

## 1. Introduction

*The Hon'ble NGT vide order dated 16.01.2019 in O.A.No.606 of 2018 in the matter of Compliance of Municipal Solid Waste Management Rules, 2016 passed various directions to all the States and directed that "The Chief Secretaries / Administrators of all States / UTs to review the progress on all the above issues and for the purpose, hold first meeting within one month from today. After the Chief Secretaries have monitored the matters, the status reports of compliance and immediate future plans may be presented / filed before this Tribunal. For this purpose, we direct the Chief Secretaries to remain present in person along with their reports on different dates mentioned below starting from 1<sup>st</sup> March, 2019 at 2:00 PM....."*

<b>S.No.</b>	<b>State / UT</b>	<b>Date of meeting</b>
33	Telangana	29.04.2019

In this connection the status of compliance report is submitted as under:

Telangana, as a State within the Union of India was born on 2<sup>nd</sup> June, 2014 as the 29<sup>th</sup> and the youngest state in Union of India. The State has an area of 1,12,077 Sq. Km. and has a population of 3.52 Crore. Hyderabad is the capital city of Telangana.

The State comprises of 33 Districts as per the Telangana Districts re-organization undertaken in 2016 and subsequently in 2018. The 2011 census reports urban population of Telangana State as 14.50 million representing about 42% of total population. The urban population of the

State is spread across 142 ULBs consisting of six Corporations and 136 Municipalities of all grades. Hyderabad is 100% urbanized district with more than 50% of the State urban population.

## **2. Status of Compliance of Solid Waste Management Rules, 2016**

### **A. Status of ULBs in the State.**

- Total no. of existing Urban Local Bodies - 74
- Municipalities recently constituted by Act 4 of 2018 - 68  
[Cleared by Court orders dt.08.03.2019 in W.P.No.14010/2018]
- Total No. of ULBs - 142

### **B. Status of Solid Waste Management in State:**

			<b>GHMC</b>	<b>Other ULBs</b>	<b>Total</b>
i.	Total Garbage Generated	:	5626 MTs	2871 MTs	8497 MTs
ii.	Total Garbage Collected	:	5543 MTs	2814 MTs	8357 MTs
iii.	% of Garbage Lifted	:	98.52%	98%	98.26%
iv.	% of Garbage segregated	:	62.00%	24%	43%
v.	Total No. of House Holds	:	22,78,240	1575889	38,54,129
vi.	No. of House Holds covered under D2D	:	22,28,118	1361606	35,89,724
vii.	% of D2D Garbage Collection	:	97.80%	94%	95.9%

- No. of ULBs practicing composting : 62
- No. of ULBs have dry waste collection centers : 30
- Landfill: The GHMC is having fully mechanized processing system and scientific landfill facility in the State.

The overall composition/Characteristics of the municipal solid waste is Organic – 50-60%, Inorganic and Recyclables 25% (paper 8.13, Plastic rubber – 9.22, Metal and glass – 1-1.5%, Rags-4-4.5%, others – 4%) remaining inert material (20-25%).

C. As per rule 23 of SWM Rules, 2016, State Level Advisory Body has been constituted by the State Govt vide G.O.Rt.No.447, MA dated 26.07.2017. A copy of the GO is annexed as **Annexure-I**.

D. In 1<sup>st</sup> SLAB meeting held on 13.10.2017 it was discussed on the various provisions enlisted in SWM Rules and made certain recommendations.

- i. As per rule 15 (f), all ULBs were requested to collect user charges from Bulk Waste Generators (BWGs) (more than 100 kg/day) in first phase and later on same has to collected from all waste generators. ULBs are collecting user charges from BWGs.
- ii. As per rules 15 (c), all ULBs recognized waste pickers and issued ID cards and allowed them to segregate waste at processing facility.
- iii. As per rule 15 (h), Material Recovery Facilities (dry resource collection centers) are functioning in 30 ULBs.

- iv. As per rules 12 (a), all District Collectors were requested to identify and allocate suitable land, where the land is not available for processing and disposal of waste. In 142 ULBs, except 49 ULBs all ULBs got land for processing and disposal of waste.
  - v. As per 15 (b), all ULBs shall strengthen the door to door collection system by engaging required number of vehicles. No. of Swachh Autos under Driver-Cum-Owner were provided to unemployed youth to take up door to door collection of waste.
- E.** The 2<sup>nd</sup> SLAB meeting was held on 11.04.2018, as per the decision taken in the meeting, the Commissioner and Director of Municipal Administration prepared and circulated model Bye-laws for user charges as well as penal provision for littering and open defecation etc.
- F.** In compliance to rule 6 (c) and 11 (a) of SWM Rules, 2016, Govt. of Telangana formulated State SWM Policy and Strategy for implementation SWM Rules 2016 in the State. The State Government vide G.O.Rt.No.808, dated 24.09.2018 notified the State Solid Waste Management Policy and Strategy. The bye-laws are included in the State policy incorporating the user fees and penalties. As per the State policy the ULBs shall notify the bye-laws incorporating the user fees for different categories and penalties.
- G.** The State SWM Policy and Strategy was prepared with a aim to reduce, re-use, recycle, recovery and optimum utilization of various components of solid waste to ensure minimization of waste going to landfill and minimize impact of solid waste human health and

environment. Copy of the State SWM Policy and Strategy was shared with Regional Monitoring Committee, South. A copy of the GO notifying the State SWM Policy and Strategy and Copy of the policy is annexed as **Annexure-II**.

- H.** Detailed Project Reports for solid waste management have been prepared for 72 ULBs and are ready for implementation. Stand alone processing facilities i.e., Composting, Material Recovery Facility and RDF facility etc., are proposed for each ULB, where as Regional/Cluster based approach adopted for scientific landfill of inerts / rejects coming out of processing of waste. Accordingly, 20 cluster have been formed (within 50 km distance ULBs) for establishment of Regional Sanitary Land Fills. The DPR proposals were sent to Government of India for sanction of the amount under Swachh Bharat Mission. Copies of all DPRs shared with Regional Monitoring Committee, South for reference. The Detailed Project Reports for another 21 Municipalities are under preparation.
- I.** A dedicated Project Management Unit with SWM experts has been established at C&DMA office to train, handhold and support the ULBs in implementation of Solid Waste Management.
- J.** The Greater Hyderabad Municipal Corporation (GHMC) has formulated and implementing the Integrated Solid waste Management project for collection, transportation, treatment and disposal of Municipal solid waste since 2012 in compliance to the Municipal Solid Waste Rules with following components.

- i. Primary and Secondary collection & transportation:** Municipal Solid Waste (MSW) is collected from door to door from individual households, bulk garbage generators like hotels & Restaurants, gated communities etc. and storage bins placed at appropriate locations at road side. The MSW so collected is being transported to various transfer stations (20 No's) through small capacity vehicles named as "Swachh Auto Tippers" (SATs).
- ii. Management of Transfer stations and Transportation of waste from transfer stations to treatment facility:** MSW from transfer stations is transferred into higher capacity vehicles and is then transported to the centralized treatment and disposal facility centre established at Jawaharnagar (V), Shameerpet (M), Medchal-Malkajgiri District.
- iii. Treatment & Disposal:** All the MSW is processed and disposed scientifically in accordance with Solid Waste Management Rules and Pollution Control Board is monitoring and is giving the consent for operation from time to time. About 35% of dry fraction of MSW is recovered as Refuse Derived Fuel (RDF), compost made from wet organic waste constitutes about 5% by weight of total waste. About 15% of inerts are disposed into the scientific landfill on an average. About 1% of plastic is recovered and recycling in to plastic granules and recycled plastic bags with > 50 microns are manufactured on site. About 5 TPD of fresh organic waste is converted into electricity

through bio-methanation process. A 300 KLD capacity RO plant was installed and operated for treatment of leachate generated at facility and another 300 KLD capacity plant is under construction.

**K.** The following municipal solid waste processing plants are located in the State:-

- **M/s.Hyderabad Integrated Municipal Solid Waste Management Project (HIMSWMP)** is operating MSW processing facility at Sy.No.173, Jawaharnagar (V), Shameerpet (M), Medchal-Malkajgiri District. This facility processes and disposes the MSW generated in GHMC area.

➤ Processing facilities:

S.No.	Description of the facility	Capacity
1.	RDF Plant (2X 1200 TPD)	2400 TPD
2.	Compost Plant (3X680 TPD)	2040 TPD
3.	Recycling Complex (Plastic, Paper, Metal, Rubber, Glass etc.)	600 TPD
4.	Land fill with leachate collection and treatment system	735 TPD

- The facility was permitted to establish Waste to Energy Plant with a capacity of 19.8 MW and the same is under construction.

- **Bio-methanation:** In Warangal Corporation the waste generated from markets, hotels and dung from slaughter houses is being used in bio-methanation plants 2 nos of 1 ton and 2 ton capacities to generate power of 12 KW & 24 KW respectively.
- **Vermi-Composting / Bio-composting:** Vermi-Composting / Bio-composting plants are existing at GHMC, Miryalguda, Nalgonda, Karimnagar, Bhongir, Suryapet, Tandur, Siddipet, Jagityal, Siricilla, Adilabad, Nizamabad, Dubbaka, Ramagundam, Armoor, Medak, Mahabubnagar, Mancherial, Mandamarri, Nirmal, Jalpally, Meerpet, Medchal, Boduppal, Shadnagar, Vikarabad, Perjadiguda municipalities.

L. The Hon'ble NGT, New Delhi in O.A.No.199 of 2014 has disposed the case with the order dated 22.12.2016 duly issuing directions to ensure the implementation of Solid Waste Management Rules, 2016. The Secretary, MA&UD filed an affidavit before the Hon'ble NGT in April, 2017 and submitted revised action plan and road map in compliance with the SWM Rules, 2016 and for implementation of the direction of the Hon'ble NGT in O.A.No.199 of 2014.

M. The action plan mainly includes (a) Achieving 100% door to door collection, (b) Establishment of dry waste collection centre in ULBs, (c) Procurement of SWM vehicles under the 14 FC grants, (d) Implementation of litter free roads in ULBs, (e) Information, education and communication activities under the Swachh Bharat Mission under SWM, (f) Training and capacity building of the elected representatives

and ULBs functionaries on SWM Rules, 2016 and (g) Preparation of detailed project reports for Integrated Solid waste Management.

**N.** The EFS&T Department vide G.O.Ms.No.27, dated 10.07.2017 issued Notification prohibiting open burning of waste and utilization of RDF as fuel in power generation and cement plants. A copy of the GO is annexed as **Annexure-III**. As per the notification:

1. The power generation plant and cement plants in Telangana State shall buy and use Refuse Derived Fuel (RDF) as fuel in their respective plants, wherever RDF plant is located within 100 km radius.
2. There shall be complete prohibition on open burning of waste on lands, including at landfill sites. Environmental compensation on open burning of waste will be levied, as Rs.5,000/- for Simple burning & Rs.25,000/- for Bulk waste burning. The Environmental compensation will be recovered as arrears of land revenue by the competent authority.
  - The competent authority for levy of environmental compensation is the concerned Urban Local Body / Gram Panchayat for open waste burning done by public, concessionaire, project proponent (Private), communities etc.
  - The Telangana State Pollution Control Board is the competent authority for levying of environmental compensation for open waste burning done by Urban Local Bodies / Gram Panchayat.

3. Environmental Compensation collected shall be utilized for creating awareness among general public on environmental issues open burning of waste.

**O.** Initiating action against the individuals for open burning of garbage as and when the incidents are brought to the notice of the Authorities. The GHMC has levied penalty of Rs.0.92 lakhs on the individuals for open burning of garbage in 190 no. of incidents.

**P.** On receiving complaints regarding open burning of garbage by Grampanchayat of Annaram & Municipalities of Sangareddy and Tandur, the TSPCB issued directions to the Grampanchayat & Municipalities to stop open burning of the waste and also levied penalty of Rs.25,000/- each as per G.O.Ms.No.27, dated 10.07.2017.

**Q.** The State submitted the action plan with revised timelines to the RMC, South Zone, with outer deadline for execution of action plan by 31.10.2019. The status of action taken on the action plan as per the revised timelines is as follows:

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
1	Implementation of the SWM Rules- Every State and Union Territory shall enforce and	1. The State Level Advisory Committee will oversee and provide	1. The State Level Advisory Body for Monitoring and Implementing of	Oct, 2019	Partly achieved

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	implement the Solid Waste Management Rules (SWM), 2016 in all respects and without any further delay.	guidance in implementation of the Rules 2. Detailed. Project Report covering all the	SWM Rules, 2016 have convened two meeting i.e., on 13.10.2017 & 19.03.2018 and certain key decisions were taken on		
2.	The directions in this judgement shall apply to the entire country. All the State Government & UTs shall be obliged to implement and enforce these directions without any alteration or reservation.	components of solid waste management will be implemented in all the Urban Local Bodies (ULBs) with the funding support from Swachh Bharat Mission by empanelled consultants.	implementation of Solid Waste Management Rules, 2016. 2. The DPRs of 72 ULBs are completed. 3. The DPRs of 31 ULBs is approved by High Power Committee and implementation is in process.		

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
3	Establishment and operationalization of the plants for processing and disposal of the waste and selection and specifications of landfill sites which have to be constructed, be prepared and maintained strictly in accordance with the Rules of 2016.	Detailed Project Reports will be prepared in line with the SWM Rules 2016 and the Standard Operating Procedures (SOPs) of the processing and specifications for landfills for scientific disposal of inert, residues, rejects and will be implemented as per the provision in the Rules.	This was taken care while preparing the Detailed Project Reports ULB wise.	Oct, 2019	Partially complied (GHMC)
4	Prepare a state policy and solid waste management strategy for the state or the union territory in	Preparation of State Policy and Solid Waste Management Strategy in consultations	The Government notified State SWM Policy and Strategy vide G.O.Rt.No.808, dated 24.09.2018	Sept, 2018	Complied

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	consultation with stakeholders including representative of waste pickers, self-help group and similar groups working in the field of waste management consistent with these rules, national policy on solid waste management and national urban sanitation policy of the ministry of urban development, in a period not later than one year from the date of notification of these rules;	with all the stakeholders will be considered in the implementation of SWM Rules, 2016.	and same was submitted to the RMC.		
5	The period of six months specified under Rule 6(b),		Revised action plan with outer deadline of		

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	<p>15 of the Rules of 2016 has already lapsed. All the stakeholders including the Central Government and respective State Government / UTs have failed to take action in terms thereof within the stipulated period. By way of last opportunity, we direct that the period of six months shall be reckoned w.e.f. 1<sup>st</sup> January, 2017. There shall be no extension given to any stakeholders for compliance with these provisions any further.</p>		<p>31.10.2019 was submitted.</p>		

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
6	Ensure identification and allocation of suitable land to the local bodies within one year for setting up of processing and disposal facilities for solid wastes and incorporate them in the master plans (land use plan) of the State or as the case may be, cities through metropolitan and district planning committees or town and country planning department;	1.Suitable lands for establishment of processing facilities for each ULB will be established. 2.Land for construction of regional landfills for ULBs (< 5 Lakh Population) will be identified and committee will be constituted headed by the District Collector for the same. The committee will consist of Revenue Development	In Telangana State, 24 ULBs do not have land for dumping. After periodic persuasion with the District Collectors 12 ULBs have got land allotted for dumpsite and only 12 ULBs are not having dumpsite presently. The proposals are under active consideration of the Collectors for allotment of land. 2 & 3. This is already incorporated into the State Solid Waste Management Policy.	January, 2019	Partially complied  The Hon'ble Chairman, SLC conducted VC on 14.03.2019 with all District Collectors for formation of District Special Task Force and identification land for the ULBs where the land is not available for processing and disposal

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		<p>Officer (RDO), Tahsildar, Public Health Engineer, Town Planning, Regional Pollution Control and respective ULB Commissioner.</p> <p>3.Guidelines will be finalized in the proposed state policy for regional level processing plants and landfills.</p>			of waste
7	Frame bye-laws incorporating the provisions of these rules within	Bye- Laws will be notified with the provisions of	Model Bye-Laws incorporated in the SWM policy.	Sept, 2018	Partly achieved

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	one year from the date of notification of these rules and ensure timely implementation.	SWM Rules, 2016			
8	Waste to Energy plant established for processing of the waste shall mandatorily ensure proper segregation prior to incineration relating to the quantum of the waste	Guidelines and Standard Operating Procedures will be laid out for the Waste to Energy Plants to ensure only combustible fractions are used for incinerations by the State Level Advisory Committee.	The State SWM Policy has indicated various technologies for processing and disposal of waste.	Oct, 2019	Under active consideration in GHMC WTE plant
9	Mandatory to provide for a buffer zone around plants and landfill sites whether they are	1.The proposed policy will consider provisions in the SWM Rules 2016	Yes, the same is incorporated in the SWM policy  Yes, the same was taken care	December, 2018	Partly achieved (GHMC WTE Plant)

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	<p>geographically integrated or are located separately. Buffer zone and green belt are essential and not necessarily need not be of 500 meters wherever there is a land constraint.</p>	<p>for demarcating buffer zones</p> <p>2.The current DPRs under preparation for all the 68 ULBs will recommend the demarcations of buffer zones based on the site locations and the surrounding environment factors as per the directions of the Hon'ble NGT</p> <p>3.The Green Belt development will be undertaken in</p>	<p>with the detailed designs in the DPRs prepared.</p> <p>Yes, the same was taken care duly mentioning detailed layout planning in the DPRs prepared.</p>		

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
		all the processing facilities along the boundary walls and maintained.			
10	State Government and the local authorities shall issue directives to all concerned, making it mandatory for the power generation and cement plants within its jurisdiction to buy and use RDF as fuel in their respective plants, wherever such plant is located within a 100 km radius of the facility.	The State Govt. will be mandating all power generation and cement plants to use RDF based fuel falling in 100 Kms of the facility and directive will be issued to through the concerned departments.	Incorporated in the SWM Policy.	Oct, 2018	Partly achieved

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
11	<p>Tipping fee, wherever payable to the concessionaire/operator of the facility, will not only be relatable to the quantum of waste supplied to the concessionaire/operator but also to the efficient and regular functioning of the plant</p> <p>Proper computerised weighing machines should be connected to the online system of the concerned departments and local authorities mandatorily.</p>	<p>1. Concessionaries/ Operators of the waste processing plants will be paid tipping fee linking it to the functioning of facility and output.</p> <p>2. Computerised weighing machines for recording the waste will be installed in respective ULBs generating more than 100 MTD of waste and the cost for procuring will be</p>	<p>Computerised weighing machines are proposed in the DPRs.</p>	<p>Dec, 2018</p>	<p>Partly achieved (under implementation in GHMC)</p>

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
		incorporated in the SWM DPRs			
12	The waste is to be collected by the concessionaire/operator of the facility, there it shall be obligatory for him to segregate inert and C&D waste at source/collection point and then transport it in accordance with the Rules to the identified sites.	C&D waste will be handled separately and will not be mixed with municipal solid waste and the guidelines will be issued in this matter to all the ULBs and concessionaries	C&D waste processing is being handled separately only in GHMC. As per clause 6.13 of Solid Waste Management Policy: All efforts shall be made to allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill. All efforts shall	Dec, 2018	Partly implemented (GHMC)

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
			be made to restrict maximum quantity of 20% of the solid waste reaching the landfill.		
13	Landfill sites shall be subjected to bio-stabilisation within six months from the date of pronouncement of the order. The stabilised waste should be subjected to composting, which should then be utilized as compost, ready for use as organic manure.	<p>1. Detailed Project Report are under process. The DPR will list out the process for leachate management in compost processing plants and landfills</p> <p>2. Standard Operating Procedures for bio-stabilization of waste will be prepared</p>	Trainings were given to all the ULBs on the Standard Operating Procedure of composting. At present 56 ULBs are practicing compost from bio-degradable waste.	Dec, 2018	Partly achieved (GHMC)

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
		and circulated to all the ULBs.			
14	Landfills should preferably be used only for depositing of inert waste and rejects. However, if the authorities are compelled to use the landfill for good and valid reasons, then the waste (other than inert) to be deposited at such landfill sites be segregated and handled in terms of clause-12.	Guidelines will be issued for deposition of the waste (other than inert) by segregating such waste at source of generation.	As per Provision 6.13 of Solid Waste Management Policy. All efforts shall be made to allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill. All efforts shall be made to restrict maximum quantity of 20% of the solid waste	Dec, 2018	October, 2019  (being implemented since 2012 by GHMC)

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
			reaching the landfill.		
15	Deposited Non-biodegradable waste and non-recyclable plastic should be segregated from the landfill sites and used for construction of roads and embankments in all road projects	Guidelines will be framed in consultation with the EnCPH and other concerned departments for usage of deposited non – biodegradable and non – recyclable plastics in embankments and constructions of roads.	DRCCs are established in 30 ULBs and the segregated recyclable waste is sent for recycling.	Oct, 2019	Partly achieved (GHMC)
16	State Government, Local Authorities, Pollution Control Boards of the respective States, Pollution Control	1. Provision will be made in the Detailed Projects Reports under process for	DRCCs are established in 30 ULBs to collect, store and make recycling arrangements for all categories of the dry waste.	Dec, 2019	Partly achieved

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
	<p>Committees of the UTs and the concerned departments would ensure that they open or cause to be opened in discharge of Extended Producer Responsibility, appropriate number of centers in every colony of every district in the State which would collect or require residents of the locality to deposit the domestic hazardous waste like fluorescent tubes, bulbs, batteries, electronic items, syringe, expired medicines and</p>	<p>establishment of Dry waste centres in every colony.</p> <p>2. Linkages will be provided for recycling the domestic hazardous waste.</p> <p>3. Remnant hazardous material will be disposed safely.</p>	<p>Further, a provision is also made in the Detailed Project Reports prepared by the consultants.</p>		

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	such other allied items. Hazardous waste, so collected by the centers should be either sent for recycling, wherever possible and the remnant thereof should be transported to the hazardous waste disposal facility.				
17	We direct MoEF&CC, and the State Governments to consider and pass appropriate directions in relation to ban on short life PVC and chlorinated plastics as expeditiously as possible and in any case, not later than six	Ban on short life PVC and Chlorinated plastics will be considered.	The Govt. also issued draft G.O.Ms.No.28, dated 10.07.2017 regarding ban on short life PVC and Chlorinated plastics.  The Government received objections on the draft notification. The TSPCB addressed a letter	July, 2017	The guidelines to be framed by the MoEF&CC will be followed.

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	months from the date of pronouncement of this judgment.		to CPCB to give suggestions / guidelines to be followed on banning short live PVC and Chlorinated plastic as directed by the Hon'ble NGT. The MoEF&CC constituted a Technical Committee to frame the guidelines on the use of PVC in all packaging, hoarding / banners, use and throw and short time items.		
18	Direct that there shall be complete prohibition on open burning of waste on lands, including at landfill sites. For	1. Burning of waste on lands will be prohibited and penalties specified in the directions	At clause 6.9 of Solid Waste Management Policy, ULBs have been requested to issue a press notice	Oct, 2018	Achieved and on going.  So far TSPCB imposed

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	<p>each such incident or default, violators including the project proponent, concessionaire, ULB, any person or body responsible for such burning, shall be liable to pay environmental compensation of Rs. 5,000/- (Rupees Five Thousand only) in case of simple burning, while Rs. 25,000/- (Rupees Twenty Five Thousand only) in case of bulk waste burning. Environmental compensation shall be recovered as</p>	<p>will be levied against the violators responsible as the directions will be issued to all the ULBs, concessionaire and persons responsible.</p> <p>2. Fire fighting equipment's will be installed in the processing facilities to put off the fire and training to the plant operators to handle fire incidence.</p>	<p>prohibiting the open burning of waste on lands and at landfill site. Any person or body responsible for such burning shall liable to pay any person or body responsible for such burning, shall be liable to pay environmental compensation of Rs.5,000/- (Rupees Five Thousand only) in case of simple burning, while Rs.25,000/- (Rupees Twenty Five Thousand only) in case of bulk waste burning.</p> <p>The same are incorporated in</p>		<p>penalty of Rs.25,000/- each from three ULBs (Annaram Sangareddy &amp; Tandur Municipalities) for open burning of solid waste.</p> <p>The GHMC imposed penalties on the individuals and so far Rs.1,11,025/- penalty was imposed</p>

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	arrears of land revenue by the competent authority in accordance with law.		the Solid Waste Management Policy.  The Govt. also issued G.O.Ms.No.27, dated 10.07.2017 prohibiting open burning of garbage.		and continuous monitoring and special drives are being conducted by the respective field staff.
19	All the local authorities, concessionaire, operator of the facility shall be obliged to display on their respective websites the data in relation to the functioning of the plant and its adherence to the prescribed parameters. This data shall be placed in the public domain	All the processing plants will display the detailed information of the processing in ULB website and in frontage of the processing plant.	No WTE plants are operating in the ULBs other than GHMC.	Oct, 2019	Under implementation  Dashboard was established in GHMC for administrative purpose.

