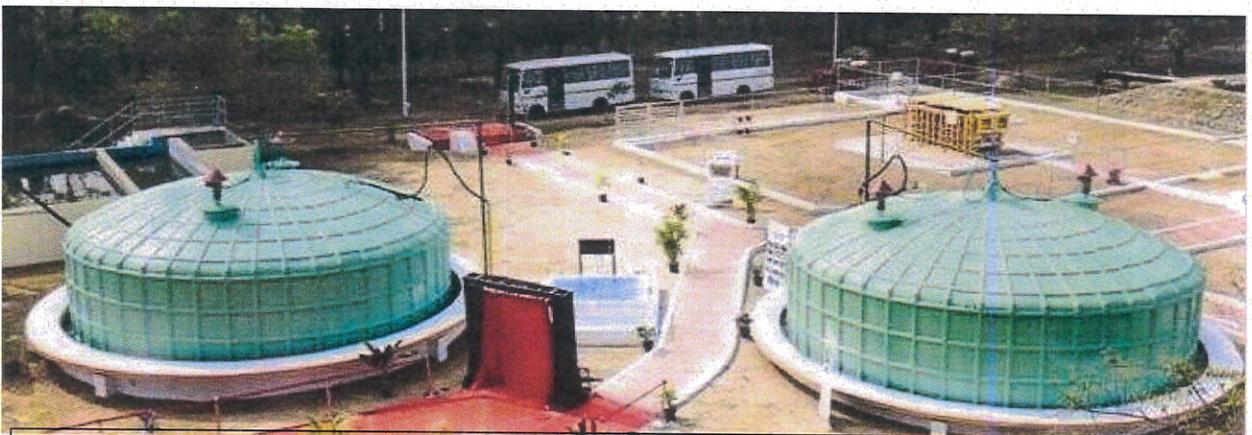


Waste to Compost Plant, Tiruvuru Nagar Panchayat

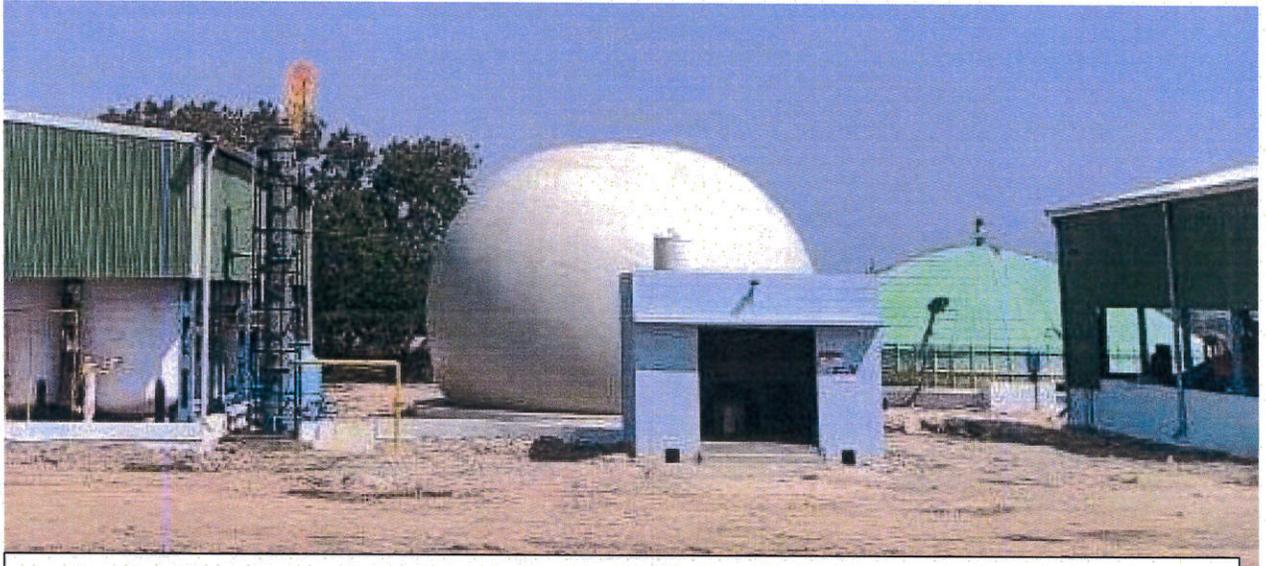
Photographs showing Bio-CNG Plants



Bio-CNG, Adoni Municipality



Bio-CNG, Tirupati Municipal Corporation



Bio-CNG, Pidiguralla Municipality

Photographs showing Windrow/Vermi Composting



Windrow Composting, Chittoor Municipal Corporation

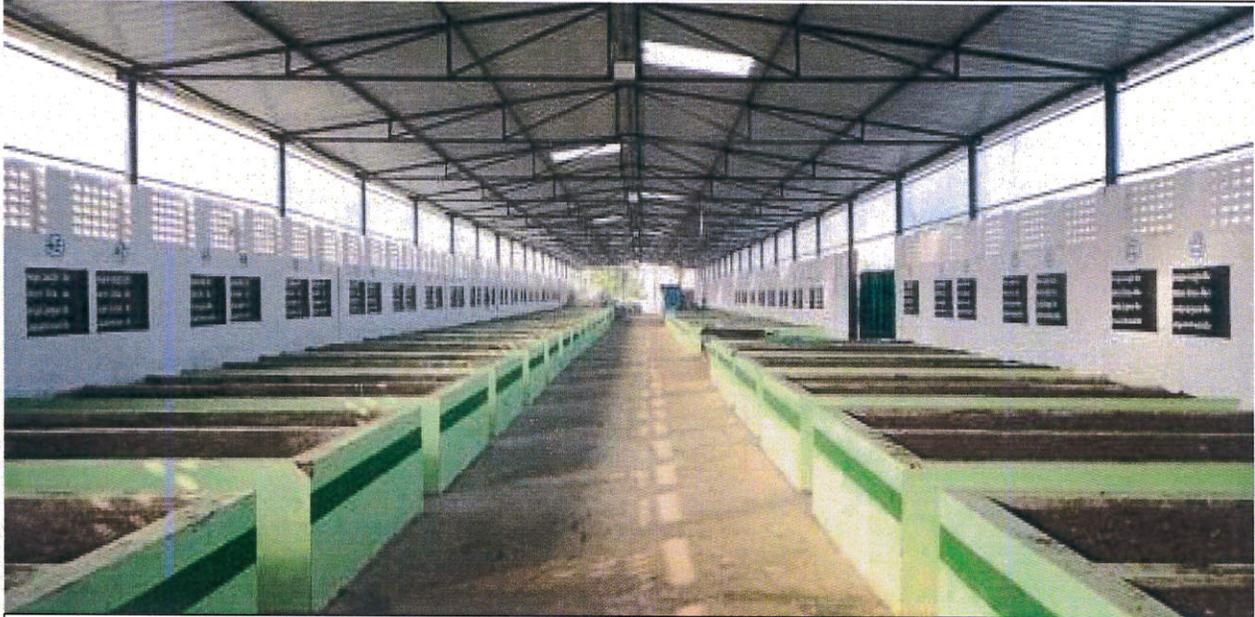


Windrow Composting, Palamaneru Municipality



Windrow Composting, Srikalulam Municipal Corporation

Photographs showing Windrow/Vermi Composting



Vermi Composting, Kakinada Municipal Corporation

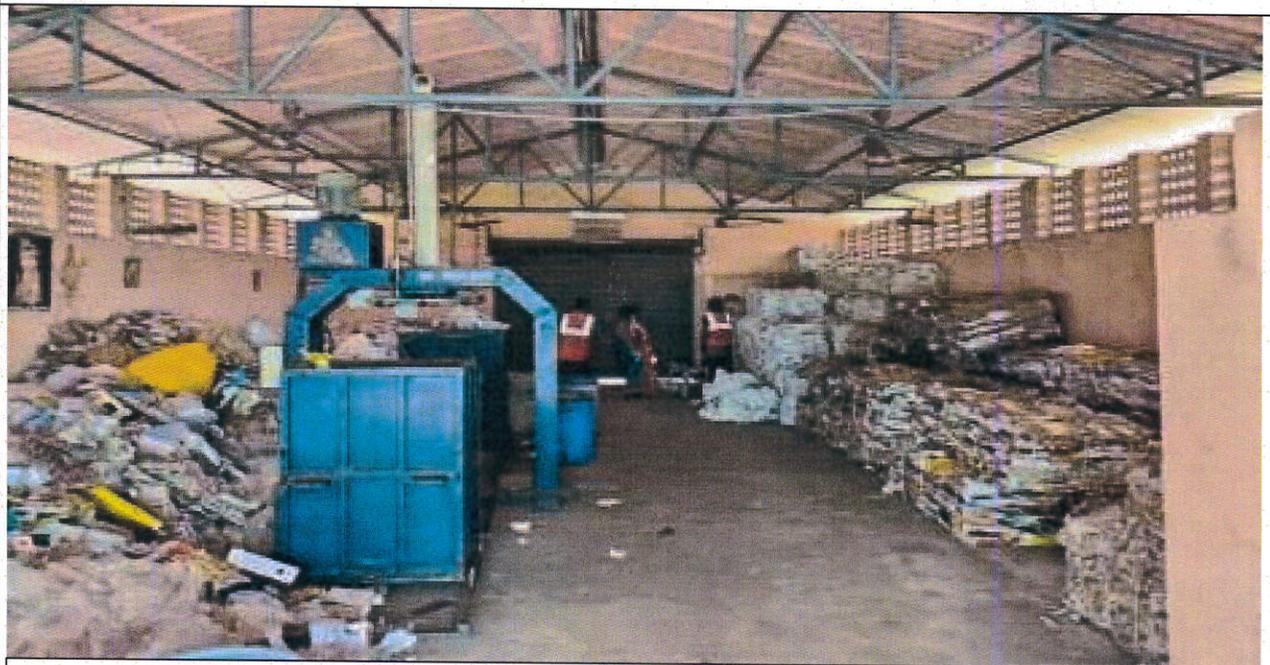


Vermi Composting, Visakhapatnam Municipal Corporation