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	and any person would be entitled to approach the authority, if the plant is not operating as per specified parameters.				
20	We direct the CPCB and the respective State Boards to conduct survey and research by monitoring the incidents of such waste burning and to submit a report to the Tribunal as to what pollutants are emitted by such illegal and unauthorized burning of waste.		The Govt. also issued G.O.Ms.No.27, dated 10.07.2017 prohibiting open burning of garbage. Sporadic incidences of open burning of garbage is noticed.	July, 2017	Continuous and ongoing. A toll free number is provided at TSPCB for the citizens to lodge complaints including on open burning.

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21	To create public awareness about the facilities available, processing of the waste, obligations of the public at large, public authorities, concessionaire and facility operators under the Rules and this judgment. his program should be conducted in the local languages of the concerned States/UTs/Districts	1. Cost for Information Education and Communication (IEC) activities are earmarked in the DPR under preparation. 2. Intensive IEC activities will be undertaken in the ULBs in regular intervals w.r.t. the duties of waste generators and provisions of SWM Rules, 2016.	IEC activities i.e., rallies, meetings, essay writings and elocutions in schools, door to door awareness through SGHs women on segregation, hoardings, banners etc., were conducted under Bharat Mission program. IEC programs are implementing on continuous basis in all ULBs to sensitize the people on segregation, not to litter and burn the waste etc.	March, 2017	Continuous and on going

S. No	NGT DIRECTIONS	ACTION PROPOSED	ACTION TAKEN	TIME LINES SUBMITTED	STATUS OF IMPLEMENTATION
22	Every Advisory Committee in the State shall also act as a Monitoring Committee for proper implementation of these directions and the Rules of 2016.		State Level Advisory Body was constituted vide G.O.Ms.No. 447, dated 26.07.2017. The SLAB is monitoring the progress on implementation of the directions and SWM Rules, 2016.	July, 2017	Continuous and on going
23	Hon'ble NGT judgment and the obligations contained under the Rules of 2016 should be circulated and published in the local languages.	Hon'ble NGT judgment and the obligations contained under the Rules of 2016 are circulated and published in the Telugu to all the ULBs.	The Judgement of the Hon'ble NGT and the SWM Rules, 2016 are uploaded in the TSPCB website in English and Telugu languages.	April, 2017	Achieved

**R. Status of compliance with regard to O.A.No.606 of 2018 in the matter of compliance of Solid Waste Management Rules, 2016:**

- i. The Hon'ble NGT, New Delhi vide order dated 20.08.2018 in O.A.No.606 of 2018 in the matter of Municipal Solid Waste Management Rules, 2016 issued the following directions:
  - a) Action plans shall be submitted latest by 31.10.2018 and to be executed in the outer deadline of 31.12.2019.
  - b) Constitution of Apex Monitoring Committee (AMC), Regional Monitoring Committee (RMC) and State Level Committee (SLC), to oversee the steps to be taken to give effect to the directions of the Tribunal, so that, if necessary, further action can be taken in the matter.
- ii. The Government of Telangana participated in all the five review meetings held by the Regional Monitoring Committee, South Zone.
- iii. Subsequently, the Hon'ble NGT vide order dated 16.01.2019 in the above matter stated that the coordination at Regional Level does not appear to be as effective as expected and felt that the pattern of Committees needs modification. The Hon'ble NGT at paras 27 & 28 issued directions that instead of having Regional Monitoring Committees constituted, the State Level Committees may function in the modified form as being now directed. The Hon'ble NGT modified the Constitution of SLC for Telangana State with the following members: -

1. Justice Sri.C.V.Ramulu, Former Judge of High Court – Chairperson
  2. The Prl. Secretary, MA&UD Dept. – Member
  3. The Spl. Chief Secretary, EFS&T Dept. – Member
  4. The Prl. Secretary, PR&RD Dept. – Member
  5. The Prl. Secretary, MH&FW Dept. – Member
  6. Representative of CPCB – Member
  7. Member Secretary, TSPCB – Member Secretary of the Committee
- iv. The State Level Committee under the Chairmanship of Hon'ble Justice Sri.C.V.Ramulu, Former Judge of High Court conducted 4 meetings on 14.02.2019, 05.03.2019, 25.03.2019 and 23.04.2019. As per the decision taken in the meeting, the SLC Chairman and other members visited GHMC's Integrated Solid Waste Management facility at Jawaharnagar and observed functioning of the entire project facility. And also visited Gandhamguda, Fathullaguda and Autonagar facilities of GHMC. The Principal Secretary to Government, MA & UD Dept. conducted Video Conference with Commissioners in the state, and directed them to implement SWM Rules in toto without any deviation.
- v. The Chairman SLC conducted a video conference with all District Collectors with regard to formation of District level Special Task Force for implementation of SWM Rules, 2016 under the Chairmanship of the Chief Secretary to Government.

vi. The Government vide G.O.Rt.No.223, dated 11.03.2019 issued orders for constitution of District Level Special Task Force (STF) in the matter of O.A.No.606 of 2018. All District Collectors have constituted District Level Taskforce for monitoring and implementation of SWM Rules, 2016. A copy of the GO is annexed at **Annexure-IV**.

vii. Model Cities/Towns: In compliance to the orders in O.A.No.606/2018 the following cities are selected for Model Cities:

a) Three major cities selected for Model Cities:

1. Greater Hyderabad Municipal Corporation
2. Greater Warangal Municipal Corporation
3. Karimnagar Municipal Corporation

b) Three major towns selected for Model Towns:

1. Siddipet Municipality
2. Sircilla Municipality
3. Boduppal Municipality

c) The Government has identified 96 villages @ three villages each in 32 Districts (except Hyderabad District) where the Solid Waste Management is taken up or proposed to be taken up for 100% compliance of the SWM Rules. List of villages identified in 32 Districts is annexed as **Annexure-V**.

#### **S. Future Plans for Solid Waste Management:**

- 1) DPRs for SWM are prepared for 72 ULBs and ready for implementation. As per the DPRs, each ULB shall have minimum

processing facilities, i.e., trammels, conveyors, shredders, balers and vibratory sievers etc., to process the incoming waste. And also have compost pads, storage facility for compost, Material Recovery Facility and Refuse Derived Fuel facility etc., to maximize the resource recovery and minimize the waste go to landfill. As per the DPRs, in 1<sup>st</sup> phase, standalone processing facilities with above said facilities will be established in all ULBs of the State. In 2<sup>nd</sup> phase, Regional Scientific Landfill facilities will be established on cluster basis.

- 2) The C&DMA is organizing continuous capacity building programs to all ULBs officials on SWM, PWM and C&D waste management etc. so far, 2 state level workshops, 6 regional level workshops were conducted to ULB officials. ULB are continuously conducting door to door awareness programs on source segregation through women self help groups, school children, NGOs and RWAs etc. The MEPMA (Mission for Elimination of Poverty in Municipal Areas) is actively working for sensitization people on SWM Rules 2016. At present, 95% of households are being covered under door to door collection of waste and 24% segregation is happening. To ensure, 100% door to door collection in segregated form, all stakeholders of the society, i.e., SHGs, Schools, NGOs, RWAs and ward councillors / ward committees are involved through extensive IEC and Awareness programs. And also strengthened the infrastructure for primary collection of waste by providing requirement number of

vehicles to ULBs to cover extended / merged and sub urban areas under door to door collection of waste.

3) Huge activities were taken up under Information Education and Communication (IEC) through Telangana Samskruthika Saradhi under Swachh Bharat Mission on Solid Waste Management.

- **1152 Corporators / Councillors and 11274** Public Health functionaries were trained on Solid Waste Management through Environment Protection and Training Research Institute (EPTRI).
- **622** individuals were trained on masonry skills.
- **3500** Swachh Dhoots were trained on source segregation and personnel hygiene.
- **250** Wall paintings on Swachh Bharat Themes.
- **316** hoardings and **934** lollipops are installed creating awareness on Swachh Telangana.
- **8** Ad films on Swachh Bharat themes including on Solid waste Management were developed and telecasted across all the ULBs.
- Advertisements were taken up on **600** buses for **3** months on Source Segregation and door to door garbage collection.
- Advertisements were also taken up on **176** Railways Reservation Counters across the State.

- 4) ULBs started felicitation of best performing sanitation workers with certificates as well as rewards from philanthropists/RWAs/NGOs for their performance. To recognize best performing officials, the Telangana state government is planning to introduce an annual award scheme at state level and at ULB level officials with incentives.
- 5) In order to involve the citizen in Solid waste management as per SWM rules 2016 , the following efforts were made by GHMC:
  - i. Distributions of Twin Litter Bins–Twin bins to every household were distributed to segregate wet and dry waste at household level.
  - ii. Replacement of Tricycles with 2500 mechanized auto tippers (named as Swachh Auto Tipper or SAT) to improve collection efficiency.
  - iii. GHMC has launched Swachh Doot App to motivate citizens to segregate the waste.
  - iv. Taken up regular health check-ups to the sanitation workers and distributing protective equipment to prevent any risk while performing sanitation duties.
  - v. Information Education and Behaviour Change Communication (IEBCC) activities conducted such as:
    - Deployed unemployed women from slums by name Swachh Community Resource Persons (Swachh CRPs) to educate citizens.

- Involved main Bulk Garbage Generators (BGG) stakeholders like Residential Welfare Associations (RWAs), schools, Hotels in source segregation, maintenance of parks & play grounds and community halls and introduced self ranking system among the above to create a competitive environment and accordingly the best performers are rewarded in their respective category.
- e-Learning Course on Swachh Bharat & Solid waste Management: In order to educate and sensitize citizens, launched a free e-learning course on Solid Waste Management and Sanitation activities.
- Essay Competition on Source Segregation to create awareness among school students.
- Swachh Caller Tune on source segregation on mobile as caller tune to propagate the importance of recycling and segregating garbage at source.
- Awareness campaign in coordination with Radio Mirchi has initiated an awareness campaign with Radio Jockeys to mobilize citizens and sensitize them about waste management like Beat the Plastic Pollution, Source Segregation, and Waste Management.
- Notification of Bulk Garbage Generators charges were issued and collecting the user charges from Bulk Waste Generators and encouraging on-site composting by BGGs by way giving

Concession in user who implement Decentralized composting.

- Encouraging the Dry Resource Centres and Waste to Compost pits in parks to implement RRR policy.

6) GHMC initiated the intensive IE&BCC Project through ASCI and the details are as follows:

- a) Further in order to involve citizens in implementation of Solid Waste Management by encouraging and making all the waste generators in the city responsible for source segregation of the waste at their door steps, GHMC initiated a pilot project for a period of six months named as "SAAF HYDERABAD – SHAANDAR HYDERABAD" and with an intension to extend further period based on learnings from the pilot project to improve Sanitation and to achieve the objectives of Solid Waste Management Rules and ODF++ protocol in a period of three years. The pilot project is proposed to implement in the selected areas having 2500 HHs size during the pilot project through Administrative Staff College of India (ASCI) along with their selected NGOs and Technical & Operational partners who are working for Indore Municipal Corporation (IMC) which has proven as best city in the country in this regard. Accordingly, the government of Telangana has approved the pilot project through a Memo no. 2432/GHMC-II/2019 MA&UD dated 07.03.2019 and GHMC will be start implementation from 01.05.2019.
- b) It was aimed to cover 1/3 of the area in the selected wards to involve and prepare them for 100% source segregation and cover all the

areas in the selected wards in the city by the end of one year.

- c) The following is the task wise action plan for the IE&BCC implementation for all the 150 wards in the city and to achieve the objectives of the SWM rules and to sustain the ODF ++ status of the city in the areas in the selected wards.

S.No.	Task	Time period
1	Attaining 100 % Attendance of workers	90
2	Collecting waste 100% from D2D	30
3	Achieving 100% Segregation	90
4	Decentralised Composting in Parks/Bulk Garbage Generators	60
5	Elimination of Bin Locations (Category Black Spots)	45
6	Elimination of GVPs Spots (Category Black Spots)	45
7	Removal of C&D Points (Category Black Spots)	45
8	Litter Free Open Plots (Category Black Spots)	45
9	Garden Waste & Tree Cutting Spots (Category Black Spots)	45
10	Litter Free Roads/Drains/Lakes (Category Litter Management)	30
11	Elimination of Waste Burning Spots (Category Hot Spots)	30
12	Elimination of Open Defecation Spots (Category ODF ++)	45
13	Sustaining Public/Community Toilets as Per	45

S.No.	Task	Time period
	ODF ++ (Category ODF ++)	
14	Elimination of Drainage Overflow Spots (Category Hot Spots)	90
15	Elimination of Water Stagnation Points (Category Hot Spots)	90
16	Restoration of Broken Footpath and Dividers (Category Infrastructure)	45
17	IEC/BCC and Motivational Programme (Category IEC/BCC)	90
18	IEC/BCC and Technical Training with Field Staff by NGO (Category IEC/BCC)	90

a) The following detailed activities will be taken up under said pilot project

ACTIVITY	SUB-ACTIVITY
Door to Door Collection	<ul style="list-style-type: none"> <li>• Proper route mapping of all residential and commercial D2D waste collection vehicle</li> <li>• Meeting with door to door waste collection Safaimitra and Rag pickers and visit along with vehicle</li> <li>• Sensitize household and commercial establishment on SWM and promotion of Swachh Bharat Mission, survey to collect necessary data required for the project.</li> <li>• Awareness will be created among residents for 100% door to door garbage collection and mobilize residents of wards/communities to use 2 dustbins for segregation.</li> <li>• Spread awareness in market areas, maintain</li> </ul>

	<p>and enhance an integrated SWM strategy and encourage shop owners to dump their garbage into GHMC vehicle to get 100% garbage collection.</p> <ul style="list-style-type: none"> <li>• Monitor the door to door waste collection, segregation and ensure proper operations will be done on daily basis.</li> <li>• In residential area once a day waste collection system and commercial area twice a day waste collection system will be introduced.</li> </ul>
<p>Bulk Waste Generators Compliance</p>	<ul style="list-style-type: none"> <li>• Identify the Institutions, Hotels, Restaurants, Marriage Gardens, Hospitals, Nursing Homes, RWA's, Market Associations in Circle 17, GHMC.</li> <li>• Make the list of bulk waste generators and submit to the higher authority of GHMC.</li> <li>• Preparation route map for proper waste collection and start door step collection in daily basis</li> <li>• Awareness on 3 R concept among bulk waste generators in GHMC for establishment of decentralized treatment of organic waste generated in such institutions and segregate organic waste at source</li> <li>• Spread awareness in market areas, maintain and enhance an integrated SWM strategy and encourage bulk waste generation owners to dump their garbage into GHMC vehicle</li> <li>• Inform to collect only dry waste in daily</li> </ul>

	<p>basis</p> <ul style="list-style-type: none"> <li>• Make them aware that they will not give food waste to animal/pig rearing agency/persons.</li> </ul>
Sweeping of Public, Commercial and Residential Areas.	<ul style="list-style-type: none"> <li>• Meetings with Market Associations, Resident Welfare Associations, team will coordinate with a market association regarding their cooperation into implementation of strategies of cleaning and sweeping being done by GHMC.</li> <li>• Prepare proper street cleaning system beat to beat and street route mapping to assigned individual Safaimitra duty</li> <li>• Will sensitize shop keepers, floating population, community people on the drives under Swachh Bharat Abhiyan to clean surroundings and save environment and to keep required number of bins in front of shops.</li> <li>• GHMC will provide HDPE bags to all Safaimitra involved in road sweeping so that they can store the sweeping waste in the bags which will avoid littering of sweeping waste in the wind.</li> </ul>
Mechanized road sweeping	<ul style="list-style-type: none"> <li>• Assessment and identification of all commercial areas for mechanized road sweeping.</li> <li>• Proper monitoring of sweeping of roads.</li> </ul>
Segregation at source	<ul style="list-style-type: none"> <li>• Will encourage residents to provide segregated waste from their houses.</li> </ul>

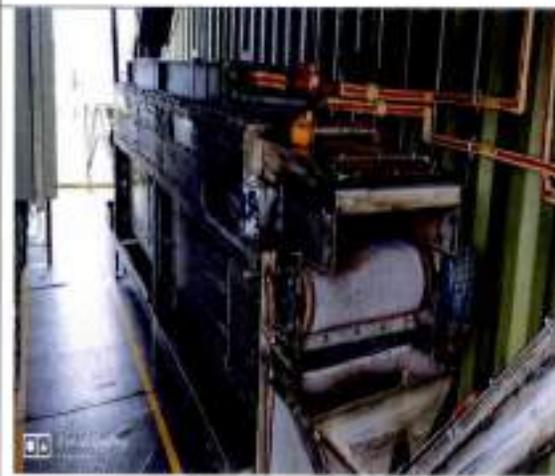
	<ul style="list-style-type: none"> <li>• Will find colonies/areas in all wards, where RWA has been working on Swachhata and will register themselves in GHMC, so that they can create awareness among the Community/ Society for Source Segregation.</li> <li>• Will form community group with female, youth groups, local residents, RWA and involve them into awareness to make of Source Segregation.</li> <li>• Meetings with these groups and monitoring of source segregation on regular basis.</li> </ul>
Litter Bins	<ul style="list-style-type: none"> <li>• Listing and Identification of spots for placing litter bins and promotion among the residents, customers to use litter bins while travelling in the city.</li> <li>• Monitoring and Supervising of litter bins will be done on regular basis so as to ensure timely emptying of all litter bins.</li> </ul>
Citizen Grievance Redressal and feedback system	<ul style="list-style-type: none"> <li>• Household promotion of Swachhata App., and take household feedback regarding waste collection and management.</li> <li>• Will promote door to door awareness of the GHMC App., regarding grievance redressal of online complains etc.</li> </ul>

#### **T. Faecal Sludge and Septage Management (FSSM):**

- Safe management of faecal sludge and septage is critical for better sanitation outcomes and building liveable urban areas.
- Towards this, Government of Telangana formulated Policy on Faecal

Sludge and Septage Management (FSSM) vide G.O. Ms No.176, dated 29<sup>th</sup> September, 2018. The G.O. mandates every ULB in Telangana to scientifically treat and dispose faecal sludge and septage. A copy of the GO and policy on FSSM is annexed as **Annexure-VI.**

- Establishment of Faecal Sludge Treatment Plant (FSTP) is a way to scientifically treat the faecal sludge and septage and render it harmless. A FSTP consists of infrastructure wherein faecal sludge and septage is received and treated and the residue after treatment is safely reused within the FSTP premises or safely disposed as per applicable standards.
- In order to meet the mandate of the FSSM Policy, the Director of Municipal Administration (DMA), Government of Telangana awarded all 71 ULBs to 7 private operators for construction and maintenance of FSPTs under Build Operate & Transfer mode.

**Feacal Sludge Treatment Plant at Warangal Municipal Corporation:**

### **3. Status Report on Compliance to Plastic Waste Rules, 2016.**

- The State issued G.O.Ms.No.79, dated 30.12.2016 regarding Ban of manufacture, stocking, sale and use of carry bags of less than 50 microns thickness and imposing penalties for non-compliance of the Rules. A copy of the GO is annexed as **Annexure-VII**.
  
- Through this GO, the Plastic Waste Management and the roles and responsibilities of the Urban Local Bodies and the Grama Panchayats, responsibilities of waste generator, producers, importers and brand owners, retailers and street vendors are specified. State Level Monitoring Committee and District Level Committee are also created.

#### Levy of penalties:

- a) The manufacturing units, found to be violating the rules, relating to manufacture, recycling, thickness and marking, shall be fined Rs.50,000/- for the first offence and the license / consent of the unit shall be cancelled for the subsequent offence in addition to confiscating the machinery used for the manufacture;
  
- b) The retailers, vendors and other establishments found to be violating the rules, relating to the use of plastic carry bags of banned category, shall be fined Rs.2,500/- to Rs.5,000/- for the first offence and the trade license of the violator shall be cancelled for the subsequent offence, under relevant Municipal Laws and Shops and Establishments Act;

- c) The individuals found to be littering public places with plastic bags shall be fined Rs.250/- to Rs.500/- per offence.
- The total estimated plastic waste generated in the State of Telangana is 685.4 TPD in the year 2017-18 as per the annual reports furnished to CPCB. The Integrated MSW processing facility at Jawaharnagar has recycled about 657.12 MT of plastic waste in the year 2017-18 for making plastic bags. The non-recyclable plastic which is approximately 275 to 330 tons per day received at the facility is going as part of RDF. A quantity of about 12 TPD of plastic is being channelized to recyclers through DRCCs.
  - The TSPCB has issued registrations to 211 Nos. of plastic carry bag /multilayer pouch or sachet / recycling units / producers and brand owners.
  - As per the Hon'ble High Court orders in W.P.No.28447 of 2008, dated 26.12.2014 and 25.03.2015 illegal flexes are completely banned in all ULBs in the State. The MA&UD Dept., Telangana has issued instructions to all the Municipal Commissioners in the State for strict implementation of above orders without any deviation.
  - All the ULBs have identified and notified "Litter Free Zones" to ensure special focus on littering / usage of plastic / flexes etc., in these identified zones.
  - The EFS&T Department, GoT vide G.O.Ms.No.27, dated 10.07.2017 issued notification prohibiting open burning of waste and utilization of RDF as fuel in power generation and cement plants for co-processing.

So far penalty of Rs.25,000/- each has been collected from three ULBs (Annaram, Sangareddy & Tandur) for open burning of solid waste.

- The circular issued by the TSPCB vide No:11/GEN/TSPCB/ROH/HYD /2017-06 dated 01.04.2017 was circulated by GHMC to all its Zones/ Circles to prohibit the open burning of the waste and impose penalties on the violators and so far Rs.1,11,025/- penalty was imposed and continuous monitoring and special drives are being conducted by the respective field staff.
- The EFS&T Department also issued a draft notification vide G.O.Ms.No.28, dated 10.07.2017 to impose ban on short life PVC and Chlorinated Plastics in the State of Telangana and requested for any objections or suggestions before a period of 60 days from the date of issue of notification. A copy of the GO is annexed as **Annexure-VIII**.
- The Government received objections on the draft notification. The TSPCB addressed a letter to CPCB to give suggestions / guidelines to be followed on banning short live PVC and Chlorinated plastic as directed by the Hon'ble NGT. It is learnt that the MoEF&CC has constituted a Technical Committee to examine the issue.
- TSPCB has procured 2 vehicles for creating environmental awareness including plastic waste management. Awareness programmes were also conducted by the Board through distributing pamphlets / posters. As a new innovative concept, short films were made to create awareness on plastic waste management and distributed to all the District Collectors through Regional Officers for screening.

- The CPCB issued guidelines for co-processing of plastic waste in cement units. The TSPCB initiated action for co-processing of non-recyclable plastic waste in cement industries as an alternate fuel. The TSPCB has pursued lifting of plastic waste from Kattedan Plastic Industrial Cluster to Cement industries for co-incineration. During the year 2016 two truckloads of plastic waste (about 14 Tons) has been lifted to M/s.Zuari Cement, Nalgonda district for co-processing.
- Swachh Auto Tippers (SATs) collect the wet and dry waste separately from the Households and commercial establishment. Segregated waste is transported to transfer stations in compartmentalized space in tippers by which Auto drivers will collect the high value recyclable plastic and channelize to recyclers through DRCCs.
- From transfer station mixed solid waste is transported to Jawaharnagar processing facility which is operated by the M/s.Hyderabad Integrated Municipal Solid Waste Ltd., (M/s.HiMSW) in GHMC area where in the plastic with high recyclable value is channelized to recycling centre where in it was washed shredded and converted in to granules for the end use such as manufacturing plastic bags with more than 50 microns. Plastic waste with low or no recyclable value chanalizes for RDF.
- In other ULBs Plastic waste is segregated along with other municipal solid waste by establishing DRCCs. 30 Nos. of DRCs (Dry Resource Centres) are functioning in the State for segregation of dry waste into different categories, enabling to re-use / recycle.

- Plastic waste was used in the laying of BT roads by GHMC and the details are:
  - During 2016-17 : 2.40 Km of BT roads were laid by adding 6343 kgs of plastic
  - During 2017-18 : 2.20 Km of BT roads were used by adding 5162 kgs of plastic
  
- Plastic waste was used in foot-path by GHMC and laid about 5000 Sqft of footpath in Serilingampally circle in collaboration with Bamboo house India.
  
- A special drive was conducted on 6<sup>th</sup> and 7<sup>th</sup> October, 2017 where four manufacturing units were seized and 1319 retailer shops / users were penalized, the total amount of penalty being Rs.13.93 Lakhs. The GHMC collected cumulative fines from violators amounting to Rs.72.90 lakhs since 2016.
  
- The DPRs for 72 Municipalities are prepared for Rs.652.0 Crores for treatment of MSW including Plastic waste. For establishment of DRC centres for segregation of plastic waste an amount of Rs.85.20 Crores is required.
  
- The CPCB issued guidelines for disposal of thermo-set plastic waste including Sheet Moulding Compound (SMC) / Fibre Re-inforced Plastic (FRP) as per the Hon'ble NGT direction. The TSPCB issued directions to all the power utilities using SMC / FRP / Poly carbonate enclosures to dispose the waste as per the guidelines issued by the CPCB.

- Apart from GHMC area the status of implementation of ban on plastic carry bags <50 microns and flexes are as follows in other ULBs:
- 1162 awareness programmes have been conducted by the ULBs.
  - Enforcement teams are constituted in all 72 ULBs.
  - A total of 10875 raids were conducted to regulate the usage.
  - A total of 26776 Kgs of plastic is seized by the all ULBs.
  - A total of Rs.35,31,160/- is collected as penalty from violators.
  - 13541 no. of flexes are removed in the ULBs.
- The Director of Municipal Administration is monitoring the progress of implementation of ban on plastic carry bags and flexies in the State.
- The GHMC is carrying out IEC activity by the name of “Plogging” which means Pluck the Plastic while Jogging for your health during morning hours is being implemented which got a very good response and appreciation from citizen of the city.
- The General Administration Department, Telangana Secretariat issued circular instructions on prohibiting usage of single use plastic i.e., plastic covers, tea glasses etc. In the premises of Telangana Secretariat.
- The General Body of the Greater Hyderabad Municipal Corporation passed resolution dated 23.05.2018 recommending to the Government for according approval for imposing ban on manufacture, sale and use of all types of plastic including above 50 microns thickness in GHMC limits and also recommended for penalties for violation of the above.

- The Government of Telangana is also contemplating complete ban on usage of single use plastic in and around religious shrines in the State of Telangana.

**Plastic waste recycling plant located at M/s.Hyderabad Integrated MSW Facility, Jawaharnagar.**



Plastic tiles being laid in the street of Serilingampally Circle, GHMC, Hyderabad.



#### **4. Status of Construction & Demolition Waste Rules, 2016**

- The Construction and Demolition (C&D) Waste Management Rules, 2016 were notified on 29th March, 2016 by the Ministry of Environment, Forest and Climate Change (MoEF&CC).
- The rules shall apply to every waste resulting from construction, remodeling, repair and demolition of any civil structure of individual or organization or authority who generates construction and demolition waste such as building materials, debris, rubble. Wastes like surplus and damaged products and materials arising in the course of construction work or used temporarily during the course of on-site activities come under C&D wastes.
- Activities which generate C & D waste in cities / towns are mainly from:
  - i. Demolition of existing, old dilapidated structures;
  - ii. Renovation of existing buildings (residential or commercial);
  - iii. Construction of new buildings (residential or commercial or hotel etc.);
  - iv. Excavation/ reconstruction of asphalt/ concrete roads;
  - v. Construction of new fly over bridges/ under bridges/ sub-ways etc.;
  - vi. Renovation/ Installation of new water/ telephone/ internet/ sewer pipe lines etc.
  - vii. Present collection and disposal system.

- The GHMC in compliance to Construction & Demolition Waste Management Rules 2016, GHMC has finalized tenders for 2 locations viz., Jeedimetla and Fatullaguda for establishment of C&D recycling plants with 500 TPD capacity each, expandable to 625 TPD capacity.
- Collection and transportation of C&D waste has commenced and is in progress. The plant at Jeedimetla site is under construction and the proposed plant at Fathullaguda will be initiated after finalization of proper approach road to the site for which Road Development Plan is prepared and land acquisition process is in progress. Further (2) plants in other two directions are being planned at Kothwalguda and Mallapur, for which identification of sites are under process.
- Salient features of the existing C&D Waste Management project agreement are:
  - i. Concession period is (25) years and tipping fee payable to the concessionaire on per tonne of C&D waste collected and weighed at the Weighbridge at plant or storage locations.
  - ii. Rs.342.00 per MT for Collection, Transportation, processing and disposal of C&D waste.
  - iii. Rs.256.50 per MT for Collection and Transportation of C&D waste until Commercial operation of the plant.

- iv. GHMC will pay the tipping fee to the Concessionaire for the "Un-claimed C&D waste" which is the C&D waste where generator cannot be identified by both Concessionaire and GHMC. In respect of "Claimed C&D waste" which is the C&D waste where generator can be identified by both Concessionaire and GHMC for which the generator will pay the fee to the Concessionaire.
  - v. Generators of C&D waste are free to bring their waste directly to the C&D plant on their own cost and the Concessionaire is entitled to collect 25% of tipping fee i.e. Rs.85.50/- per MT
  - vi. The concessionaire shall set up an appropriate wet processing C&D waste management facility (water washing & crushing) at designated site on its own cost. Revenue from sale of by products such as Tiles, bricks, sand, metal, brickbats, soil etc belongs to the Concessionaire. The inerts/ rejects left behind after processing the C&D waste shall be transported and disposed in the scientific landfill sites on its own cost.
- Until Commercial operation date of the plant, the concessionaire may store the C&D waste in the plant site or disposed off at mutually agreed location in a manner not detrimental to the environment.

### **5. Status of Bio-Medical Waste Management Rules, 2016**

- There are 5191 HCFs with bed strength of 1,07,018 beds in Telangana. Out of total HCFs, 2257 HCFs are having valid authorization.
- The authorizations were lapsed for 1959 HCFs. The remaining 975 HCFs are yet to obtain authorization from TSPCB. Notices were issued to HCFs operating without valid authorization. It will be ensured that the authorization for all remaining HCFs will be completed within three months.
- Out of 5191 HCFs, 4407 are tied up with respective CBMWTFs in the Districts for safe disposal of Bio-medical waste. The remaining small HCFs and Veterinary institutions are yet to be tied up with CBMWTFs. This is being reviewed regularly and will be ensured completion of tie-up with CBMWTFs within three months.
- 11 Common Bio-Medical Waste Treatment Facilities (CBMWTFs) are operating for collection and safe disposal of Bio-Medical Waste covering all Districts in the State.
- Total Bio-Medical Waste collected, treated and disposed by the 11 CBMWTFs in the year 2017-18 is 15,719 Kg/day.
- Category wise Bio-medical waste, collected, treated and disposed by the 11 CBMWTFs in the year 2017-18 are:
  - i. Incinerable waste (Yellow)-9,899 kg/day (Incinerated and ash is disposed to TSDF).
  - ii. Autoclave (Red)-3,688.5 kg/day (After autoclaving, shredded plastic waste is disposed to authorized recyclers).

- iii. Sharps (White)-2,035.5 kg/day (After autoclaving, the waste is disposed to TSDF).
  - iv. Glass and Metallic implants (Blue)-96 kg/day (After autoclaving, encapsulated in cement containers at the site).
- 145 no. of HCFs have installed Sewage Treatment Plant (STP) and other HCFs in Hyderabad are connected to HMWS&SB sewage system having STPs. 755 no. of HCFs have provided pretreatment of Lab Micro Biology and Bio Technology Waste.
- The Board submitted annual report, for the year 2017 (Jan 2017 to Dec 2017) in prescribed format to CPCB on 16.08.2018. Next annual report for the year 2018 will be submitted before 31.07.2019 in accordance with the timelines of BMW Rules, 2016.
- In compliance to the BMW Rules 2016, the Health Medical & Family Welfare Department has Constituted State Advisory Committee vide G.O.Rt.No.329, dated 15.04.2017 for implementation of BMW Rules in the state. 1<sup>st</sup> meeting of State Advisory Committee meeting was held on 21.09.2017 under the Chairmanship of the Spl. Chief Secretary HM&FW Department. A copy of the GO is annexed as **Annexure-IX**
- As per the decision taken by the State Advisory Committee held on 21.09.2017, HM&FW department issued G.O.Ms.No.28, dated 16.01.2018 for constitution of District Level Monitoring Committee (DLC) with District Collector as the Chairman and DM&HO as the Member Convener and Concerned Regional Officer as the Member for effective implementation of the provisions of the Bio-Medical Waste Management Rules. A copy of the GO is annexed as **Annexure-X**.

- TSPCB constituted a Committee with external experts and Board Officials on 01.12.2017. The Committee held meetings with Telangana Nursing Homes Association (THANA), Medical & Health Department Officials and CBMWTFs representatives on 23.02.2018, 16.04.2018 & 18.05.2018 to fix user charges (Cost to be charged by the CBMWTF Operator for the Health Care Facilities) as per BMWM Rules, 2016. The committee had submitted its recommendations for user charges and EFS&T Department will be requested to issue GO for notifying user charges. Presently the user charges are being paid by the HCFs on mutual agreement between CBMWTF & HCF/THANA.
- Carried out inspections of 594 Veterinary hospitals / Institutes / Animal houses by following CPCB prescribed inspection format and initiated action on non-compliances.
- To prevent mixing of Bio-medical waste with MSW, the Board vide order dated 23.05.2018 constituted teams to inspect major Hospitals (Government / Private). 10 No. of HCFs were inspected. The status was reviewed by TSPCB on 03.08.2018 and directions were issued.
- All the 11 CBMWTFs were instructed to collect the segregated Bio-medical waste from the generator and dispose it. Weekly analysis reports on Bio-medical waste generated from the major 38 Government HCF is taken from the CBMWTFs and analysis is being done on monthly basis. The Board is taking measures to see that no recyclable Bio-medical waste (Plastic items) is taken by the unauthorised persons.

- As part of regular monitoring the Board has reviewed the functioning of CBMWTFs and issued following directions on 27.03.2017, 12.12.2017 and 21.01.2018 to 11 CBMWTFs operating in Telangana to comply with the conditions of meeting new emission standards prescribed in the new BMWM Rules, 2016.
- The Board has reviewed on 22.03.2019 all the 11 CBMWTFs and observed that all the 11 facilities have upgraded secondary chamber of incinerator to meet new emission standards for stack and retention time of 2 sec.
- The Board also issued directions dated 09.04.2019 to all the CBMWTFs to furnish Bank Guarantees for ensuring strict compliance and also to provide required sampling platform to carryout monitoring of Dioxins & Furans in Incinerator stack emissions.
- The CBMWTFs are collecting BMW from their member HCFs through 51 GPS fitted vehicles with facility to track the movement of the vehicles.
- CBMWTFs were instructed to supply sufficient colour coded bags to the HCFs and collect the bio-medical waste duly ensuring proper segregation is done at collection point.
- During the year 2017, 663 no.of workshops/training programmes were conducted by the 11 CBMWTFs. 412 in-house training programmes were conducted by the Hospitals. The Board in association with the administrative Staff College of India is organizing a workshop on 04.05.2019 on the implementation of the BMWM Rules, 2016.

➤ TSPCB has developed “Online Bio-Medical Waste manifest and Bar Code System” as per CPCB guidelines, through Centre for Good Governance (CGG). Online tracking of BMW collection vehicles of CBMWTFs is also integrated in the software. The CBMWTFs have started using the software in the 2nd week of April, 2019, which is expected to be stable and fully operational by the end of May, 2019.

➤ Future action plan for Bio-Medical Waste Management in Telangana State:

1. Identification of non-complying HCFs through District Level Committees for initiating action as per the provisions of Water Act, Air Act and BMWM Rules.
2. Surprise Joint Inspection of HCFs by the TSPCB and Municipal authorities to prevent mixing of BMW with Municipal Waste and pilferage of recyclable BMW (disposable items such as tubing, bottles, intravenous tubes and sets etc).
3. Periodical monitoring of CBMWTFs for ensuring compliance of standards.

**6. Status of Action Plan for River Rejuvenation Committee for identified polluted river stretches and compliance with directions of the NGT passed in O.A.No.673/2018, dated 20.09.2018 in the matter of news item published in “The Hindu” authored by Sri Jacob Koshy, titled “more river stretches are now critically polluted”.**

➤ CPCB has identified the following river stretches of Telangana State based on the BOD levels and priority criteria for restoration of river quality.

S.No.	River name	Stretch Identified	BOD range / Max. value in mg/L	Priority
1.	Musi	Hyderabad to Nalgonda	4.0 – 60.0	I
2.	Manjeera	Gowdicharla to Nakkavagu	5.0 – 26	II
3.	Nakka vagu	Gandilachapet to Sevalal Thanda	26	II
4.	Karakavagu	Along Palvancha	18	III
5.	Maneru	Warangal to Somanpalli	6 – 20	III
6.	Godavari	Basar to Khammam	4.0 – 9.0	IV
7.	Kinnerasani	Along Palvancha	10	IV
8.	Krishna	Thangadi to Wadapally	5.0 – 6.0	V

➤ The Hon’ble NGT vide order dated 20.09.2018 in O.A.No.673/2018 on polluted river stretches directed the State to prepare action plans **within two months** for bringing all Polluted River Stretches to be fit at least for bathing purposes (i.e., BOD < 3 mg/l and FC < 500 MPN / 100 ml) **within six months** from the date of finalisation of the action plans.

- Incompliance with the Hon'ble NGT directions, the EFS&T Department, Govt. of Telangana vide G.O.Rt.No.191, dated 29.11.2018 has constituted the "River Rejuvenation Committee" (RRC) with the following members for preparation and execution of the action plans for restoration of river quality in polluted stretches.

1.	Chief Secretary to Government	Chairman
2.	Spl. CS /Prl. Secy/ Secy, Environment, Science and Technology Department.	Vice-chairman
3.	Director General, Environment Protection Training and Research Institute	Member
4.	Spl. CS/ Prl. Secy/Secy, Municipal Administration and Urban Development Department	Member
5.	Spl. CS/ Prl. Secy/Secy, Industries Department	Member
6.	M.D., Hyderabad Metropolitan Water Supply Sewage Board (HMWSSB)	Member
7.	M.D., Telangana State Industrial Infrastructure Corporation (TSIIC)	Member
8.	Principal Secretary to Government, Finance Department	Member
9.	Member Secretary, Telangana State Pollution Control Board	Member Convenor

A copy of the GO is annexed as **Annexure-XI**.

- As per the GO, the responsibilities of RRC are:

- Preparation of action plan which includes components like identification of polluting sources including functioning / status of

STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch.

- The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation.
- The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water.
- The action plan should have speedy, definite or specific timelines for execution of steps.
- Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/Committee and out of Central Schemes.
- The Chief Secretary of the State and Administrators / Advisors to Administrators of the State will be personally accountable for failure to formulate action plan, as directed.

- The RRC will function under the overall supervision and co-ordination of Special Chief Secretary, EFS&T Dept.
- The MA&UD Dept., Govt. of Telangana has issued work order to NEERI on 05.12.2018 for preparation of action plan for rejuvenation of rivers in Telangana state.
- The Hon'ble NGT has also directed in its order to set-up Special Environment Surveillance Task Force (SESTF), comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority. Accordingly, EFS&T Dept., in its Lr.No.2171/For.III/A2/2017, dated 04.12.2018 has addressed all District Magistrates, Superintendent of Police, the Member Secretary, TSPCB and District Judges in the Telangana State for nominating the members to SESTF.
- The Hon'ble NGT during the hearing held on 19.12.2018 has issued fresh directions to submit the action plans before 31.01.2019 to CPCB for approval. The Hon'ble NGT further directed SPCBs to display the quality of water of the polluted river stretches in the website on or before 19.01.2019.
- The 1st RRC meeting was held on 31.12.2018, 2nd RRC meeting held on 19.01.2019 and 3rd RRC meeting was held on 25.01.2019 in which the action plan of polluted river stretches was approved and submitted to CPCB on 29.01.2019.

- TSPCB has uploaded the water quality data upto March, 2019 in the TSPCB website. As per the directions of the Hon'ble Tribunal vide order dated 19.12.2018 in O.A.No.673 of 2018, the water quality data will be updated every quarterly.
- CPCB has reviewed the action plans submitted by the State in the 3rd Task Team meeting and informed that the action plan for Priority-I & II stretches was recommended subject to conditions and also suggested following points to be incorporated in the action plan and submit the revised report of Priority-I & II after approval of RRC:
  - a) Septic management is to be included in the action plan of River Musi.
  - b) Polluted stretches with improved water quality are to be declared as non-polluted in the revised reports.
  - c) The Task Team suggested to combine action plan related to River Manjeera and Nakkavagu.
  - d) Ground Water Board and Irrigation Departments are required to rework on their plans and budget estimation.
  - e) Revised action plans with, timelines and estimated budget are required to be made for concurrence of RRC and for initiating further action.
- Accordingly, the action plans were revised and placed before the 4<sup>th</sup> RRC meeting held on 13.03.2019. The revised action plan were approved by the RRC for Priority-I & II stretches i.e., Musi and

Manjeera (including Nakkavagu) and the same was submitted to CPCB on 23.03.2019. TSPCB has hosted the action plan for Priority-I (River Musi) and Priority-II (combined report of River Manjeera and Nakkavagu) in the TSPCB website on 26.03.2019 in compliance to the directions of Hon'ble NGT.

- The Hon'ble NGT vide order dated 08.04.2019 further extended time up to 30.06.2019 to furnish the action plans for P-III, P-IV & P-V stretches. The RRC has reviewed and approved the revised action plans incorporating the suggestions of the CPCB in the meeting held on 20.04.2019.
- The revised action plans are proposed to be placed in the website and will be submitted to CPCB.

**7. Non attainment cities in O.A.No.681 of 2018.**

➤ The Hon'ble NGT issued order in O.A.No.681/2018, dated 08.10.2018 about time bound preparation and implementation of the Action Plan for lowering the ambient air pollution in the non-attainment cities. CPCB has identified 102 non-attainment cities out of which, Telangana has 3 non-attainment cities/areas (Hyderabad, Patancheruvu and Nalgonda). The action plan has to be prepared by a 6 member committee called Air Quality Monitoring Committee (AQMC) under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory and may be further supervised by the Chief Secretaries concerned.

**a. Constitution of AQMC:** The Government of Telangana through EFS&T G.O.Rt.No.182, dated 20.11.2018 constituted the Air Quality Monitoring Committee (AQMC) with the following members.

1.	Director General, Environment, Protection Training Research Institute, Hyderabad.	Member
2.	Commissioner / Director of Transport, Hyderabad	Member
3.	Commissioner/Director of Industries, Hyderabad.	Member
4.	Commissioner/Director of Municipal Administration and Urban Development, Hyderabad.	Member
5.	Commissioner / Director of Agriculture, Hyderabad.	Member
6.	Member Secretary, Telangana State Pollution Control Board, Hyderabad.	Member Convener

A copy of the GO is annexed as **Annexure-XII**.

➤ So far three meetings of the AQMC were held under the chairmanship of the Spl. Chief Secretary, EFS&T on 04.12.2018, 23.01.2019 and 05.03.2019.

**b. 1<sup>st</sup> AQMC meeting (04-12-2018):** The existing Action Plan for Hyderabad and Patancheruvu was updated as per the deliberations had during the 1<sup>st</sup> AQMC meeting on 4<sup>th</sup> December, 2018 and the action plan was communicated to CPCB on 17.12.2019. The Committee noted that the Nalgonda town is meeting the standards since the last three years from 2016 onwards and hence a separate action plan may not be required and suggested for monitoring at additional locations in Nalgonda instead of single location.

**c. 2<sup>nd</sup> AQMC Meeting (23-01-2019):** AQMC has deliberated on the Action Plan for Nalgonda as per the instructions of the Chairperson, NGT during the video conference held on 9<sup>th</sup> January, 2019, and finalised the action plan for Nalgonda and the same was communicated to CPCB on 29.01.2019.

**d. 3<sup>rd</sup> AQMC Meeting (05-03-2019):** The CPCB through its letter dated 12.02.2019 informed that, the three member committee examined the city plans on January, 24-25, 2019 and the city plans for Hyderabad and Patancheruvu is not approved and directed to submit revised city action plans for the Hyderabad and Patancheruvu.

The revised action plan for the three non-attainment cities as approved by the AQMC is communicated to CPCB on 11.03.2019. The approval from the CPCB is awaited.

**e. Constitution of District Level Air Quality Monitoring**

**Committee:** EFS&T has issued the G.O.Rt.No.33, dated 14.03.2019 constituting the District Level Air Quality Monitoring Committee for implementation of the action plan in HMDA and Nalgonda. A copy of the GO is annexed as **Annexure-XIII**.

**f. Hon'ble NGT orders on 15.03.2019:**

- i. Based on the parameters applied, if there are other cities not included in the 102 non-attainment cities, the CPCB is directed to include the same in the list of non-attainment cities.
- ii. The Chief Secretary of the states may finalize Action Plans within three months for reducing the Noise Pollution Levels and submit the same to the CPCB.

As per the Hon'ble NGT orders action will be initiated for identification of other cities not included in the 102 non-attainment cities for preparation action plans and also prepare and finalise action plans for reducing the noise pollution levels.

**8. Status report on compliance of Hon'ble NGT order in OA no. 1038 of 2018 on the news item published "The Asian Age" titled "CPCB to rank industrial units on pollution levels".**

➤ The Hon'ble NGT vide order dated 13.12.2018 in O.A.No.1038/2018 has observed that Central Pollution Control Board during the year 2009-10 has carried out comprehensive environmental assessment of 88 industrial clusters across the country and rated them on the concept of Comprehensive Environment Pollution Index (hereinafter referred to as CEPI). Out of 88 Industrial clusters, 43 industrial clusters in 16 States having CEPI score of 70 and above were identified as Critically Polluted Areas (CPAs). Further 32 industrial clusters with CEPI scores between 60 & 70 were categorized as severely polluted areas (hereinafter referred to as SPAs). It was suggested that areas having CEPI score between 60 to 70 i.e., severely polluted industrial cluster shall be kept under surveillance and pollution control measures should be effectively implemented. Whereas the Critically Polluted Industrial Areas need further detailed investigations interms of extent of damage and formulation of appropriate remedial action plan. Three industrial clusters were monitored in the Telangana State and the CEPI scores were assessed as below:

S.No.	Name of the industrial cluster	CEPI Score
1	Patancheru-Bollaram	70.07 (Critically Polluted Area)

S.No.	Name of the industrial cluster	CEPI Score
2	Kattedan	57.73
3	Kukatpally	56.56

- Patancheru-Bollaram was considered by MoEF, GOI as a Critically Polluted Area with a CEPI score of 70.07. Subsequently, the MoEF imposed moratorium in January, 2010 on consideration of projects for Environmental Clearance (EC) to be located in critically polluted areas identified by CPCB.
- An action plan was prepared by Board to improve environmental parameters in critically polluted area of Patancheru-Bollaram and submitted to CPCB in the month of September, 2010. As per the action plan, 27 major polluting industries were directed for up-gradation of treatment systems / providing zero discharge systems. After review of the action plan by CPCB, the MoEF lifted the moratorium vide notification dated 26<sup>th</sup> October, 2010 with a condition that the SPCB will monitor the action plan, initially for a period of six months, which was extended from time to time. With respect to Kattedan and Kukatpally Industrial Cluster the CPCB communicated that no action plan was required as the CEPI Score was below 60.
- The MoEF vide order dated 17.09.2013 has re-imposed the moratorium in critically polluted area of Patancheru-Bollaram after re-assessment of CEPI score with (76.05) taken up by CPCB in 2013. Subsequently, MoEF vide order dated 10.06.2014 kept in abeyance the re-imposing of

the moratorium till CPCB re-assesses the CEPI duly considering the objections raised by the States.