Photographs showing Material Recovery Facilities



MRF, Tirupati Municipal Corporation



MRF, Bobbili Municipality



MRF, Chirala Municipality



MRF, Kakinada Municipal Corporation

Photographs showing Material Recovery Facilities



MRF, Srikakulam Municipal Corporation



MRF, Ponnur Municipality



MRF, Vijayawada Municipal Corporation



MRF, Kurnool Municipal Corporation

Photographs showing Waste to Energy Plants



Waste to Energy Plant, Visakhapatnam



Waste to Energy Plant, Guntur

Photograph showing Transportation of Combustible Waste to Cement Plant



Transportation of Combustible Waste, Srikalahasti Municipality



Transportation of Combustible Waste, Srikalulam Municipal Corporation

Photographs showing Treatment of Legacy Waste



Bio-Mining at Ananthapur Municipal Corporation



Bio-Mining at Kurnool Municipal Corporation



Bio-Mining at Kurnool Municipal Corporation



Bio-Mining at Dharmavaram Municipality

Photographs showing Treatment of Legacy Waste



Bio-Mining at Kakinada Municipal Corporation



Bio-Mining at Narasaraopet Municipality



Bio-Mining at Adoni Municipality

Photographs showing Bio-remediation of Drains

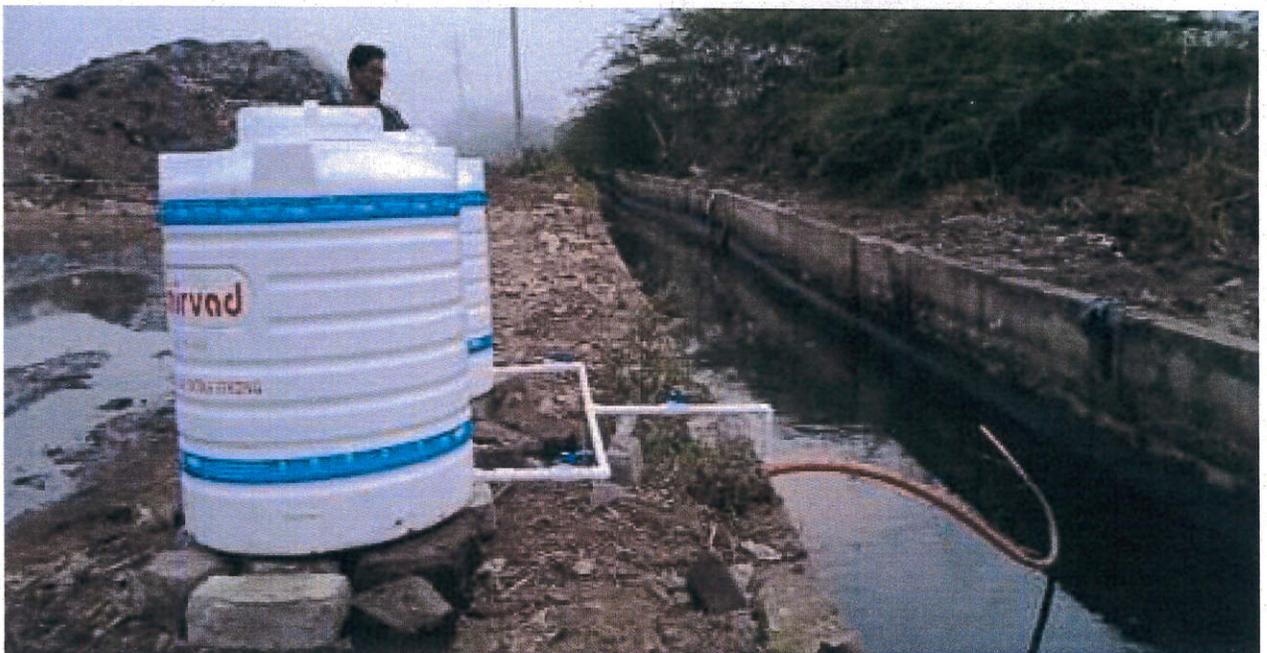


Machilipatnam Municipal Corporation



Nidadavole Municipality

Photographs showing Bio-remediation of Drains



Kakinada Municipal Corporation



Kovvur Municipality