Dr.A.Kishan Rao, R/o.Patancheru has filed an Original Application (OA) No. 100 of 2014, in Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi praying *To prohibit Union of India from lifting the moratorium issued vide O.M. dated 17.09.2013 and stopping establishment of proposed new hazardous projects and extension of existing hazardous polluting industries in the Patancheru, Medak as the environmental carrying capacity has crossed the critical levels.* The Hon'ble NGT, New Delhi vide order dated 16.11.2017 disposed the application directing *“that the order of Ministry of Environment, Forest & Climate Change dated 10th June, 2014 keeping the moratorium in 2013 in abeyance is hereby set aside. The moratorium imposed in 2013 shall continue to be in force. Till Ministry of Environment, Forest & Climate Change passes a speaking order upon the report of the Central Pollution Control Board objectively considering whether the moratorium should continue or the same should be vacated keeping in view the needs of the environment and public health”.*

- The CPCB has revised CEPI concept in concurrence with MoEF&CC in 2016, which is formulated by eliminating the subjective factors but retaining the factors which can be monitored, in order to ensure greater transparency and objectivity in evaluating the environmental quality scenario in the industrial clusters. The CPCB vide letter dated 26.04.2016 issued directions to SPCBs communicating the 'Revised CEPI Concept 2016' wherein the CPCB directed the SPCBs, to

carryout environmental quality monitoring in all the Critically Polluted Areas (CPAs), installation of Continuous Ambient Air Quality, Water Quality monitoring stations and to implement the action plans for restoring environmental quality and bring down CEPI Scores.

- As per the directions of the CPCB, the TSPCB has carried out Pre-Monsoon & Post-Monsoon monitoring during the year 2016 in Patancheru-Bollaram Industrial Cluster and the results were communicated to CPCB. Also, the CPCB has undertaken monitoring, sampling and analysis for Ambient Air Quality, Surface Water Quality and Ground Water Quality in Patancheru–Bollaram Polluted Industrial Area (PIA) for evaluation of CEPI Scores as per the revised concept – 2016.
- The Hon'ble NGT vide order dated 13.12.2018 directed that a Committee shall be constituted by the concerned State which shall prepare and finalize the time bound action plan with regard to identified polluted industrial clusters in accordance with the revised norms laid down by the CPCB to restore environmental qualities within norms.
- In compliance to the Hon'ble NGT orders, the EFS&T Department, Government of Telangana vide G.O.Rt.No.2, dated 10.01.2019 (copy of the notification is annexed as Annexure) constituted the Committee for preparation of Action Plan for restoration of environmental qualities in respect of identified three Polluted Industrial Clusters (PIA) viz. (Patancheru-Bollaram, Kukatpally and Kattedan) with the following members (A copy of the GO is annexed as **Annexure-XIV**):

- |   |                      |
|---|----------------------|
| 1. Special Chief secretary/Principal Secretary/<br>Secretary to Govt, EFS&T Dept. | -Chairman            |
| 2. Commissioner/Director of Industries, Hyd.                                      | -Member              |
| 3. Representative of Medical, Health &<br>Family Welfare Department               | -Member              |
| 4. VC & MD, TSIIC, Govt. of Telangana   | -Member              |
| 5. MD, HMWS&SB, Govt. of Telangana.   | -Member              |
| 6. Commissioner, PR&RD Department   | -Member              |
| 7. Member Secretary, Telangana State<br>Pollution Control Board, Hyd              | -Member-<br>Convenor |

- The Committee held its meeting on 11.03.2019 for preparation and finalization of Action Plan for restoration of environmental qualities in respect of above identified polluted industrial clusters. The Committee noted the background, the actions initiated by the TSPCB under the Joint Action Plan submitted to Hon'ble Supreme Court, Action Plan furnished to CPCB and successful implementation of all the action points. The committee noted that an action plan has to be submitted for only Patancheru-Bollaram Industrial Area where the CEPI index is falling under Critically Polluted category. However, Action plan for Kukatpally and Kattedan are also prepared even though the index is not falling under the Critically Polluted Area as these two IDAs are figuring in the list of CPCB's Polluted Industrial Areas.
- The Copy of the final Action Plans were submitted to the CPCB on 11.03.2019 for information. The Action Plans were communicated to all the stake holder Departments for implementing the same. The Action Plans were also uploaded in the TSPCB website for information.

**9. Status of work in compliance of the directions passed in O.A.No.173/2018, Sudarshan Das Vs. State of West Bengal & Others order dated 04.09.2018.**

- The Government of Telangana has introduced New Sand Mining Policy in the year 2014 and framed Telangana State Sand Mining Rules, 2015, vide G.O.Ms.No.03, dated 08.01.2015, to have sustainable sand mining in the State of Telangana and authorised Telangana State Mineral Development Corporation Ltd (TSMDC), for excavation, regulation and supply of sand in the State of Telangana on allocation of feasible areas. TSMDC is following all the guidelines of sustainable sand mining in the State of Telangana. A copy of the GO is annexed as **Annexure-XV.**
- TSMDC has deployed staff in the stockyard with Sand Reach Officer, Sand Reach Assistant and Security Guards to monitor sand Mining and Transportation activities.
- Sand Mining activities are monitored by TSMDC, through a website Sand Sales Monitoring and Management System. Transparency and Accountability is maintained by online booking of sand, electronic transit pass generation, authentication of vehicles along with gross weight through RTA and authentication of customers through Aadhar database. As an additional security measure, security paper is used for generating transit passes through computer printing and tab printing where power supply is not available. TSMDC empanelled nearly 27 weigh-bridges at strategic points nearer to the sand stockyards in Telangana State to ensure proper weighment of transport vehicles. The

powers of enforcement are vested with Mines Department, Revenue, Police and RTA to curtail illegal sand mining and transportation. A mobile application is provided to the enforcement authorities to verify genuinity of transportation vehicles enroute.

- At present, Telangana State Mineral Development Ltd., is operating desiltation at 28 locations.
- Telangana State Mineral Development Corporation Ltd., is also excavating sand in (7) Patta lands to make them feasible for agricultural use. Further, presently one sand bearing area is operative for which environmental clearance is in existence.
- In addition Telangana State Mineral Development Corporation Ltd., has applied for Environmental clearances on obtaining Mining plan from DDMGs for (27) sand bearing areas since October, 2018.

**10. Status of setting up and proper functioning of ETPs/ CETPs/ STPs in the State of Telangana (OA No.593/2017).**

- Paryavaran Suraksha Samithi & Others has filed a Writ Petition (Civil) No.375 of 2012 against Union of India & Others before the Hon'ble Supreme Court.
- The Hon'ble Supreme Court vide order dated 22.02.2017, disposed of the writ petition issuing certain directions to all State Governments and State Pollution Control Boards.
- Further, the case was taken up by Hon'ble NGT, New Delhi in O.A.No.593 of 2017. The Hon'ble NGT vide order dated 04.07.2017 directed the SPCBs to file a statement on the status of functioning of STPs/ETPs/CETPs.
- Accordingly the TSPCB filed an affidavit before the Hon'ble NGT on 02.08.2017 comprising details of water polluting industries & inspection thereof and action taken report in compliance with Hon'ble Supreme Court order dated 22.02.2017.
- The Hon'ble NGT disposed the Original Application vide order dated 03.08.2018 and ordered as follows:-

“\_\_\_\_\_

*9. Having monitored the matter for the last more than one year on several dates, we are of the view that the matter requires continuous monitoring by statutory authorities as per directions which we proceed to issue today.*

- (i) We direct the Central Pollution Control Board (CPCB) to forthwith prepare an action plan after looking into all the status reports. The action plans must have mechanism to ensure compliance or all the directions in the order of the Hon'ble Supreme Court. To enable this to be done, a Nodal officer must be identified to deal with the issue of CETPs / ETPs / STPs.*
- (ii) A representative of the Ministry of Environment, Forest and Climate Change may be associated with the Nodal Officer of the CETP for monitoring. The Monitoring by the said two officers- the representative of the MoEF and the Nodal Officer of the CPCB must be held atleast once in a month and on the basis of such meeting and the feedback taken further follow up action must be taken and appropriate directions issued. This process may be a continuous process.*
- (iii) It must be ensured that STPs, CETPs and ETPs are functional and meet the requisite standards.*
- (iv) There is already a direction in the above judgment under which 50% of the funds for the purpose are to be provided by the Central Government, 25% by the States and remaining 25% to be arranged by way of loans which is to be re-paid by the user industries. Local bodies and the States have duties as clearly stipulated in the judgment. There has to be online monitoring system by each State to display emission levels in public domain in terms of paragraph 17 of the order of the Hon'ble Supreme Court.*

*(v) A report of the steps taken may be placed on the website of the Central Pollution Control Board atleast once in three months. Deficiencies if any may also be so displayed.*

*(vi) The Central Pollution Control Board may take penal action for failure, if any, against those accountable for setting up and maintaining STPs, CETPs and ETPs Central Pollution Control Board may also assess and recover compensation for damage to the environment and the said fund be kept in a separate account and utilized in terms of an action plan for protection of the environment. Such action plan may be prepared by the Central Pollution Control Board within three months from today.*

*(vii) A compliance report in terms of the above order may be furnished to this Tribunal within four months from today by e-mail at [filing.ngt@gmail.com](mailto:filing.ngt@gmail.com).*

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- As per the above orders of Hon'ble NGT, the CPCB has developed an online portal in its website so as to upload the status of ETPs / CETPs / STPs every month by the State PCBs.
- Accordingly, the Board is submitting compliance status of industries (ETPs) / CETPs / STPs every month into the CPCB website, so as to file the report before the Hon'ble NGT.

➤ **Status of ETPs / CETPs / STPs in the State are as follows:**

- **Status of ETPs:** The Telangana State Pollution Control Board has identified 2195 number of water polluting industries existing in the State. Out of 2195 industries, 2110 industries having functional ETPs and 85 industries are not having ETPs. The status of ETPs and action taken report is as follows:

1	No. of industries which require ETP	2195
2	No. Industries having functional ETP	2110
3	No. of industries complying	1979
4	No. of industries non-complying	131
5	Closure directions issued	94
	Show cause notice/directions issued	37
6	No. of industries operating without ETP	85
7	Closure directions issued	84
	Show cause notice issued	1

- **Status of CETPs:** There are 7 CETPs existing and 1 CETP is proposed in the State of Telangana and the status is as follows:

1	No. of CETPs	7
2	No. of CETPs complying	5
3	No. of CETPs non-complying	2
4	Closure directions issued	2
5	Details of under construction/proposed CETPs	1

- **Status of STPs:** There are 372 STPs (Municipal-28 nos. & Other-344 nos.) existing and 215 STPs (Municipal-14 nos. & Other-201 nos.) are proposed in the State of Telangana and the status of STPs is as follows:

<b>A</b>	<b>Municipal STPs</b>	
1	No. of STPs	28
2	No. of STPs complying	14
3	No. of STPs non- complying	14
4	Show cause notice/directions issued	14
5	Details of under construction/proposed STPs	14
<b>B</b>	<b>Other than municipal STPs</b>	
1	No. of STPs	344
2	No. of STPs complying	292
3	No. of STPs non- complying	52
4	Show cause notice/directions issued	52
5	Details of under construction/proposed STPs	201

*S. Jayashankar*  
26/4/19

**CHIEF SECRETARY,  
GOVT OF TELANGANA.**

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# ANNEXURES

GOVERNMENT OF TELANGANA  
ABSTRACT

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT DEPARTMENT - Municipal Solid Waste Management Rules, 2016 - Constitution of State Level Advisory Bddy for Monitoring and Implementation of SWM Rules 2016 in the State- Orders - Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (F1) DEPARTMENT

G.O.Rt.No.447

Dated. 26.07.2017

Read the following

1. Notification No.861, dated. 08.04.2016 of MoEF&CC, Govt.
2. The Hon'ble National Green Tribunal in OA No. 199/2014 order Dated. 22.12.2016
3. From the Director of Municipal Administration, Telangana State, Hyderabad, Lr Roc.No.CDMA-H2/ELPU/SWM/1/2017-HSEC-CDMA, Dated. 11.02.2017.

ORDER.

In the reference 1<sup>st</sup> read above, the Ministry of Environment, Forest & Climate Change, Government of India in exercise of powers conferred under Section 3,6 & 25 of Environment (Protection) Act, 1986, has notified the Solid Waste Management Rules, 2016, vide Notification dated 08.04.2016 in supersession of Municipal Solid Waste (Management and Handling) Rules, 2000 for Management of Solid Wastes in ULBs. Accordingly, the Director of Municipal Administration, Telangana State, Hyderabad, vide Cir Roc.No.3762/MSW/PLASTIC/ C&D Rules/ 2016-H2, dated. 28.07.2016, have issued instructions to all ULBs to take immediate necessary action for strict compliance of SWM Rules, 2016. The Hon'ble National Green Tribunal in the reference 2<sup>nd</sup> read above have also issued directions to all the ULBs for strict implementation of SWM Rules 2016 without any deviation and further delay.

2. In the reference 3<sup>rd</sup> read above, the Director of Municipal Administration, Telangana State, Hyderabad has requested the Government to constitute a State Level Advisory Body for monitoring and proper implementation of above SWM Rules, 2016 in ULBs of State and the State Level Advisory Body shall meet at least once in a every three months to review the matters related to implementation of these rules, state policy and strategy on solid waste management and give advice to State Government for taking measures that are necessary for expeditious and appropriate implementation of these rules. The copies of the review report shall be forwarded to the State Pollution Control Board for necessary action.

3. The Government after careful examination of the matter, hereby constitute the State Level Advisory Body for Monitoring and Implementation of SWM Rules 2016 in the State with the following members / representatives;

Sl.No	Designation	To be nominated by	
1	Secretary, Department of Urban Development or Local self Government Department of the State		Chairman
2	One Representative of Panchayat Raj and Rural Development Department not below the rank of Joint Secretary to Government.	Panchayat Raj and Rural Development Department, Telangana Secretariat, Hyderabad.	Member
3	One Representative of Revenue Department of State Government.	Revenue Department, Telangana Secretariat, Hyderabad	Member
4	One Representative from Ministry of Environment, Forest and Climate Change Government of India.	Ministry of Environment, Forest and Climate Change Government of India.	Member, Ex-officio
5	One Representative from Ministry of Urban Development, Government of India	Ministry of Urban Development Government of India	Member Ex-officio

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6	One Representative from Ministry of Rural Development, Government of India.	Ministry of Rural Development, Government of India.	Member, Ex-officio
7	One Representative from the Central Pollution Control Board.	Central Pollution Control Board, New Delhi	Member, Ex-officio
8	One Representative from the State Pollution Control Board or Pollution Control Committee.	Environment, Forest Science & Technology Department, Telangana Secretariat, Hyderabad	Member
9	One Representative from Indian Institute of Technology or National Institute of Technology.	Ministry of Human Resource Development Government of India	Member, Ex-officio
10	The Director, Town and Country Planning Telangana, Hyderabad	---	Member
11	Three Representatives from the Urban local bodies by rotation	Commissioner & Director of Municipal Administration, Telangana State, Hyderabad.	Member
12	Two Representatives from Census Towns or Urban agglomerations by rotation	Commissioner & Director of Municipal Administration, Telangana State, Hyderabad	Member
13	One Representative from reputed Non-Government Organisation or Civil Society working for the waste pickers or informal recycler or solid waste management	Commissioner & Director of Municipal Administration, Telangana State, Hyderabad.	Member
14	One Representative from a body representing Industries at the State or Central level	Industries and Commerce Department, Telangana Secretariat, Hyderabad.	Member
15	One Representative from waste recycling industry	Industries and Commerce Department, Telangana Secretariat, Hyderabad.	Member
16	Two subject experts	Commissioner & Director of Municipal Administration, Telangana State, Hyderabad.	Members
17	One Representative from Agriculture Department State Government of Telangana	Agriculture & Co-operation Department, Telangana Secretariat, Hyderabad.	Member
18	One Representative from Labour Department State Government of Telangana	Labour Employment Training & Factories Department, Telangana Secretariat, Hyderabad.	Member
19	The Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad (or) his/ her representative not below the rank of Additional Commissioner	-----	Member
20	Director of Municipal Administration, Telangana State, Hyderabad.	-----	Member / Convener

4. The State Level Advisory Body shall meet at least once in a every three months to review the matters related to implementation of SWM Rules, 2016, state policy and strategy on solid waste management and give advice to State Government for taking measures that are necessary for expeditious and appropriate implementation of SWM Rules, 2016. The copies of the review report shall be forwarded to the State Pollution Control Board for necessary action.

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5. The above State Level Advisory Body / Committee shall also act as a Monitoring Committee for proper implementation of these directions and the SWM Rules of 2016, as directed by the Hon'ble NGT in O.A.No. 199 of 2014 dated. 22.12.2016.

6. The Ministry of Environment, Forest and Climate Change Government of India / Ministry of Urban Development, Government of India / Ministry of Rural Development, Government of India / Central Pollution Control Board, New Delhi / Ministry of Human Resource Development Government of India are requested to nominate their Members for Telangana State Level Advisory Body for maintaining of SWM Rules, 2016.

7. The Panchayat Raj and Rural Development Department, Telangana Secretariat, Hyderabad / Revenue Department, Telangana Secretariat, Hyderabad / Environment, Forest, Science & Technology Department, Telangana Secretariat, Hyderabad / Industries and Commerce Department, Telangana Secretariat, Hyderabad / Agriculture & Co-operation Department, Telangana Secretariat, Hyderabad / Labour Employment Training & Factories Department, Telangana Secretariat, Hyderabad and Director of Municipal Administration, Telangana State, Hyderabad also requested to nominate their Members for Telangana State Level Advisory Body for Maintaining SWM Rules, 2016.

8. The Director of Municipal Administration, Telangana State, Hyderabad shall take necessary further action accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

NAVIN MITTAL  
SECRETARY TO GOVERNMENT

To

The Director of Municipal Administration,  
Telangana State, Hyderabad.

The Ministry of Environment, Forest and Climate Change Government of India / Ministry of Urban Development, Government of India / Ministry of Rural Development, Government of India / Central Pollution Control Board, New Delhi / Ministry of Human Resource Development Government of India.

The Panchayat Raj and Rural Development Department, Telangana Secretariat, Hyderabad / Revenue Department, Telangana Secretariat, Hyderabad / Environment, Forest, Science & Technology Department, Telangana Secretariat, Hyderabad / Industries and Commerce Department, Telangana Secretariat, Hyderabad / Agriculture & Co-operation Department, Telangana Secretariat, Hyderabad / Labour Employment Training & Factories Department, Telangana Secretariat, Hyderabad.

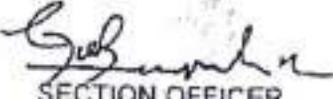
Copy to:

The OSD to Minister for MA&UD

The P.S to Secretary to Govt. MA&UD Dept.

Sc/Sf.

// FORWARDED :: BY ORDER //

  
SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

MA & UD Department – Solid Waste Management Rules, 2016 – Solid Waste Management Policy and Strategy – Orders – Issued.

MUNICIPAL ADMINISTRATION AND URBAN DEVELOPMENT DEPARTMENT

G.O.Rt.No.808,

Dated: 24.09.2018

Read the following:

1. S.O. 1357 (E) dated 8<sup>th</sup> April 2016
2. C&DMA Letter Roc No E-45347-2018-H2 Dt: 06.09.2018

ORDER:

The Ministry of Environment, Forest and Climate Change, Government of India under the provision of Environment Protection Act, 1986; notified latest regulations "Solid Waste Management Rules 2016" vide reference 1<sup>st</sup> read above. The Solid Waste Management Rules 2016 mandates that each State shall prepare a "State Policy and Solid Waste Management Strategy" for effective implementation of the provisions of the notification.

2. After careful examination and incorporating the suggestions and objections raised by the stakeholders, Government hereby formulate the "State Policy and Solid Waste Management Strategy" for the State of Telangana.

3. The Director of Municipal Administration is requested to take necessary action accordingly and furnish copies of the "State Policy and Solid Waste Management Strategy" to all the concerned.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

ARVIND KUMAR  
 PRINCIPAL SECRETARY TO GOVERNMENT

To,  
 The Director of Municipal Administration, Hyderabad (w.e.)  
 The Member Secretary, Telangana State Pollution Control Board, Hyderabad (w.e.)  
 The Director of Town & Country Planning, Hyderabad (w.e.)

Copy to:-

The EFS&T Department.  
 The PR & RD Department.  
 The OSD to Minister for MA&UD  
 The P.S to Principal Secretary, MA&UD Department.  
 Sc.

//FORWARDED BY ORDER//

SECTION OFFICER



# SOLID WASTE MANAGEMENT POLICY AND STRATEGY



GOVERNMENT OF TELANGANA

SEPTEMBER  
2018





Shri. K.T. Rama Rao  
Hon'ble Minister for IT, MA & UD,  
Industries & Commerce, Public Enterprises,  
Mines & Geology, NRI Affairs  
Government of Telangana

## MESSAGE

With an objective for protecting the environment and to develop clean and safe cities, Government of India had brought out many regulations with a special focus on Solid Waste Management and also other initiatives such as Swachh Survekshan, Livability Index and Seven Star Rating. These activities have been fruitful in bringing to the fore issues in the areas of sanitation.

Recognising the need to strengthen the Solid Waste Management System in all the ULBs and also inline with the provisions of the SWM Rules 2016, the government had prepared the Solid Waste Management Policy and Strategy with a specific timeframe for compliance.

I wish this document will help all the stakeholders in making our cities and towns clean, sanitised, healthy and liveable. And also, in achieving Service Level Benchmarking in all aspects i.e, Household coverage, Efficiency in Collection, Segregation of waste, Planning for Recovery and Recycle, Scientific disposal, Cost Recovery and Redressal of customer complaints and Efficiency in collection of user charges. To address this issue, Government of Telangana is committed to assist the ULBs to undertake massive steps in the direction of Solid Waste Management to ensure a robust civic life for all.

We thank Administrative Staff College of India (ASCI), our knowledge partner, for assisting the government in developing this policy.



Shri Arvind Kumar, IAS  
Principal Secretary,  
Municipal Administration & Urban Development,  
Government of Telangana

## MESSAGE

Municipal Solid Waste Management is one of the major environmental issues being faced across the world. Due to rapid increase in urbanization and increase in the population, the rate of generation of municipal solid waste in ULBs is also increasing and posing a serious challenge to all the ULBs.

The state vision on Sanitation is to ensure that "All cities and towns in Telangana becomes totally clean, sanitized, healthy, liveable, ensuring and sustaining good public health and environmental outcomes for all citizens, with a special focus on hygienic and affordable sanitation for the urban poor and women".

In these lines the state has set improvement of sanitation as one of its top priorities. The Government of Telangana has initiated SwachhTelangana with an aim to improve its ranking in the Swachh Survekshan. ULBs are gearing up to conduct the initiatives under Solid Waste Management extensively.

To support the ULBs in fulfil the requirement under Solid Waste Management, the state government is keen to establish a SWM Cell in CDMA for coordination and implementation of programmes and projects pertaining to Solid Waste Management.

I would like to acknowledge Administrative Staff College of India (ASCI), our key knowledge partner, for their support in developing this policy and for building capacities of the ULBs.



Dr. T.K. Sreedevi, IAS  
 Director of Municipal Administration  
 Commissioner and Directorate of Municipal Administration  
 Government of Telangana

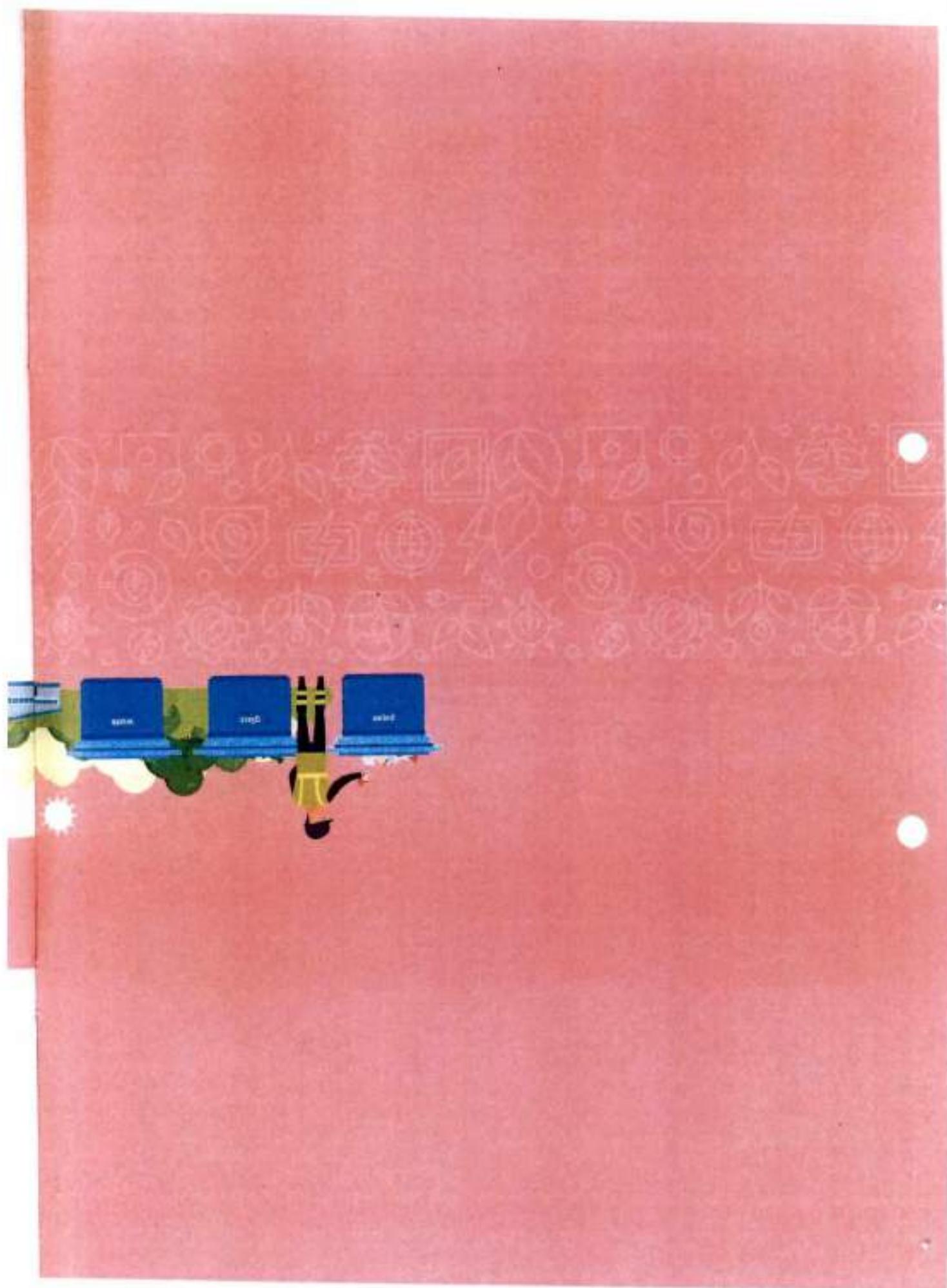
## MESSAGE

Growing urbanisation has a peculiar negative externality, in the form of generating massive amount of solid waste by-products, which if left unmanaged could lead to environmental catastrophe. A lot of innovative ideas, techniques and thoughts have been poured into the management of municipal waste sector by public and private enterprises alike, spurred by nationwide Swachh Bharat Mission which is an organising idea behind various state governments taking cue from it and tailoring it to suit their current needs.

Since the formation of the state of Telangana, the elected government has embarked upon the path to enable sustainable development of its urban centres; managing municipal solid waste is an indispensable and critical element of it. In this regard, the government has drafted Solid Waste Management Policy and Strategy for effective implementation of Solid Waste Management Rules 2016. This policy is intended to provide operational guidance for the safe, responsible, and ecologically sound management of municipal solid waste and defines standardised techniques of managing solid waste, covering each and every aspect of the solid waste management value chain, from collection to treatment and reuse phase.

With the intended objective of achieving 100% treatment and reuse of municipal waste, SWM policy is a creditable stride in that direction. The onus of its successful implementation lies on the shoulder of all the stakeholders involved as enumerated in the policy.

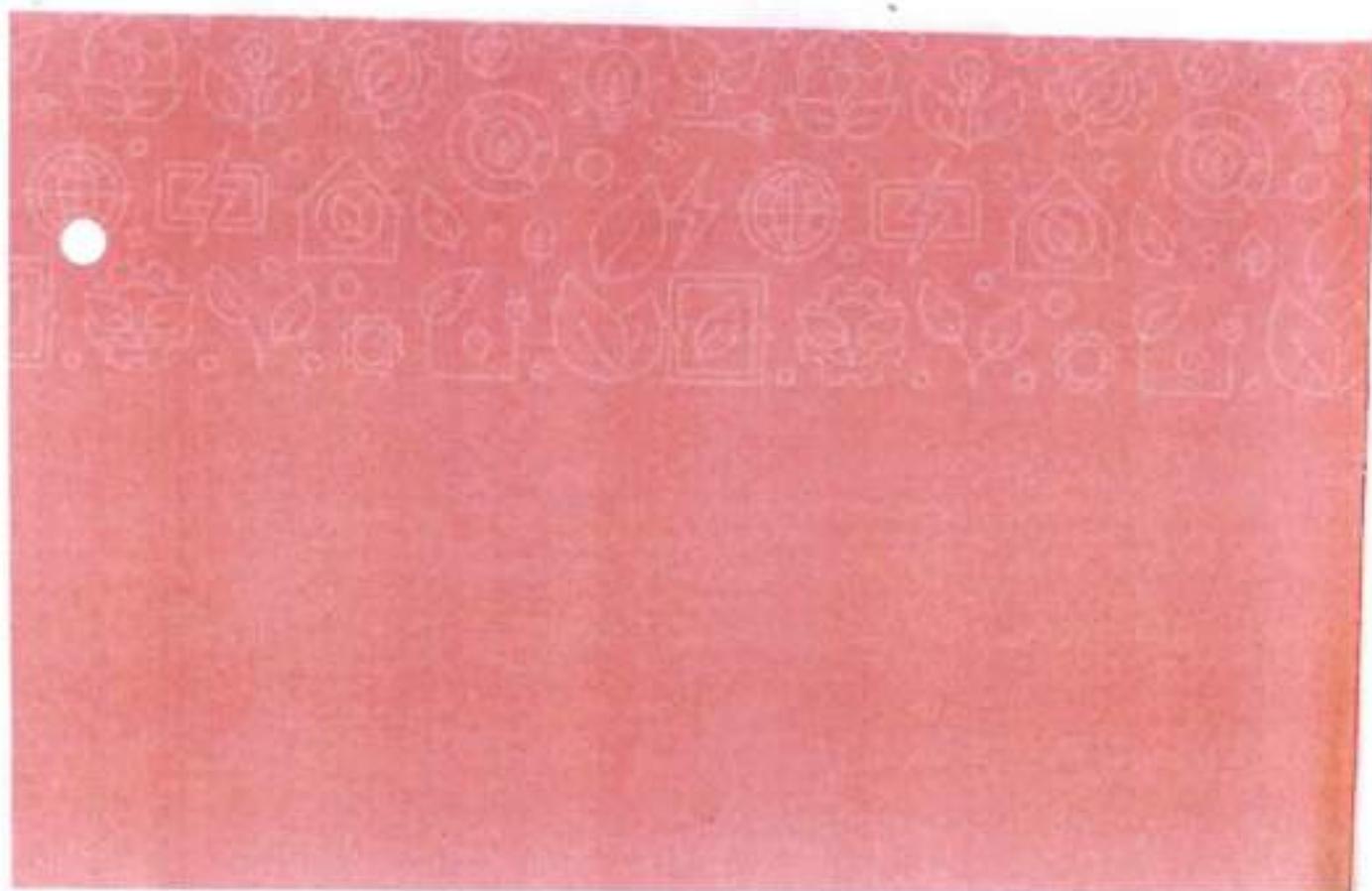
I would like to thank all the experts who involved in preparation of this policy, especially Administrative Staff College of India, in bringing out this elaborative, holistic yet cogent policy whose imprints on a sustainable future is sure to be felt.



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## ABBREVIATIONS

<b>BM</b>	-	Bio-methanation
<b>CC</b>	-	Conventional Composting
<b>CDMA</b>	-	Commissioner and Director of Municipal Administration
<b>CSR</b>	-	Corporate Social Responsibility
<b>D2D</b>	-	Door to Door
<b>DPR</b>	-	Detailed Project Report
<b>DRC</b>	-	Dry Resource Center
<b>EPR</b>	-	Extended Producer Responsibility
<b>EPTRI</b>	-	Environment Protection Training & Research Institute
<b>IALA</b>	-	Industrial Area Local Authority
<b>IE</b>	-	Industrial Estate
<b>IEC</b>	-	Information Education and Education
<b>IP</b>	-	Industrial Park
<b>IWP</b>	-	Integrated Waste Processing
<b>MRF</b>	-	Material Recovery Facility
<b>MT</b>	-	Metric Tonnes
<b>NUSP</b>	-	National Urban Sanitation Policy
<b>P&amp;CP</b>	-	Prevention & Control of Pollution
<b>PPE</b>	-	Personal Protective Equipment
<b>PPP</b>	-	Public Private Partnership
<b>RDF</b>	-	Refused Derived Fuel
<b>RWA</b>	-	Residential Welfare Association
<b>SEZ</b>	-	Special Economic Zone
<b>SHG</b>	-	Self Help Group
<b>SLAB</b>	-	State Level Advisory Body
<b>SLB</b>	-	Service Level Benchmarks
<b>SLMC</b>	-	State Level Monitoring Committee
<b>SWM</b>	-	Solid Waste Management
<b>TPD</b>	-	Tonnes Per Day
<b>TSIC</b>	-	Telangana State Industrial Infrastructure Corporation Limited
<b>TSPCB</b>	-	Telangana State Pollution Control Board
<b>ULB</b>	-	Urban Local Body

## DEFINITIONS

1. **"Aerobic composting"** means a controlled process involving microbial decomposition of organic matter in the presence of oxygen.
2. **"Anaerobic digestion"** means a controlled process that involves microbial division of organic matter in the absence of oxygen.
3. **"Authorization"** means the permission given by the State Pollution Control Board or Pollution Control Committee, as the case may be, to the operator of a facility or urban local authority, or any other agency responsible for processing and disposal of solid waste.
4. **"Biodegradable material"** means any organic material that can be degraded by micro-organisms into simpler stable compounds.
5. **"Bio-methanation"** means a process which entails enzymatic decomposition of the organic matter by microbial action to produce methane rich biogas.
6. **"Brand owner"** means a person or company who sells any commodity under a registered brand label.
7. **"Buffer zone"** means zone of no development to be maintained around solid waste processing and disposal facility, exceeding 5 TPD of installed capacity. This will be maintained within total area allotted for the solid waste processing and disposal facility.
8. **"Bulk waste generator"** means and includes buildings occupied by the Central government departments or undertakings, State government departments or undertakings, local bodies, public sector undertakings or private companies, hospitals, nursing homes, schools, colleges, universities, other educational institutions, hostels, hotels, commercial establishments, markets, places of worship, stadia and sports complexes having an average waste generation rate exceeding 100kg per day.
9. **"Bye-laws"** means regulatory framework notified by local body, census town and notified area townships for facilitating the implementation of these rules effectively in their jurisdiction.
10. **"Census town"** means an urban area as defined by the Registrar General and Census Commissioner of India.
11. **"Combustible waste"** means non-biodegradable, non-recyclable, non-reusable, non-hazardous solid waste having minimum calorific value exceeding 1500 kcal/ kg and excluding chlorinated materials like plastic, wood pulp, etc.;
12. **"Composting"** means a controlled process involving microbial decomposition of organic matter.
13. **"Contractor"** means a person or firm that undertakes a contract to provide materials or labour to perform a service or do a job for service providing authority.
14. **"Co-processing"** means use of non-biodegradable and non-recyclable solid waste having calorific value exceeding 1500k/ Cal as raw material or as a source of energy or both to replace or supplement the natural mineral resources and fossil fuels in industrial processes.

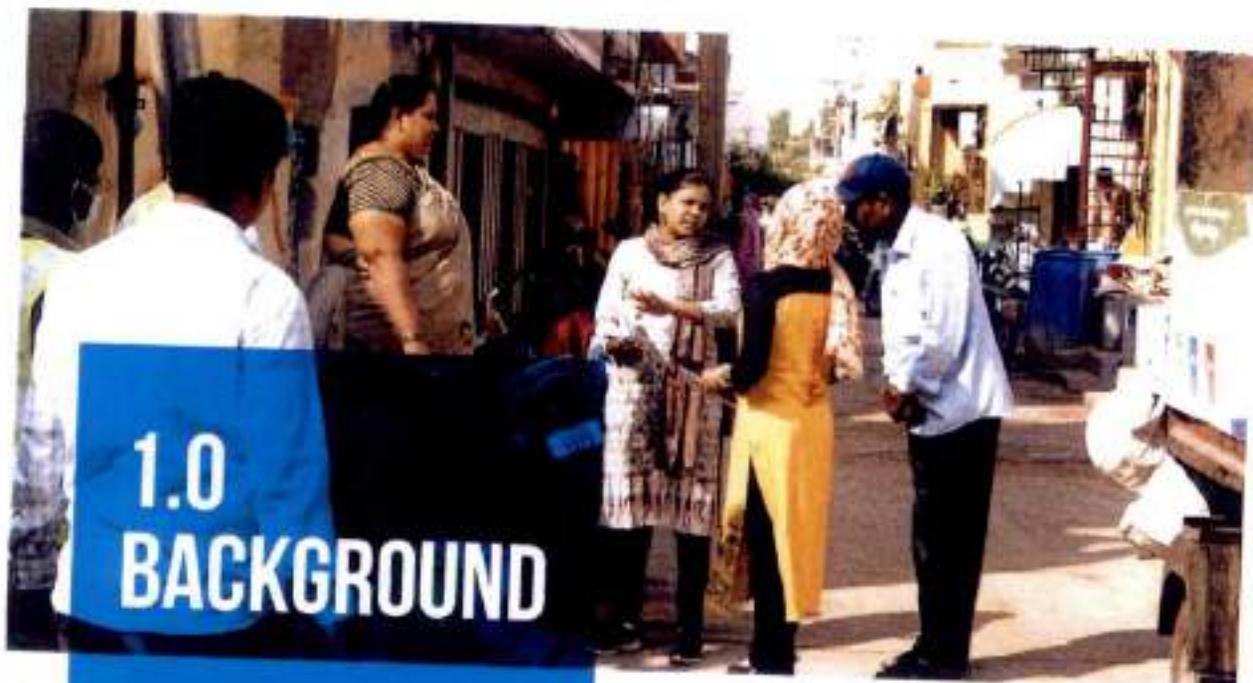
15. **"Decentralized processing"** means establishment of dispersed facilities for maximizing the processing of biodegradable waste and recovery of recyclables closest to the source of generation so as to minimize transportation of waste for processing or disposal.
16. **"Disposal"** means final disposal of urban solid waste with the care necessary to protect ground water, surface water and environment air quality from pollution.
17. **"Domestic hazardous waste"** means discarded paint drums, pesticide cans, CFL bulbs, tube lights, expired medicines, broken mercury thermometers, used batteries, used needles and syringes and contaminated gauge, etc., generated at the household level.
18. **"Door to Door collection"** means collection of solid waste from the door step of households, shops, commercial establishments, offices, institutional or any other non-residential premises and includes collection of such waste from entry gate or a designated location on the ground floor in a housing society, multi storied building or apartments, large residential, commercial or institutional complex or premises.
19. **"Dry waste"** means waste other than bio-degradable waste and inert street sweepings and includes recyclable and non-recyclable waste, combustible waste and sanitary napkin and diapers, etc.
20. **"Dump sites"** means a land utilized by local body for disposal of solid waste without following the principles of sanitary landfilling.
21. **"Extended Producer Responsibility" (EPR)** means responsibility of any producer of packaging products such as plastic, tin, glass and corrugated boxes, etc., for environmentally sound management, till end-of-life of the packaging products.
22. **"Facility"** means any establishment wherein the solid waste management processes namely segregation, recovery, storage, collection, recycling, processing, treatment or safe disposal are carried out.
23. **"Fine"** means penalty imposed on waste generators or operators of waste processing and disposal facilities under the bye-laws for non-compliance of the directions contained in these rules and/ or bye- laws.
24. **"Form"** means a Form appended to these rules.
25. **"Handling"** includes all activities relating to sorting, segregation, material recovery, collection, secondary storage, shredding, baling, crushing, loading, unloading, transportation, processing and disposal of solid wastes.
26. **"Inert"** means wastes which are not bio-degradable, recyclable or combustible street sweeping or dust and silt removed from the surface drains.
27. **"Incineration"** means an engineered process involving burning or combustion of solid waste to thermally degrade waste materials at high temperatures.
28. **"Informal waste collector"** includes individuals, associations or waste traders who are involved in sorting, sale and purchase of recyclable materials.
29. **"Leachate"** means a liquid that has seeped through solid waste or other medium and which has extracted soluble or suspended matter from it.
30. **"Local body"** for the purpose of these rules means and includes the municipal corporation, nagarnigam, municipal council, nagarpalika, nagarpalika parishad, municipal board, nagarpanchayat and town panchayat, census towns, notified areas and notified industrial townships with whatever name they are called in different States and union territories in India.
31. **"Materials Recovery Facility" (MRF)** means a facility where non-compostable solid waste can be temporarily stored by the local body or any other entity mentioned in rule 2 of Solid Waste Management (SWM) Rules 2016 or any person or agency authorized by any of

them to facilitate segregation, sorting and recovery of recyclables from various components of waste by authorized informal sector of waste pickers, informal recyclers or any other work force engaged by the local body or entity mentioned in rule 2 SWM Rules 2016 for the purpose before the waste is delivered or taken up for its processing or disposal.

32. **"Non-biodegradable waste"** means any waste that cannot be degraded by microorganisms into simpler stable compounds.
33. **"Operator of a facility"** means a person or entity, who owns or operates a facility for handling solid waste which includes the local body and any other entity or agency appointed by the local body.
34. **"Primary collection"** means collecting, lifting and removal of segregated solid waste from source of its generation including households, shops, offices and any other non-residential premises or from any collection points or any other location specified by the local body.
35. **"Processing"** means any scientific process by which segregated solid waste is handled for the purpose of reuse, recycling or transformation into new products.
36. **"Recycling"** means the process of transforming segregated non-biodegradable solid waste into new material or product or as raw material for producing new products which may or may not be similar to the original products.
37. **"Redevelopment"** means rebuilding of old residential or commercial buildings at the same site, where the existing buildings and other infrastructures have become dilapidated.
38. **"Refused Derived Fuel"(RDF)** means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste.
39. **"Residual solid waste"** means and includes the waste and rejects from the solid waste processing facilities which are not suitable for recycling or further processing.
40. **"Sanitary landfilling"** means the final and safe disposal of residual solid waste and inert wastes on land in a facility designed with protective measures against pollution of ground water, surface water and fugitive air dust, wind-blown litter, bad odour, fire hazard, animal menace, bird menace, pests or rodents, greenhouse gas emissions, persistent organic pollutants slope instability and erosion.
41. **"Sanitary waste"** means wastes comprising of used diapers, sanitary towels or napkins, tampons, condoms, incontinence sheets and any other similar waste;
42. **"Schedule"** means the Schedule appended to these rules.
43. **"Secondary storage"** means the temporary containment of solid waste after collection at secondary waste storage depots or MRFs or bins for onward transportation of the waste to the processing or disposal facility.
44. **"Segregation"** means sorting and separate storage of various components of solid waste namely biodegradable wastes including agriculture and dairy waste, non-biodegradable wastes including recyclable waste, non-recyclable combustible waste, sanitary waste and non-recyclable inert waste, domestic hazardous wastes, and construction and demolition wastes.
45. **"Service provider"** means an authority providing public utility services like water, sewerage, electricity, telephone, roads, drainage, etc.
46. **"Solid waste"** means and includes solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non-residential

wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities.

47. **"Sorting"** means separating various components and categories of recyclables such as paper, plastic, cardboards, metal, glass, etc., from mixed waste as may be appropriate to facilitate recycling.
48. **"Stabilizing"** means the biological decomposition of biodegradable wastes to a stable state where it generates no leachate or offensive odours and is fit for application to farm land, soil erosion control and soil remediation.
49. **"Street vendor"** means any person engaged in vending of articles, goods, wares, food items or merchandise of everyday use or offering services to the general public, in a street, lane, side walk, footpath, pavement, public park or any other public place or private area, from a temporary built up structure or by moving from place to place and includes hawker, peddler, squatter and all other synonymous terms which may be local or region specific; and the words "street vending" with their grammatical variations and cognate expressions, shall be construed accordingly.
50. **"Tipping fee"** means a fee or support price determined by the local authorities or any state agency authorized by the State government to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill.
51. **"Transfer station"** means a facility created to receive solid waste from collection areas and transport in bulk in covered vehicles or containers to waste processing and, or, disposal facilities.
52. **"Transportation"** means conveyance of solid waste, either treated, partly treated or untreated from a location to another location in an environmentally sound manner through specially designed and covered transport system so as to prevent the foul odour, littering and unsightly conditions.
53. **"Treatment"** means the method, technique or process designed to modify physical, chemical or biological characteristics or composition of any waste so as to reduce its volume and potential to cause harm;
54. **"User fee"** means a fee imposed by the local body and any entity mentioned in rule 2 of SWM Rules 2016 on the waste generator to cover full or part cost of providing solid waste collection, transportation, processing and disposal services.
55. **"Vermi composting"** means the process of conversion of bio-degradable waste into compost using earth worms.
56. **"Waste generator"** means and includes every person or group of persons, every residential premises and non-residential establishments including Indian Railways, defence establishments, which generate solid waste.
57. **"Waste hierarchy"** means the priority order in which the solid waste is to should be managed by giving emphasis to prevention, reduction, reuse, recycling, recovery and disposal, with prevention being the most preferred option and the disposal at the landfill being the least.
58. **"Waste picker"** means a person or groups of persons informally engaged in collection and recovery of reusable and recyclable solid waste from the source of waste generation the streets, bins, material recovery facilities, processing and waste disposal facilities for sale to recyclers directly or through intermediaries to earn their livelihood.



Ministry of Environment, Forest and Climate change, Government of India under the provision of Environment Protection act 1986, notified latest regulations "Solid Waste Management Rules 2016", vide S.O. 1357 (E), dated 8th April 2016. The notification spells out duties to different stakeholders as mentioned below:

- Waste generators
- Ministry of Environment, Forest and Climate Change
- Ministry of Urban Development
- Department of Fertilisers, Ministry of Chemicals and Fertilisers
- Ministry of Agriculture, Government of India
- Ministry of Power
- Ministry of New and Renewable Energy Sources
- Secretary-in-charge, Urban Development in the States and Union territories
- District Magistrate or District Collector or Deputy Commissioner
- Secretary-in-charge of Village Panchayats or Rural Development Department
- Central Pollution Control Board
- Local authorities and village Panchayats of census towns and urban agglomerations
- State Pollution Control Board or Pollution Control Committee
- Manufacturers or brand owners of disposable products and sanitary napkins and diapers
- Industrial units located within one hundred km from the refused derived fuel and waste to energy plants based on solid waste
- Criteria for Duties regarding setting-up solid waste processing and treatment facility

Also, to tackle other solid waste, Ministry notified the following rules under the provision of Environment protection act 1986:

- Construction and Demolition Waste Management, 2016
- E Waste (Management) Rules, 2016
- Plastic Waste Management Rules, 2016
- Bio- Medical (Management and Handling) Rules, 2016

Recognising the key role to be played by the state government and ULBs, the SWM Rules 2016 mandates that each State shall prepare a "State Policy and Solid Waste Management Strategy" for effective implementation of the provisions of the notification.

# 2.0 SOLID WASTE MANAGEMENT IN SITUAION IN URBAN TELANGANA

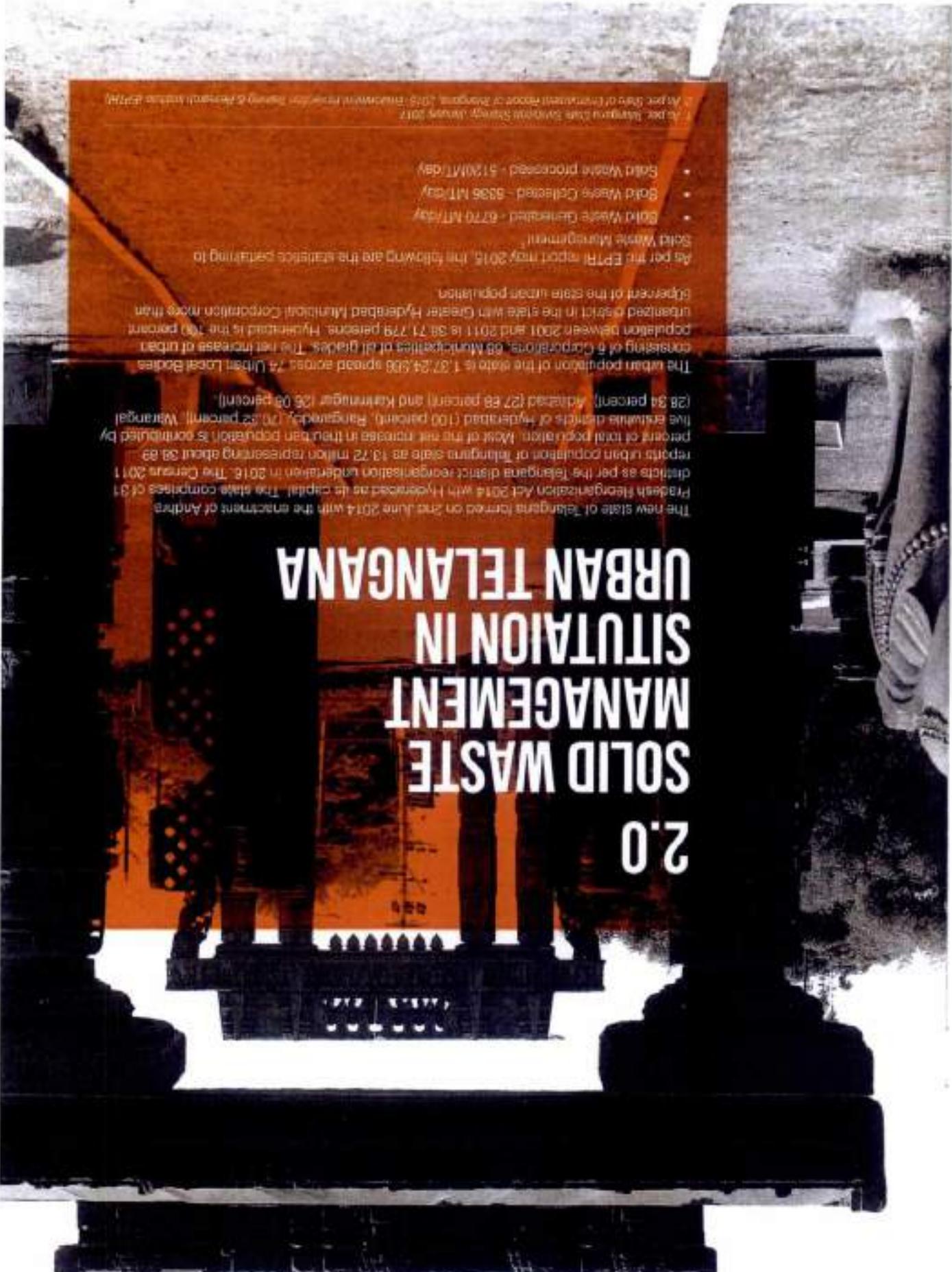
The new state of Telangana formed on 2nd June 2014 with the enactment of Andhra Pradesh Reorganisation Act 2014 with Hyderabad as its capital. The state comprises of 31 districts as per the Telangana district reorganisation undertaken in 2014. The Census 2011 reports urban population of Telangana state as 13.72 million representing about 38.89 percent of total population. Most of the net increase in the urban population is contributed by five districts of Hyderabad (100 percent), Rangareddy (70.52 percent), Warangal (28.34 percent), Adilabad (27.88 percent) and Karimnagar (26.05 percent).

The urban population of the state is 1,37,24,508 spread across 74 Urban Local Bodies consisting of 6 Corporators, 68 Municipalities of all grades. The net increase of urban population between 2001 and 2011 is 38,71,729 persons. Hyderabad is the 100 percent urbanized district in the state with Greater Hyderabad Municipal Corporation more than 60 percent of the state urban population.

As per the EPTI report may 2015, the following are the statistics pertaining to Solid Waste Management

- Solid Waste Generated - 6779 MT/day
- Solid Waste Collected - 6336 MT/day
- Solid Waste Processed - 5130MT/day

As per Bangalore Urban Development Strategy, March 2017  
 At per 2nd of Environment report of Bangalore, 2015 - Environment report from Bangalore & Hyderabad (EPTI)



The present level of service level benchmarks in solid waste management of Telangana is as given below:

S.No.	Indicator	Benchmark (in %)	Present Status in Telangana (in %)
1.	Household level coverage of Solid Waste Management services	100	94
2.	Efficiency of collection of municipal solid waste	100	93
3.	Extent of segregation of municipal solid waste	100	28
4.	Extent of municipal solid waste recovered/recycled	80	56
5.	Extent of scientific disposal of municipal solid waste	100	50
6.	Extent of cost recovery in solid waste management services	100	47
7.	Efficiency in redressal of customer complaints	80	93
8.	Efficiency in collection of user charges	90	15





### 3.0 NEED FOR POLICY AND STRATEGY

With an objective for protecting the environment and to develop clean and safe cities, the government had brought out specific regulations with focus on Solid Waste Management and also other initiatives such as Liveability Index, Seven Star Rating and Swachh Survekshan. The salient features of the same are as stated below:

**SWM Rules 2016** mandates all the states and union territories to formulate a State Policy and Strategy on Solid Waste Management based on National Solid Waste Management Policy and National Urban Sanitation Policy (NUSP). While preparing State Policy and Strategy on Solid Waste Management, emphasis shall be laid on waste reduction, reuse, recycling, recovery and optimum utilisation of various components of solid waste to ensure minimisation of waste going to the landfill and minimise impact of solid waste on human health and environment.

**Liveability Index:** Ministry of Housing and Urban Affairs developed a set of "Liveability Standards in Cities" to generate a Liveability Index and Rate Cities. One of the identified categories is "Solid Waste Management" and the following are the three core indicators:

- Household level coverage of municipal solid waste collection
- Efficiency of collection of municipal solid waste
- Extent of municipal solid waste recovered through reuse

**Seven Star Rating:** Ministry of Housing and Urban Affairs developed a set of "Protocol for Star Rating of Garbage-Free Cities". The star-rating initiative, developed by the Swachh Bharat Mission - Urban will be rating cities on a 7-star rating system based on multiple cleanliness indicators for solid waste management, such as:

1. Door-to-Door Collection
2. Segregation at source
3. Sweeping of public, commercial and residential areas (no visible eyesores onstreets)
4. Waste storage bins, litter bins and material recovery facility
5. Bulk waste generators compliance
6. Scientific waste processing, scientific landfilling and C&D waste management
7. User fees, penalties, spot fines for littering and enforcement of ban on plastic
8. Citizen grievance redressal and feedback system

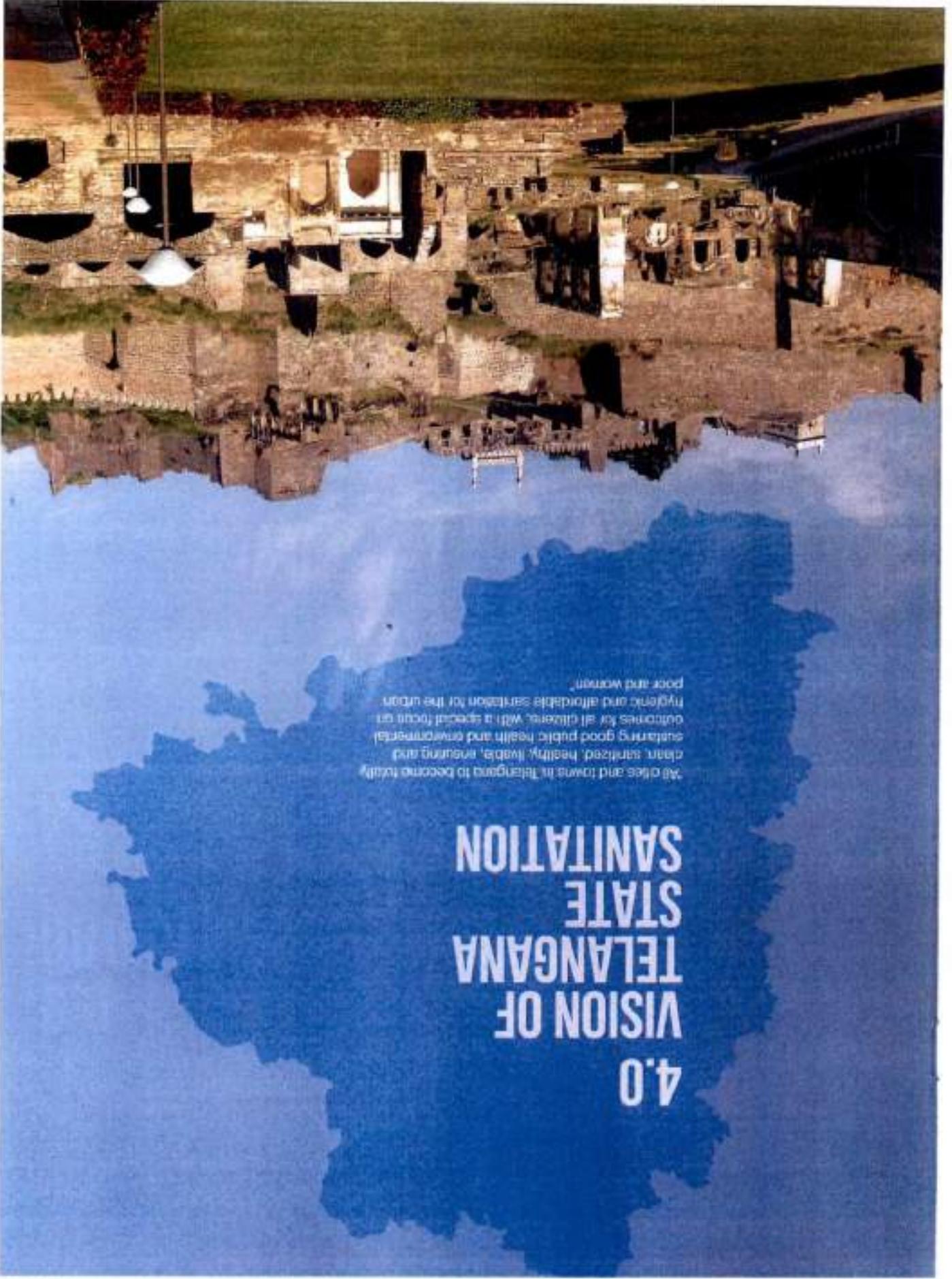
9. Eradication of crude dumping of garbage and dump remediation
10. Cleaning of storm drains and surfaces of water bodies
11. Waste reduction
12. Visible beautification in the city

**Swachh Survekshan:** To improve urban sanitation, Minister of Housing and Urban Affairs announced 'Swachh Survekshan' for ranking of cities. To scale up the coverage of the ranking exercise and encourage towns and cities to actively implement mission initiatives in a timely and innovative manner "Municipal Solid Waste Management" is considered as one of the initiative under Swachh Survekshan. The following are the set of indicators under Municipal Solid Waste - Sweeping, Collection, Transportation, Processing and Disposal

- Availability of Automated Systems in Collection and Transportation of MSW
- Efficiency of Waste Collection and Management of Construction & Demolition Waste
- Solid Waste Management in Commercial Areas
- Solid Waste Management in Residential Areas
- Door to Door Waste Collection done and Transported from residential areas
- Efficiency in Transportation of Waste to Disposal/Treatment Sites

In compliance with SWM Rules 2016, the State Policy and Strategy on Solid Waste Management is being prepared for effective implementation.





All cities and towns in Telangana to become totally clean, sanitized, healthy, livable, ensuring and sustaining good public health and environmental outcomes for all citizens. With a special focus on hygienic and affordable sanitation for the urban poor and women.

# VISION OF TELANGANA STATE SANITATION 4.0

# 5.0 OBJECTIVES

- This policy is intended to achieve following objectives:
- To achieve 100% level of service level consistent with reference to holistic coverage, efficiency of collection and segregation.
- To achieve service level equivalent of 80% for solid waste recovery.
- To match the quantity of solid waste reaching to the desired level to maximum of 20% generated, by encourage segregation and reduction.
- To achieve 100% service level consistent with reference to development of resource friendly.
- To plan for cost recovery in the solid waste management services.
- To achieve service level consistency of 80% with reference to reduction of compliance and 50% with reference to collection of user charges.
- To ensure implementation and enforcement of on-site source segregation and waste treatment system such as composting, Biogas production and other treatment system such as bulk generation, treatment and reuse, anaerobic, solid containers and reduction more than 5000 lit. meters of the used, bottles and containers as listed in the OWM Rules 2016.
- To introduce "user charges" and "charges" in line with "polluter pays" principle.
- To introduce "Recognition" and "Incentive" to encourage the compliance.



# 6.0 POLICY AND STRATEGY CONSIDERATIONS

6.1 Policy Approach: All efforts shall be made to achieve paradigm shift from "Linear Approach" to "Circular Economy Approach" in Solid Waste Management as an opportunity for developing "Social and Private Sector Entrepreneur" in the SWM; and by encouraging the reputed institutions to take up research and support the ULBs in this endeavour.



Figure 1: Linear Approach

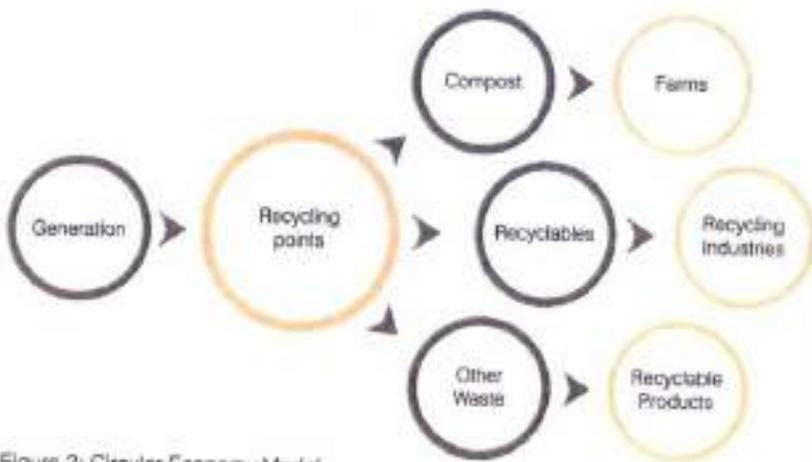


Figure 2: Circular Economy Model

**Benefits**

- Make waste management affordable, as the overwhelming majority of the collected waste will be recycled
- Reduction in the disposal costs, as minimum waste will be reaching the landfill and reduce the pressure on the land requirements for landfills
- Generate revenue from the sale of recyclable materials
- Generate revenue from the sale of compost

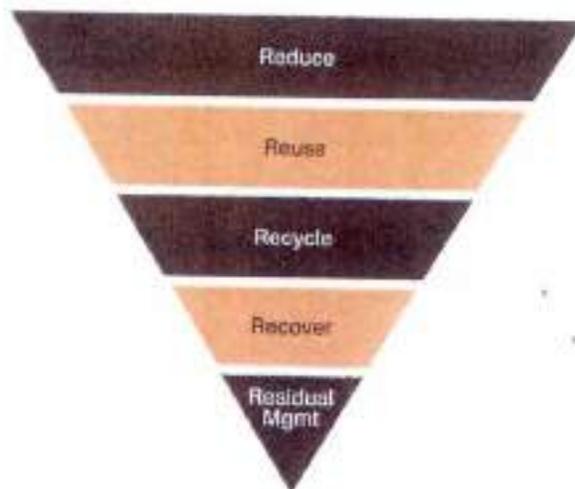
- 6.2 **Policy Commitment:** The Telangana State Government is committed in providing clean and safe cities/towns by giving priority for the effective implementation of Solid Waste Management Rules 2016 and by extending necessary support to the Urban Local Bodies (ULBs).

Policy aims at achieving the Service Level Benchmarks (SLBs) fully by 2022 and achieving reduced quantity of solid waste reaching the landfill not more than 20%.

Efforts shall be initiated for having ULB wise SWM Plan including the treatment and landfill development for rejects. In case of non-feasibility for any ULB due to non-availability of land, then only to plan for regional or cluster development.

For achieving the said goal, the State Government extends support to ULBs as needed.

- 6.3 **Waste Hierarchy:** While formulating the policies and programs, thrust shall be given to the following waste management hierarchy by all the concerned:



REDUCE BEING THE MOST PREFERRED OPTION AND THE RESIDUAL MANAGEMENT AT THE LANDFILL BEING THE LEAST.

- 6.4 **Regulatory Compliance:** ULBs shall take necessary action for obtaining authorisation under the provisions of SWM Rules 2016 for setting up waste processing, treatment or disposal facility, if the volume of the waste exceeding 5 MT per day including sanitary landfills from the Telangana State Pollution Control Board (TSPCB).

ULBs shall prepare and submit annual report in Form IV by 30th April of the succeeding year to the Commissioner and Director of Municipal Administration (CDMA).

The CDMA shall submit the annual report of ULBs to Principal Secretary, Municipal Administration with a copy to Member Secretary of TSPCB by 31st May of every year.

The District Collector shall review the performance of the local bodies at least once in a quarter on the implementation of solid waste management rules and take corrective measure in consultation with CDMA.

- 6.5 Planning:** The Town Planning Department to ensure in the master plan of the ULBs regarding provision for setting up solid waste processing and disposal facilities except for the ULBs planning for common waste processing facility or regional sanitary landfill for group of ULBs.

ULBs shall complete the process of identification and allocation of suitable land to the local bodies within three months for setting up of processing and disposal facilities of solid waste and incorporate the same in the master plan (land use plan) within a period of three months.

All the SEZ, Industrial Estate and Industrial parks shall earmark 5% of the total area of the plot or minimum 5% of plot area or sheds for recovery and recycling facility, in case of upcoming ones. In case of existing SEZ / IE / IPs the TSIC and TSPCB to study the feasibility for incorporating the same depending upon the unallotted plots and to ensure incorporating the provisions in the master plan. TSPCB to ensure the compliance through their concerned management under the provisions of the Water Prevention & Control of Pollution (P&CP) Act 1974 as amended and the Air (P&CP) Act 1981 as amended.

The CDMA has taken up the need assessment study for establishing common regional sanitary landfill for a group of ULBs falling within a distance of 50 km (or more) from the regional facility on a cost sharing basis and ensuring professional management of such sanitary landfills.

The CDMA in consultation with TSPCB to notify the buffer zone maintained for the solid waste processing and disposal facilities of more than 5TPD in compliance with the rules.

The ULBs shall periodically submit the status reports on the key elements of the SWM to CDMA.

- 6.6 Stakeholder Engagement:** Involvement of citizens especially for achieving segregation at source is very important. The ULBs to promote home composting, bio-gas generation systems, decentralised processing of waste at community level; subject to control of odour and maintenance of hygienic conditions around the facility.

To inventory the manufacturers or brand owners of disposable products, in a phased manner, such as tin, glass, plastic packing and sanitary napkins and diapers and seek financial assistance to the ULBs for establishing the waste management system. The identified manufacturers and brand owners to be encouraged for taking up CSR programs in waste management system and support the ULBs. The progress report shall be placed before State Level Advisory Board periodically.

All the ULBs to have a scheme for registration of waste pickers and waste dealers.

The ULB shall build the capacities of RWAs on solid waste management and the technologies available for decentralised processing facilities, as a continual improvement.

The state shall empanel the technology vendors with due focus on decentralised sanitation facilities.

- 6.7 Decentralised Facility:** All the ULBs shall inventory the bulk waste generators (Waste generation rate exceeding 100kgs per day) to ensure segregation at source and also to explore the possibility for decentralised facility for handling wet waste and to prepare action plan. The progress shall be reviewed periodically in the State Level Advisory Board.

Inventory the bulk waste generators (Waste generation rate exceeding 100kgs per day) / residential welfare and market associations / gated communities and institutions more than 5000 sq.m of the area / hotels and restaurants to ensure the segregation of waste at source for handing over recyclable material to either the authorised waste pickers or authorised recyclers and to assess the feasibility for developing on site composting / bio-methanation for treating bio degradable waste.

It is proposed to introduce property tax rebate for those bulk generators implementing on-site segregation and treatment facility for full quantity of waste generated.



6.8 **User Fee:** The ULBs shall notify the user fee for different categories once in two years. The user fee shall be informed to the public through press statement. The indicative user fee is given below and the ULBs can adopt as per their requirements.

S.No.	Type of generator	User Fee per month for Door to Door collection
1.	Individual Household	Rs. 20/-
2.	Apartments	No. of units * Rs. 30/-
3.	Commercial establishments, shops, eating places (Dhaba/Sweet shops/coffee houses/fast food centers etc)	Rs. 500/-
4.	Guest House	Rs. 750/-
5.	Hostels	Rs. 750/-
6.	Hotels(Unstar)	Rs. 750/-
7.	Hotels (Up to 3 star)	Rs. 1500/-
8.	Hotels (over 3 star)	Rs. 5000/-
9.	Educational Institutions Government	Rs. 250/-
10.	Educational Institutions Private	Rs. 1000/-
11.	Individual Office	Rs. 1000/-
12.	Offices in a complex building	No. of units * Rs. 1000/-
13.	Cinema Hall	Rs. 1500/-
14.	Multiplex	No. of screens * Rs. 1500/-
15.	Marriage hall, function halls and Banquet Halls (Plinth area < 20,000 sq.m)	Rs. 3000/-
16.	Marriage hall, function halls and Banquet Halls (Plinth area >= 20,000 sq.m)	Rs. 5000/-
17.	Bulk generator (Generating more than 100 kg per day and not listed above)	Rs. 3000/-
18.	Healthcare institutions without bed*	Rs. 1000/-
19.	Healthcare institutions with beds upto 50*	Rs. 3000/-
20.	Healthcare institutions with beds more than 50 and upto 100*	Rs. 5000/-
21.	Healthcare institutions above 100 beds and upto 200 beds*	Rs. 7500/-
22.	Healthcare institutions above 200 beds*	Rs. 10000/-

Note: The user fee is not applicable in case of adopting zero solid waste system, which should be verified by the competent person of the ULB.

\* Non-biomedical waste as defined vide Bio Medical Rules 2016. In case of Non-Segregation of waste properly, the ULB shall issue a notice to the healthcare facility with a copy to TSPCB requesting them to initiate appropriate action under the provisions of Bio-medical Rules 2016.

- 6.9 **Penalties:** The ULBs to issue a press notice prohibiting the open burning of waste on lands and at landfill site. Any person or body responsible for such burning shall liable to pay any person or body responsible for such burning, shall be liable to pay environmental compensation of Rs. 5,000/- (Five Thousand only) in case of simple burning, while Rs. 25,000/- (Twenty-Five Thousand only) in case of bulk waste burning. Environmental compensation shall be recovered as arrears of land revenue by the competent authority in accordance with law<sup>7</sup>. ULB shall encourage the citizens for bringing to the notice of the ULB in case of any one indulging in the open burning. The details of the penalties levied by the ULB shall be reported on monthly basis to the CDMA.

Whoever fails to intimate about organizing an event or gathering of more than 100 persons or fails to ensure segregate the waste at source and hand over to segregated waste to waste collector or agency specified by the ULB, shall be liable to pay the penalty of Rs. 5,000.00 plus double the clean-up cost as estimated by the competent authority of the ULB.

ULBs to develop a system for levying spot fine for persons who litters or fails to comply with the provisions of these rules. The model criteria for levying the fine is indicated below:

S.No.	Category	Fine / day
1.	Littering in the public place	Rs. 200/-
2.	Bulk waste generators (Rule 3 (8))	Rs. 1000/-
3.	Residential welfare and market association (Rule 4 (6))	Rs. 1000/-
4.	Gated communities and institution with 5000 Sq.m (Rule 4(7))	Rs. 2000/-
5.	Hotels and Restaurants (Rule 4(8))	Rs. 2000/-
6.	Healthcare establishments *	Rs. 2000/-

\*In case of mixing of Bio-medical waste with non-bio medical waste, the ULB shall issue a notice to the healthcare facility with a copy to TSPCB requesting them to initiate appropriate action under the provisions of Bio-medical Rules 2016.

The ULBs shall notify competent authority and develop transparent procedure for levying fines.

- 6.10 **Health and Safety:** Protecting health and safety of all the workers handling solid waste is to be given priority. ULBs shall ensure Personal Protective Equipment (PPE) including uniform, fluorescent jacket, hand gloves, rain coats appropriate foot wear and mask to all workers handling the solid waste and to ensure the same is being used by the workers.
- 6.11 **Special Permissions:** ULBs shall introduce an online permit system for organizing an event or gathering of more than 100 persons at any unlicensed place. The organizers shall submit solid waste management and area clean-up program after the event is over, atleast three working days in advance of the event.
- 6.12 **Encouraging Usage of Refused Derived Fuel (RDF):** The TSPCB shall inventorize the units using fuel and located within 100 Kms from solid waste-based RDF plants and to ensure to replace at least 5% of their fuel requirement with RDF. The progress shall be reviewed periodically in the State Level Advisory Board.
- 6.13 **Separate Restrictions for the Landfill Management:** All efforts shall be made to allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill. All efforts shall be made to restrict maximum quantity of 20% of the solid waste reaching the landfill.

<sup>7</sup> NGT Judgement Pronounced on: 22nd December, 2016

**6.14 Existing Unscientific Dump Sites:** ULBs to inventorize all the existing unscientific dumpsites and prepare plan of action for Bio-mining or Bio-remediation or scientifically capping as per the feasibility. The progress shall be reviewed periodically in the State Level Advisory Board. The state shall explore to establish a Bio-remediation fund.

**6.15 Awards:** To enhance the involvement of the stakeholders and to recognise the good performance, the Telangana state government proposes to introduce an annual award scheme in the following categories:

*At state level awards:* The CDMA shall develop key performance indicators and a scheme for recognising the best ULB separately for corporation and municipalities.

*At ULB level:* To recognise on-site solid waste treatment facility developed by Colony, Residential Welfare Association, institutions, Commercial Establishments, Hotels & Restaurants, Hospitals, Apartments, Gated Communities, IALAs and Educational Institutions, to encourage on-site segregation and disposal resulting into reduced quantity reaching the secured landfill site.

The above awards are intended to be given on 22nd April of every year (World Earth Day).

**6.16 Budgeting:** All the ULBs are required to make separate budgeting provisions under the head of "SWM" for capex and opex. The approved budgetary amount shall be exclusively used for the implementation of solid waste management.

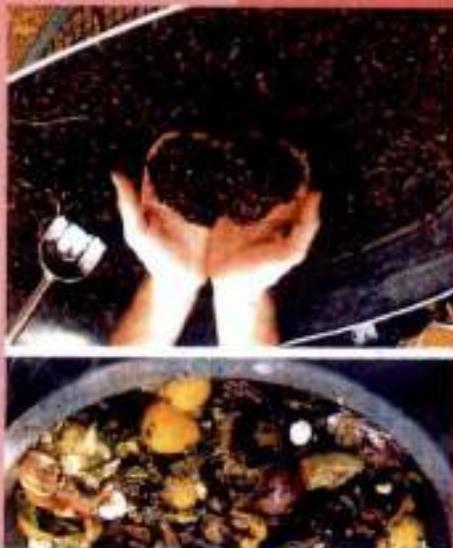
#### 6.17 Plastic Waste Management

- The TSPCB shall enforce the carry bag manufactured shall not be less than fifty microns in thickness.
- The ULBs shall enforce that retailers and street vendors shall not use any carry bags made of virgin or recycled plastic, having thickness less than 50 microns.
- The State Level Monitoring Committee (SLMC) under the chairmanship of Principal Secretary, Municipal Administration and Urban Development shall meet once in six months to review the implementation of the provisions of Plastic Waste Management Rules 2016. The Director of CDMA will be the conveyor for the committee.



The ULBs shall consider the  
residue dry mass, nitrogen, fuel  
and power generated from the bio  
converting material to support  
the sustainability of the system.  
The revenue generated from the  
sale of products shall be applied to  
CDMA on monthly basis for  
financing before the state advisory  
board.

# PRICING PRINCIPLE FROM THE WEALTH GENERATED WASTE 7.0





# 8.0 TECHNOLOGY OPTIONS FOR PROCESSING AND TREATMENT OF SOLID WASTE<sup>4</sup>

The selection and adoption of MSW processing technologies should be based on defined selection criteria and be subject to a detailed due diligence study, which ascertains the appropriateness of the technology to the prevailing conditions of the respective ULB.

The organic waste is usually composted aerobically to produce manure or processed anaerobically (in absence of air) for production of energy. Recyclables are separated and sent to wholesalers for further supply to recycling facilities. Few technology options for processing and treatment of solid waste is as given below:

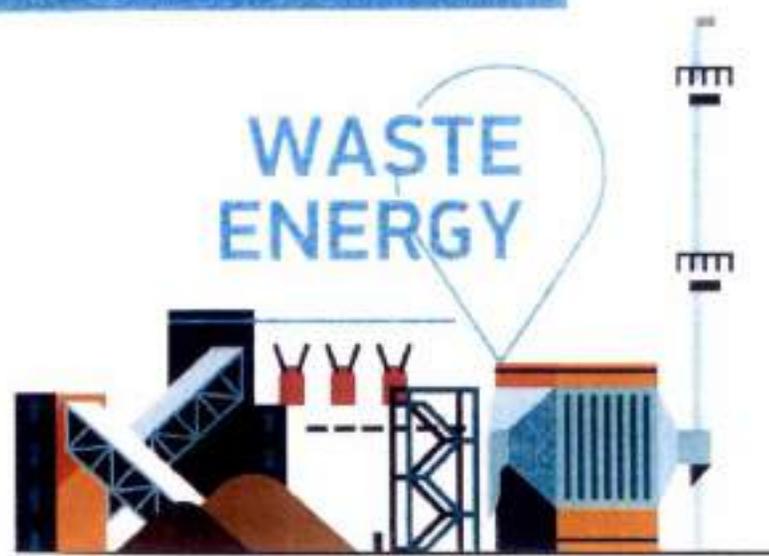
- Composting
- Bio-methanation
- RDF
- Material Recovery Facility
- Waste to energy
- Integrated facility such as Material Recovery Facility + Composting/Bio-methanation/ Waste to Energy

S.No	Population	Waste Generation	Technology Options
1.	Above 2 Million	> 500 TPD	<p>WtE comprising- BM + CC+ RDF;</p> <p>WtE for plant for power, where waste exceed 500 TPD based on gasification, pyrolysis, incineration and manufacturing;</p> <p>RDF to cement industry and</p> <p>Plant to fuel oil.</p>
2.	1.5M to 2.5M	300 - 500 TPD	<p>WRBM, CC + RDF as feed stock to power plant / cement industry.</p> <p>RDF to cement.</p>
3.	1 Lakh to 10 Lakh	100 - 300 TPD	<p>WtBM, CC + RDF as feed stock to cement plant / cement industry.</p> <p>Plant to fuel oil.</p>
4.	50,000 to 1 Lakh	50 - 100 TPD	Bbi, WtE, CC, RDF
5.	Less than 50,000	< 50 TPD	BM, VC / CC and RDF

Source: Report of the Task Force on Waste to Energy (Volume I), Planning Commission

## Key messages for decision-makers

Ensure that selected MSWM technologies fit to the local conditions. Check for successful and proven project references and experiences in other ULBs. Seek opinions of independent experts. Consult the State Pollution Control Board (SPCB) for validation of the proposed technology.





## 9.0 PRIVATE SECTOR ENGAGEMENT

**Possibility of funding:** The government to explore the possibility of funding from external funding agencies.

**Options of Public Private Partnership (PPP):** All efforts will be made to explore the possibility of projects being implemented with private capital by using various procurement models based on PPP.

**The models may be one or combination of following:**

- DBO
- DFBOT/BOT - Annuity
- Hybrid Annuity Model (HAM)

PPP model shall be finalized after adequate due diligence and detailed assessment.

## 10.0 GOVERNANCE ARRANGEMENT

**Advisory Board:** The State Level Advisory Board (SLAB) already constituted under the chairmanship of Principal Secretary, Municipal Administration and Urban Development shall review the progress made by the ULBs in the implementation of SWM Rules, 2016 and State Policy and Strategy. The SLAB shall meet at least once in six months and advise the state government for taking measures that are necessary for expeditious and appropriate implementation of these rules. The Director of Municipal Administration is the member/convener of the State Level Advisory Board.

**SWM Cell:** A separate unit with appropriate setup of staff headed by a Senior Level Officer shall be appointed for coordination and implementation of programmes and projects pertaining to Solid Waste Management. The cell shall support ULBs in the preparation of Detailed Project Reports (DPR) and Information Education and Communication (IEC) materials. The cell also develops management information system and update periodically to post in the CDMA website for public information.

## 11.0 TIMEFRAME FOR IMPLEMENTATION

The ULBs shall make all efforts to implement as per the following timelines:

SN	Activity	Timelines
1	Identification of suitable sites for setting up solid waste processing facilities	0 Months
2	Identification of suitable sites for setting up common regional sanitary landfill facilities for urban areas of least cumulative upto 0.5 million population and for setting up common regional sanitary landfill facilities or equivalent sanitary landfill facilities by all local authorities having a population of 0.5 million or more	5 Months
3	Identification of suitable sites for setting up solid waste processing facility and sanitary landfill facilities	3 Months
4	Encouraging waste generators to practice segregation of bio-degradable, recyclable, combustible, sanitary waste domestic hazardous and inert solid wastes at source	10 Months
5	Pushing door to door collection of segregated waste and its transportation in covered vehicles to processing or disposal facilities	6 Months
6	Improve separate storage, collection and transportation of construction and demolition wastes	0 Months
7	Setting up solid waste processing facilities by all local bodies having 100000 or more population	2022
8	Setting up solid waste processing facilities by local bodies and towns/towns below 100000 population	2022
9	Setting up common or inter-town sanitary landfills by or for all local bodies having 0.5 million or more population for the disposal of only such residual wastes from the processing facilities as well as unrecyclable inert wastes as permitted under the Rules	2022
10	Setting up common or regional sanitary landfill by all local bodies and towns/towns under 0.5 million population for the disposal of permitted waste under the rules	2022
11	Bio-remediation or composting of any abandoned dump sites	2022

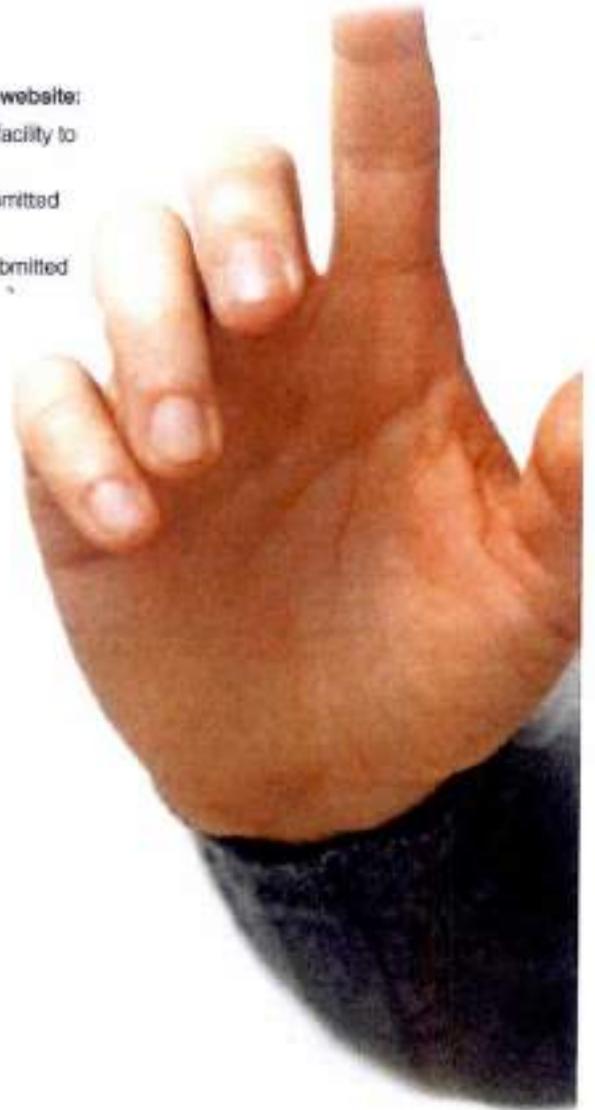
# 12.0 PUBLIC DISCLOSURE

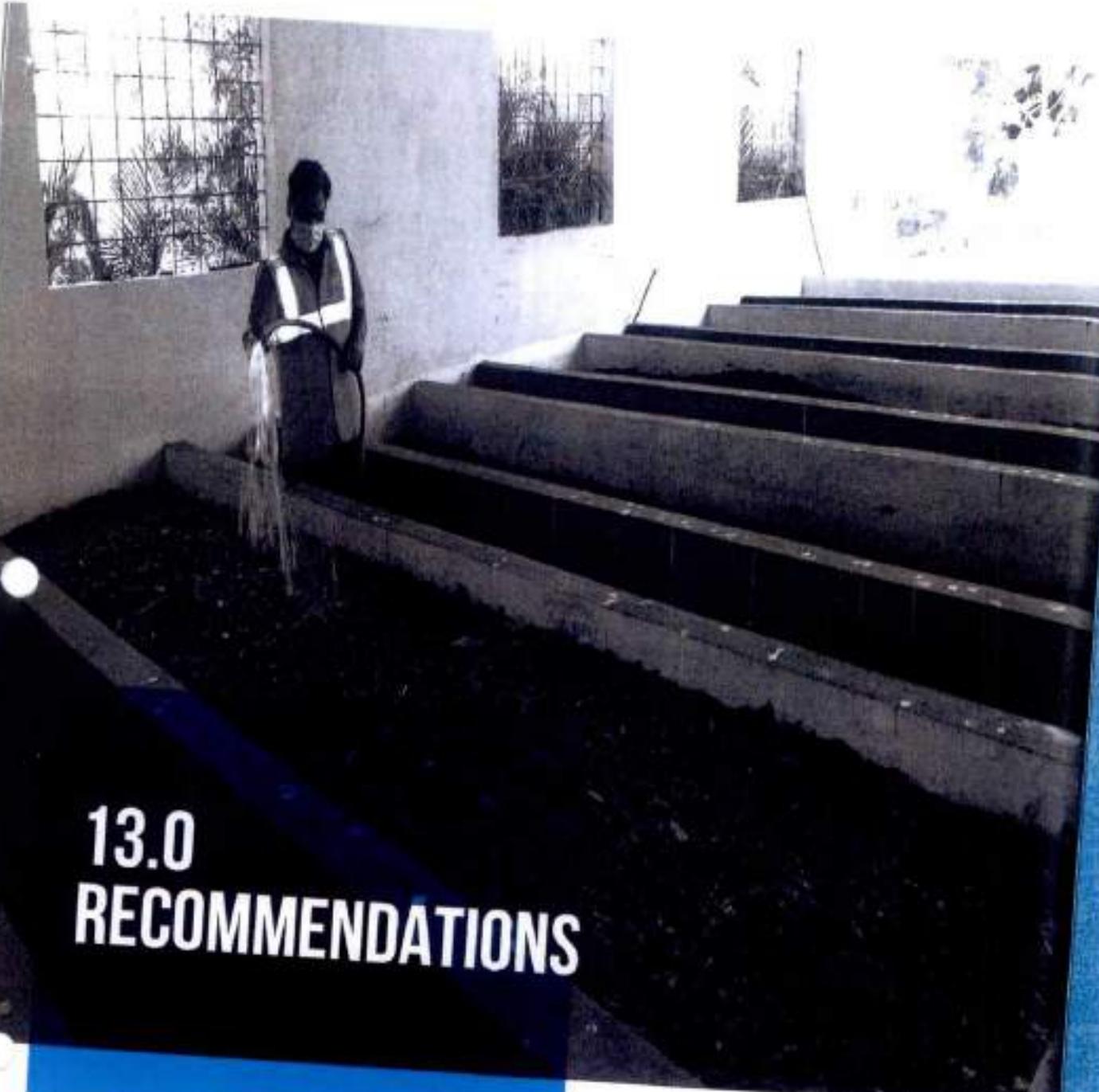
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Search

All the ULBs shall display the following information on the website:

- Form III - Annual report submitted by the operator of the facility to the ULB;
- Form IV - Annual report on Solid Waste Management submitted by the local body to the CDMA;
- Form V - Annual report on Plastic Waste Management submitted by the ULB to CDMA;
- Annual awards;
- User fee; and
- Penalties imposed





## 13.0 RECOMMENDATIONS

- Achieving paradigm shift from "Linear Approach" to "A Circular Economy Approach to Solid Waste Management";
- CDMA shall setup a separate cell for coordination and implementation of programmes and projects pertaining to Solid Waste Management;
- Achieving Service Level Benchmarking with time frame;
- To incorporate SWM in the by-laws, including "User charges" and "Penalties" in line with "Polluter pays" principle;
- To introduce "Recognition" and "Incentives" to encourage the compliance;
- State shall explore to establish a Bio-remediation fund;
- Pricing principle for the resource recovery / compost etc;
- To encourage PPP models in the SWM;
- To encourage the industry for CSR funding for the SWM

**MANDATORY  
SUBMISSION**

## ANNEXURE 1: FORM III

### FORMAT OF ANNUAL REPORT TO BE SUBMITTED BY THE OPERATOR OF FACILITY TO THE LOCAL BODY

S.No.	Details	
1.	Name of the City/Town and State	
2.	Population	
3.	Area in sq. kilometres	
4.	Name & Address of the local body	
	Telephone No.	
	Fax No.	
	E-mail	
5.	Name and address of operator of the facility	
6.	Name of officer in-charge of the facility	
	Phone No.	
	Fax No.	
	E-mail:	
7.	Number of households in the city/town	
	Number of non-residential premises in the city	
	Number of election/ administrative wards in the city/town	
8.	Quantity of Solid Waste	
	Estimated Quantity of solid waste generated in the local body area per day in metric tones	/pd
	Quantity of solid waste collected per day	/pd
	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	
	Quantity of solid waste disposed at landfill /pd	
9.	Status of Solid Waste Management (SWM) service	
	Segregation and storage of waste at source	
	Whether solid waste is stored at source in domestic/commercial/ institutional bins if yes	Yes/No
	Percentage of households practice storage of waste at source in domestic bins	%
	Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins	%
	Percentage of households dispose or throw solid waste on the streets	%
	Percentage of non-residential premises dispose or throw solidwaste on the streets	%
	Whether solid waste is stored at source in a segregated form	Yes/No
	If yes, Percentage of premises segregating the waste at source	%
	Door to Door Collection of solid waste	

S.No.	Details				
	Whether door to door collection (D2D) of solid waste is being done in the city/town				Yes/No
	If yes				
	Number of wards covered in D2D collection of waste				
	No. of households covered				
	No. of non-residential premises including commercial establishments, hotels, restaurants educational institutions / offices etc. covered				
	Percentage of residential and non-residential premises covered in door to door collection through:				
	Motorized vehicle				%
	Containerized tricycle/handcart				%
	Other device				%
	If not, method of primary collection adopted				
	Sweeping of streets				
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned				Km
	Frequency of street sweepings and percentage of population covered				
	Frequency	Daily	Alternate days	Twice a week	Occasionally
	Tools used				
	Manual sweeping				%
	Mechanical sweeping				%
	Whether long handle broom used by sanitation workers				Yes/No
	Whether each sanitation worker is given handcart/tricycle for collection of waste				Yes/No
	Whether handcart / tricycle is containerized				Yes/No
	Whether the collection tool synchronizes with collection / waste storage containers utilized				Yes/No
	Secondary Waste Storage facilities				No. Capacity in m <sup>3</sup>
	No. and type of waste storage depots in the city/town				
	Open waste storage sites				
	Masonry bins				
	Cement concrete cylinder bins				
	Dhaloo/covered rooms/space				
	Covered metal/plastic containers				
	Upto 1.1 m <sup>3</sup> bins				
	2 to 5 m <sup>3</sup> bins				
	Above 5m <sup>3</sup> containers				
	Bin-less city				
	Bin/ population ratio				
	Ward wise details of waste storage depots (attach):				
	Ward No:				
	Area:				
	Population:				

S.No.	Details		
	No. of bins placed		
	Total volume of bins placed		
	Total storage capacity of waste storage facilities in cubic meters		
	Total waste actually stored at the waste storage depots daily	Frequency	No. of bins
	Give frequency of collection of waste from the depots	Daily	
	Number of bins cleared	Alternate day	
		Twice a week	
		Once a week	
		Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes / No (if yes, add details)	
		No. of green bins:	
		No. of blue bins:	
		No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage	(%) of Manual Lifting of Solid Waste	%
		(%) of Mechanical lifting	%
	If mechanical - specify the method used	Front-end loaders/ Top loaders	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes / No (if yes, specify)	
	Waste Transportation per day	No. of trips made	
	Type and Number of vehicles used (pl tick or add)	Waste transported	
	Animal cart		
	Tractors		
	Non-tipping Truck		
	Tipping Truck		
	Dumper Placers		
	Refuse collectors		
	Compactors		
	Others		
	JCB / loader		
	Frequency of transportation of waste	Frequency	No. of bins
		Daily	
		Alternate day	
		Twice a week	
		Once a week	
		Occasionally	
	Quantity of waste transported each day	/tpd	
	Percentage of total waste transported daily	%	
	Waste Treatment Technologies used		
	Whether solid waste is processed	Yes/No	
	If yes, Quantity of waste processed daily	/tpd	
	Land(s) available with the local body for waste processing (in Hectares)		

S.No.	Details	
	Land currently utilized for waste processing	
	Solid waste processing facilities in operation	
	Solid waste processing facilities under construction	
	Distance of processing facilities from city/town	
	Details of technologies adopted	
	Composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Waste to Energy technology such as incineration, gasification, pyrolysis or anyother technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Co-processing	Qty. raw material processed
	Co-processing	Qty. raw material processed
	Combustible waste supplied to solid waste based power plants	
	Others	Qty
	Solid waste disposal facilities	
	No. of dumpsites sites available with the local body	
	No. of sanitary landfill sites available with the local body	
	Area of each such sites available for waste disposal	
	Area of land currently used for waste disposal	
	Distance of dumpsite/landfill facility from city/town	Kms
	Distance from the nearest habitation	Kms
	Distance from water body	Kms
	Distance from state/national highway	Kms
	Distance from Airport	Kms
	Distance from important religious places or historical monument	Kms
	Whether it falls in flood prone area	Yes/No
	Whether it falls in earthquake fault line area	Yes/No

S.No.	Details	
	Quantity of waste landfilled each day	tpd
	Whether landfill site is fenced	Yes / No
	Whether Lighting facility is available on site	Yes / No
	Whether Weigh bridge facility available	Yes / No
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compactors etc. available
	Manpower deployed at landfill site	Yes/No (if yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes / No
	Provisions for gas venting provided	Yes/No, (if yes, attach technical data sheet)
	Provision for leachate collection	Yes/No, (if yes, attach technical data sheet)
10.	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No, (if yes, attach technical data sheet)
11.	What separate provisions are made for:	Attach details on Proposals, Steps taken
	Dairy related activities:	Yes / No
	Slaughter houses waste:	Yes / No
	C&D waste (construction debris):	Yes / No
12.	Details of Post Closure Plan	Attach Plan
13.	How many slums are identified and whether these are provided with Solid Waste Management facilities:	Yes/ No (if Yes, attach details)
14.	Give details of manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
15.	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	
16.	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies.	

Dated:

Place:

Signature of Operator

## ANNEXURE 2: FORM IV

FORMAT FOR ANNUAL REPORT ON SOLID WASTE MANAGEMENT  
TO BE SUBMITTED BY THE LOCAL BODY

Calendar Year

Date of Submission of Report

S.No.	Details	
1.	Name of the City/Town and State	
2.	Population	
3.	Area in sq. kilometers	
4.	Name & Address of local body	
	Telephone No.	
	Fax No.	
	E-mail:	
5.	Name of officer in-charge dealing with solid waste management (SOLID WASTEM)	
	Phone No:	
	Fax No:	
	E-mail:	
6.	Number of households in the city/town:	
	Number of non-residential premises in the city:	
	Number of election/ administrative wards in the city/town:	
7.	Quantity of Solid waste (solid waste)	
	Estimated Quantity of solid waste generated in the local body area per day in metric tonnes	/tpd
	Quantity of solid waste collected per day	/tpd
	Per capita waste collected per day	/gm/day
	Quantity of solid waste processed	/tpd
	Quantity of solid waste disposed at dumpsite/ landfill	/tpd
8.	Status of Solid Waste Management service	
	Segregation and storage of waste at source	
	Whether SOLID WASTE is stored at source in domestic/ commercial/ institutional bins, if yes,	Yes/No
	Percentage of households practice storage of waste at source in domestic bins	%
	Percentage of non-residential premises practice storage of waste at source in commercial /institutional bins	%
	Percentage of households dispose or throw solid waste on the streets	%
	Percentage of non-residential premises dispose of throw solid waste on the streets	%

Sl. No.	Details	
	Whether solid waste is stored at source in a segregated form, if yes,	Yes/No
	Percentage of premises segregating the waste at source	%
	Door to Door Collection of solid waste	
	Whether door to door collection (D2D) of solid waste is being done in the city/town	Yes/No
	If yes	
	Number of wards covered in D2D collection of waste	
	No. of households covered	
	No. of non-residential premises including commercial establishments, hotels, restaurants educational institutions / offices etc. covered	
	Percentage of residential and non-residential premises covered in door to door collection through:	%
	Motorized vehicle	%
	Containerized tricycle/handcart	%
	Other device	
	If not, method of primary collection adopted	
	Sweeping of streets	
	Length of roads, streets, lanes, bye-lanes in the city that need to be cleaned	Km
	Frequency of street sweepings and percentage of population covered	
	Frequency	Daily                      Alternate days                      Occasionally
	Tools used	
	Manual sweeping	%
	Mechanical sweeping	%
	Whether long handle broom used by sanitation workers	Yes/No
	Whether each sanitation worker is given handcart/ tricycle for collection of waste	Yes/No
	Whether handcart / tricycle is containerized	Yes/No
	Whether the collection tool synchronizes with collection/ waste storage containers utilized	Yes/No
	Secondary Waste Storage facilities	
	No. and type of waste storage depots in the city/town	No. Capacity in m <sup>3</sup>
	Open waste storage sites	
	Masonry bins	
	Cement concrete cylinder bins	
	Dhalao/covered rooms/space	
	Covered metal/plastic containers	
	Upto 1.1 m <sup>3</sup> bins	
	2 to 5 m <sup>3</sup> bins	
	Above 5m <sup>3</sup> containers	
	Bin-less city	
	Bin/population ratio	
	Ward wise details of waste storage depots (attach):	

S.No.	Details		
	Ward No:		
	Area:		
	Population:		
	No. of bins placed		
	Total volume of bins placed		
	Total storage capacity of waste storage facilities in cubic meters		
	Total waste actually stored at the waste storage depots daily		
	Give frequency of collection of waste from the depots	Frequency	No. of bins
		Daily	
		Alternate day	
		Twice a week	
		Once a week	
		Occasionally	
	Whether storage depots have facility for storage of segregated waste in green, blue and black bins	Yes / No.	
		(if yes, add details)	
		No. of green bins:	
		No. of blue bins:	
		No. of black bins:	
	Whether lifting of solid waste from storage depots is manual or mechanical. Give percentage		
	(%) of Manual Lifting of solid waste	%	
	(%) of Mechanical lifting	%	
	If mechanical - specify the method used	Front-end loaders/ Top loaders	
	Whether solid waste is lifted from door to door and transported to treatment plant directly in a segregated form	Yes/ No	
		(if yes, specify)	
	Waste transportation per day		
	Type and Number of vehicles used	No. Trip made	Waste transported
	Animal cart		
	Tractors		
	Non-tipping Truck		
	Tipping Truck		
	Dumper Placers		
	Refuse collectors		
	Compactors		
	Others		
	JCB/loader		
	Frequency of transportation of waste	Frequency	(%) of waste transported
		Daily	
		Alternate day	
		Twice a week	
		Once a week	
		Occasionally	

S. No.	Details	
	Quantity of waste transported each day	/tpd
	Percentage of total waste transported daily	%
	Waste Treatment Technologies used	
	Whether solid waste is processed	Yes/No
	If yes, Quantity of waste processed daily	%
	Whether treatment is done by local body or through an agency	
	Land(s) available with the local body for waste processing (in Hectares)	
	Land currently utilized for waste processing	
	Solid waste processing facilities in operation	
	Solid waste processing facilities under construction	
	Distance of processing facilities from city/town	
	Details of technologies adopted	
	Composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Vermi composting	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Bio-methanation	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Refuse Derived Fuel	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Waste to Energy technology such as incineration, gasification, pyrolysis or any other technology (give detail)	Qty. raw material processed Qty. final product produced Qty. sold Quantity of residual waste landfilled
	Co-processing	Qty. raw material processed
	Combustible waste supplied to solid waste based power plants	
	Others	Qty
	Solid waste disposal facilities	
	No. of dumpsites sites available within the local body	
	No. of sanitary landfill sites available within the local body	
	Area of each such sites available for waste disposal	
	Area of land currently used for waste disposal	
	Distance of dumpsite/landfill facility from city/town	Kms
	Distance from the nearest habitation	Kms
	Distance from water body	Kms

S.No.	Details	
	Distance from state/national highway	Kms
	Distance from Airport	Kms
	Distance from important religious places or historical monument	Kms
	Whether it falls in flood prone area	Yes/no
	Whether it falls in earthquake fault line area	Yes/no
	Quantity of waste landfilled each day	tpd
	Whether landfill site is fenced	Yes/no
	Whether Lighting facility is available on site	Yes/no
	Whether Weigh bridge facility available	Yes/no
	Vehicles and equipments used at landfill (specify)	Bulldozer, Compactors etc. available
	Manpower deployed at landfill site	Yes/No (If yes, attach details)
	Whether covering is done on daily basis	Yes/No
	If not, Frequency of covering the waste deposited at the landfill	
	Cover material used	
	Whether adequate covering material is available	Yes/no
	Provisions for gas venting provided	Yes/No (If yes, attach technical data sheet)
	Provision for leachate collection	Yes/No (If yes, attach technical data sheet)
9.	Whether an Action Plan has been prepared for improving solid waste management practices in the city	Yes/No (If Yes attach Action Plan details)
10.	What separate provisions are made for:	Attach details on Proposals, Steps taken,
	Dairy related activities:	Yes/No
	Slaughter houses waste:	Yes/No
	C&D waste (construction debris):	Yes/No
11.	Details of Post Closure Plan	Attach Plan
12.	How many slums are identified and whether these are provided with Solid Waste Management facilities:	Yes/ No (If Yes, attach details)
13.	Give details of: Local body's own manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
14.	Give details of: Contractor/ concessionaire's manpower deployed for collection including street sweeping, secondary storage, transportation, processing and disposal of waste	
15.	Mention briefly, the difficulties being experienced by the local body in complying with provisions of these rules	
16.	Mention briefly, if any innovative idea is implemented to tackle a problem related to solid waste, which could be replicated by other local bodies	

Dated:

Place:

Signature of Operator

## ANNEXURE 3: FORM V

FORMAT OF ANNUAL REPORT TO BE SUBMITTED BY THE  
STATE POLLUTION CONTROL BOARD OR POLLUTION CONTROL COMMITTEE

### PART - A

To,

Telangana State Pollution Control Board

Hyderabad - Telangana

S.No	Details
1.	Name & address of the State Pollution Control
2.	Number of local bodies responsible for management of solid waste in the State/Union territory under these rules
3.	No. of authorisation application received
4.	A Summary Statement on progress made by local body in respect of solid waste management
5.	A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal
6.	A summary statement on progress made by local bodies in respect of implementation of Schedule II

Date:

Place:

Chairman /  
The Member Secretary

State Pollution Control Board /  
Pollution Control Committee

## PART - B

TOWNS/CITIES				
Total number of towns/cities				
Total number of ULBs				
Number of class I & class II cities/townsg				
AUTHORISATION STATUS (NAMES/NUMBER)				
Number of applications received				
Number of authorisations granted				
Authorisations under scrutiny				
SOLID WASTE GENERATION STATUS				
Solid waste generation in the state (TPD)				
collected				
treated				
landfilled				
COMPLIANCE TO SCHEDULE I OF SW RULES (NUMBER/NAMES OF TOWNS/CAPACITY)				
Good practices in cities/towns				
House-to-house collection				
Segregation				
Storage				
Covered transportation				
PROCESSING OF SW (NUMBER/NAMES OF TOWNS/CAPACITY)				
Solid Waste processing facilities setup:				
SN	Composting	Vermi-composting	Biogas	RDF/Pelletization
Processing facility operational:				
SN	Composting	Vermi-composting	Biogas	RDF/Pelletization

Processing facility under installation/planned:

SN	Composting	Vermi-composting	Biogas	RDF/Pelletization
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Waste-to-Energy Plants (Number/names of towns/capacity):

SN	Composting	Vermi-composting	Biogas	RDF/Pelletization
----	------------	------------------	--------	-------------------

Disposal of solid waste (number/names of towns/capacity)

- Landfill sites identified
- Landfill constructed
- Landfill under construction
- Landfill in operation
- Landfill exhausted
- Landfilled capped

Solid Waste Dumpsites (number/names of towns/capacity)

- Total number of existing dumpsites
- Dumpsites reclaimed/capped
- Dumpsites converted to sanitary landfill

Monitoring at Waste processing/Landfills sites

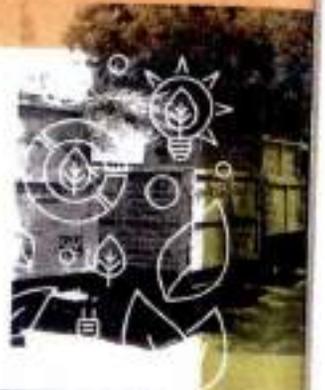
SN	Name of facilities	Ambient air	Groundwater	Leachate quality	Compost quality	VOCs
1.						
2.						
3.						

Monitoring at Waste processing/Landfills sites

Status of Action Plan prepared by Municipalities

- Total number of municipalities
- Number of Action Plan submitted





GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Department - Prohibition of open burning of Waste and Utilization of Refused Derived Fuel (RDF) as a fuel in Power Generation and Cement Plants - Orders - Issued.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (For.III) DEPARTMENT

G.O.Ms. No.27

Dated: 10 .07.2017.  
Read the following:-

1. Government of India, Ministry of Environment, Forest and Climate Change Notification No. S.O. 1357(E), dt. 08.04.2016 notifying the Solid Waste Management Rules, 2016.
2. G.O. Ms. 79, E.F.S. & T. (For.III), Dept., Dated 30.12.2016.
3. Orders of Hon'ble NGT, New Delhi, dt. 22.12.2016 in OA No. 199/2014 filed by Mrs. Almitra H. Patel.
4. From the MS, TSPCB, Hyderabad, letter No. TSPCB/MSW/U-IV/NGT-199/2016-3103, dt. 14.02.2017.

\*\*\*\*\*

ORDER:

In exercise of the powers conferred by sections 3,6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Municipal Solid Waste (Management & Handling) Rules, 2000, the Central Government notified Solid Waste Management Rules, 2016, under Environment (Protection) Act, 1986.

2. The Hon'ble National Green Tribunal, Principal Bench, New Delhi vide order dt. 22.12.2016 in OA No. 199 of 2014 filed by Mrs. Almitra H. Patel Vs. UOI & Ors. directed that:

- a. *The State Government and the local authorities shall issue directives to all concerned, making it mandatory for the power generation and cement plants within its jurisdiction to buy and use RDF as fuel in their respective plants, wherever such plant is located within a 100 km radius of the facility.*
- b. *The MoEF&CC, and the State Governments to consider and pass appropriate directions in relation to ban on short life PVC and chlorinated plastics as expeditiously as possible and, in any case, not later than six months from the date of pronouncement of this judgment.*
- c. *We specifically direct that there shall be complete prohibition on open burning of waste on lands, including at landfill sites. For each such incident or default, violators including the project proponent, concessionaire, ULB, any person or body responsible for such burning, shall be liable to pay environmental compensation of Rs.5,000/- (Rs. Five Thousand only) in case of simple burning, while Rs. 25,000/- (Rs. Twenty Five Thousand only) in case of bulk waste burning. Environmental compensation shall be recovered as arrears of land revenue by the competent authority in accordance with law."*

P.T.O

:2:

3. The Member Secretary, Telangana State Pollution Control Board has requested for orders accordingly, vide letter dated 14.2.2017 in the fourth read above.

4. Government, after careful consideration of the matter, and in exercise of the powers conferred under section 5 read with section 23 of the Environment (Protection) Act, 1986 read with sub Rule (3) of Rule 5 of the Environment (Protection) Rules, 1986 and in compliance of the judgment pronounced by the Hon'ble National Green Tribunal in Original application No.199 of 2014 hereby order that :

- A) The power generation plant and cement plants in Telangana State shall buy and use Refuse Derived Fuel (RDF) as fuel in their respective plants, wherever RDF plant is located within 100 km radius.
- B) There shall be complete prohibition on open burning of waste on lands, including at landfill sites for each such incident or default, violators including project proponent, concessionaire, Urban Local Bodies, any person or body responsible for such burning Environmental compensation shall be levied Rs.5,000/- (Rupees Five Thousand only) for simple burning and Rs.25,000/- (Rupees Twenty Five Thousand only) for bulk waste burning. The Environmental compensation will be recovered as arrears of land revenue by the competent authority.
  - I) the concerned Urban Local Body / Gram Panchayat is the competent authority for levy of environmental compensation for open waste burning done by public, concessionaire, project proponent (Private), communities etc.
  - II) the Telangana State Pollution Control Board is the competent authority for levying the environmental compensation for open waste burning done by Urban Local Bodies / Gram Panchayats.

5. The Environmental Compensation shall be utilized for creating awareness among general public on environmental issues and open burning of waste.

6. As per Rule 15 (v) (b), the Local Authorities and Village Panchayats of census towns and urban agglomeration shall establish waste to energy processes including Refused Derived Fuel (RDF) for combustible fraction of waste or supply as feed stock to solid waste based power plants to Thermal Power Plants & Cement Plants.

7. In case of Thermal Plants & Cement Plants are not existing within 100 km radius of local bodies / RDF plants, the concerned Urban Local Bodies /Refused Derived Fuel (RDF) plant shall bear the transport cost for transporting Refused Derived Fuel to the nearby Thermal Plants & Cement Plants.

Contd..page 3.

:3:

8. These orders shall come into force with immediate effect.
9. Copy of this order is available on Internet and can be accessed at [www.goir.telangana.gov.in](http://www.goir.telangana.gov.in).

( BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

Dr. RAJAT KUMAR  
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Commissioner, Printing & Stationery, Chanchalguda.(for notification of the above G.O. in the Extraordinary Issue of State Gazette.)  
All District Collectors in the State.  
The Municipal Administration & Urban Development Department,  
Telangana Secretariat, Hyderabad.  
The Commissioner and Director, Municipal Administration Deptt., Govt. of  
Telangana, Hyderabad.  
The Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad.  
The Panchayat Raj and Rural Development Department,  
Telangana Secretariat, Hyderabad.  
The Commissioner, Panchayat Raj & Rural Development Department,  
Hyderabad.  
The Industries & Commerce Department, Telangana Secretariat, Hyderabad.  
The Revenue (Endowment) Department, Telangana Secretariat, Hyderabad.  
The Food & Civil Supplies Department, Telangana Secretariat, Hyderabad.  
The Animal Husbandry, Dairy Development & Fisheries Department,  
Telangana Secretariat, Hyderabad.  
The Information & Technology Communication Department, Telangana  
Secretariat, Hyderabad.  
The Commissioner, Endowment Department, Telangana Secretariat, Hyd.  
The Director General of Police, Hyderabad.  
The Commissioner, Hyderabad Metropolitan Development Authority,  
Hyderabad.  
The Member Secretary, Telangana State Pollution Control Board, Hyderabad.  
Copy to:  
The Secretary to Chief Minister (SS)  
The P.S. to Minister (EFS&T).  
The P.S. to Chief Secretary.  
The Law (c ) Department, T.S. Secretariat, Hyderabad.  
S/F & S/C.

// FORWARDED :: BY ORDER//

SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

MA & UD Deptt - National Green Tribunal, New Delhi - Orders dated 16.01.2019 in OA No 606/2018 - Constituting Special Task Force in the districts to oversee the implementation of Solid Waste Management Rules, 2016 - Orders - Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (T.P.&E.2) DEPARTMENT

G.O.Rt.No.223,

Dated: 11.03.2019

Read:-

M.S, TSPSCB, Hyderabad Letter No. 25/NGT-New Delhi/TSPSCB/Legal/2018-1007, Dated 14.02.2019.

ORDER:-

In the Orders dated 16.01.2019 in OA No 606/2018, the Hon'ble NGT, New Delhi has proposed for the constitution of a Special Task Force (STF) in every District having 3 members one each nominated by District Magistrate, Superintendent of Police, Regional Officer of the State Pollution Control Boards in concerned Districts and one person to be nominated by the Chairman of the District Legal Services Authority (DLSA) for awareness about the SWM Rules, 2016 by involving educational, religious and social organization including local Eco-clubs. The involvement of DLSA would be subject to the approval of the National Legal Services Authority (NLSA) which is the apex body under the Legal Services Authorities Act, 1987 by an appropriate administrative order.

2. In reference read above, the Member Secretary, Telangana State Pollution Control Board, Hyderabad. has requested the Government to constitute the Special Task Force (STF) in the Districts.

3. After careful examination, Government hereby constitute the Special Task Force (STF) in the Districts, with the following members:

- a) District Collector
- b) Superintendent of Police.
- c) Regional Officer, TSPCB and
- d) One person to be nominated by the Chairperson, District Legal Services Authority (DLSA) for awareness about the SWM Rules, 2016 by involving educational, religious and social organizations including local Eco-clubs. The involvement of DLSA would be subject to the approval of the National Legal Services Authority (NLSA).

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

ARVIND KUMAR  
 PRINCIPAL SECRETARY TO GOVERNMENT

To,

All the Collectors & District Magistrate in Telangana State.

All the Superintendent of Police in Telangana State.

All the District Judge /Chairman of Legal Services Authority in the Telangana State.

All the Regional Officers of the TSPCB ~~through~~ the Member Secretary, Telangana State Pollution Control Board, Hyderabad.

The Member Secretary, Telangana State Pollution Control Board, Hyderabad.

The Chief Secretary, Government of Telangana

The EFS & T Department.

The D.G, EPTRI, Hyderabad

The Director of Municipal Administration, Hyderabad

The Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad

The Managing Director, Hyderabad Metropolitan Water Supply and Sewerage Board, Hyderabad.

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-2-

The Engineer-in-Chief, Public Health, Department.  
The PR & RD Department, Telangana Secretariat,  
The Medical Health & Family Welfare Department, Telangana Secretariat

Copy to:-

The P.S to Principal Secretary, MA&UD Department  
Sf/Sc.

//FORWARDED BY ORDER//

*Handwritten signature*  
SECTION OFFICER

Sl.No	Name of the District	Name of the Mandal	Name of the Villages (GP)
1	2	3	4
1	Adilabad	Boath	Patnapoor
		Adilabad	Kachkanti
		Adilabad	Wanwaat
2	Kumaram Bheem (Asifabad)	Dahegoan	Chinnaraspally
		Kagaznagar	Bodepally
		Penchikalpet	Bogudaguda
3	Nirmal	Dilwarpur	Narsapur
		Bhainsa	Dehagaon
		Nirmal	Yellapalli
4	Manchiryala	Dhonabanda	Hazipur
		Luxettipet	Thimmapur
		Bellampalli	Budhakurdh
5	Karimnagar	Kothapalli	Nagulamallial
		Karimnagar	Fakeerpet
		V-Saidapur	Duddenapalli
6	Jagityal	Kodimial	Himmathrao pet
		Medipalli	Kalvakota
		Velgatoor	Rajarampalli
7	Rajanna (Sirsila)	Thangallapalli	Jillella
		Boinapalli	Narsingapur
8	Peddapally	Dharmaram	Dharmaram
		Eligaid	Sultanpur
		Sultanabad	Suddala
9	Warangal (Urban)	Elkathurthy	Jagannadhapur
		Kamalapur	Kannur
		Velair	Kannaram
10	Warangal (Rural)	Atmakur	Oglapur
		Geesugonda	Mariyapuram
		Wardannapet	Kadarigudem
		Narsampet	Nagurlapalli
11	Jangaon	Zaffergadh	Zaffergadh
		Bachannapet	Bachannapet
		Ghanpur (Stn)	Ghanpur (Stn)

Sl.No	Name of the District	Name of the Mandal	Name of the Villages (GP)
1	2	3	4
12	Acharya Jaya Shanker (Bhoopal)	Mogullapalli	Rangapur
		Mahadevpur	Edapalli
		Chityal	Nawabpet
13	Mahabubabad	Mahabubabad	Madhavapuram
		Nellikuduru	Nellikuduru
		Peddavangara	Wade Kothapally
		Chinna Gudur	Chinna Gudur
14	Mulugu	Mulugu	Maliampalli
		Govindraopet	Pasara
		Mulugu	Jangalapalli
15	Khammam	Mudigonda	New Lakshmpuram
		Kallur	Kallur
		Nelakondapalli	Nelakondapalli
16	Badradri	Palvancha	Pandurangapuram
		Palvancha	Payakarū Yanambailu
		Burghampad	Nagineniprolu
		Burghampad	Laxmpuram
17	Nalgonda	Narketpally	Yellareddygudem
		Chityala	Veliminedu
		Nalgonda	Annaparthi
18	Suryapet	Kodad	Adlooru
		Huzurnagar	Lakkavaram
		Suryapet	Kesaram
19	Yadadri (Bongiri)	Bibinagar	Bibinagar
		Bommalararamaram	Naginenipally
		Mothkur	Dathapaguda
		Valigonda	Sunkishala
		Thurkapally	Rusthapur
20	Mahaboobnagar	Rajapur	Gundlapotlapally
		Addakal	Katavaram
21	Nagarkurnool	Thimmajipet	Koduparthi
		Kollapur	Machinenipally
		Nagarkurnool	Chandubatla

Sl.No	Name of the District	Name of the Mandal	Name of the Villages (GP)
1	2	3	4
22	Jogulamba (Gadwal)	Gadwal	Mellachervu
		Itikal	Kodandaour
		Alampur	Baswapur
23	Wanaparthy	Gopalpet	Thadiparthy
		Kothakota	Pamapur
		Peddmandadi	Chinnamandadi
24	Narayanpet	Narwa	Rampur
		Makthal	Mustipally
25	Rangareddy (Shamshabad)	Maheswaram	Manikyammaguda
		Farooqnagar	Gantlavelly
		Moinabad	Yenkepally
26	Medchal (Malkajiri) Hq. Keesara	Medchal	Somaram
		Keesara	Gogaram
		Peddapalli	Srirampur-Pandilla
27	Vikarabad	Tandur	Kanjapur
		Kulkacharla	Kulkacharla
		Vikarabad	Pathur
28	Sangareddy	Sangareddy	Ismailkhanpet
		Kandi	Cherlagudem
		Patancheru	Inole
29	Medak	Toopran	Malkapur
		Chegunta	Ibrahimpur
		Toopran	Konaipally(PB)
30	Siddipet	Siddipet Rural	Ibrahimpur
		Siddipet Rural	Raghavapur
		Siddipet Rural	Gurrallagondi
		Siddipet Urban	Irkode
31	Nizamabad	Armoor	Rampoor
		Jakranpally	Munipally
		Morthad	Thimmapur
32	Kamareddy	Rajampet	Shivaipally
		Yellareddy	Rudraram
		Bichkunda	Rajulla

GOVERNMENT OF TELANGANA  
ABSTRACT

Municipal Administration & Urban Development Department – Faecal Sludge and Septage Management for Urban Local Bodies and other Government Departments in Telangana-Approved- Orders – Issued.

MUNICIPAL ADMINISTRATION AND URBAN DEVELOPMENT (UBS) DEPARTMENT

G.O.Ms.No.176

Dated:29.08.2018

Read:

From the Director of Municipal Administration, Hyderabad Lr.Roc.No. 21959/2018-H2, dated: 21.6.2018.

<>0<>

ORDER:

In the reference read above, the Director of Municipal Administration, Hyderabad in consultation with the Administrative Staff College of India (ASCI), Hyderabad has prepared the "Policy on Faecal Sludge and Septage Management" applicable to all Urban Local Bodies and other Government Departments in the State and requested the Government to approve the same.

2. Government after careful examination of the proposal, hereby approves "Policy on Faecal Sludge and Septage Management" Policy for Urban Local Bodies and other Government Departments in Telangana as annexed to this order.
3. The Director of Municipal Administration, Hyderabad shall take necessary further action accordingly in the matter.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

ARVIND KUMAR  
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Director of Municipal Administration, Telangana, Hyderabad (w.e.)

The Vice Chairman & Managing Director, TUFIDC, Hyderabad (w.e.)

The Commissioner, GHMC, Hyderabad (w.e.)

The Managing Director, HMWSSB, Hyderabad (w.e.)

The Member Secretary, Pollution Control Board, Hyderabad (w.e.)

The Commissioner, PR&RD Department, Hyderabad (w.e.)

All the Collectors & District Magistrates through DMA, Hyderabad(w.e.).

The Engineer-in-Chief (PH), Hyderabad (w.e.)

The Director of Town and Country Planning, Hyderabad (w.e.).

All the Urban Local Bodies through DMA, Hyderabad (w.e.)

Copy to:

The OSD to Hon'ble M(MA&UD) (w.e)

The Principal Secretary to Government, EFS&T Department (w.e.)

The Principal Secretary to Government, Industries & Commerce Department(w.e.)

The Principal Secretary to Government, PR&RD Department (w.e.)

Principal Secretary to Government, MA&UD Department (w.e.)

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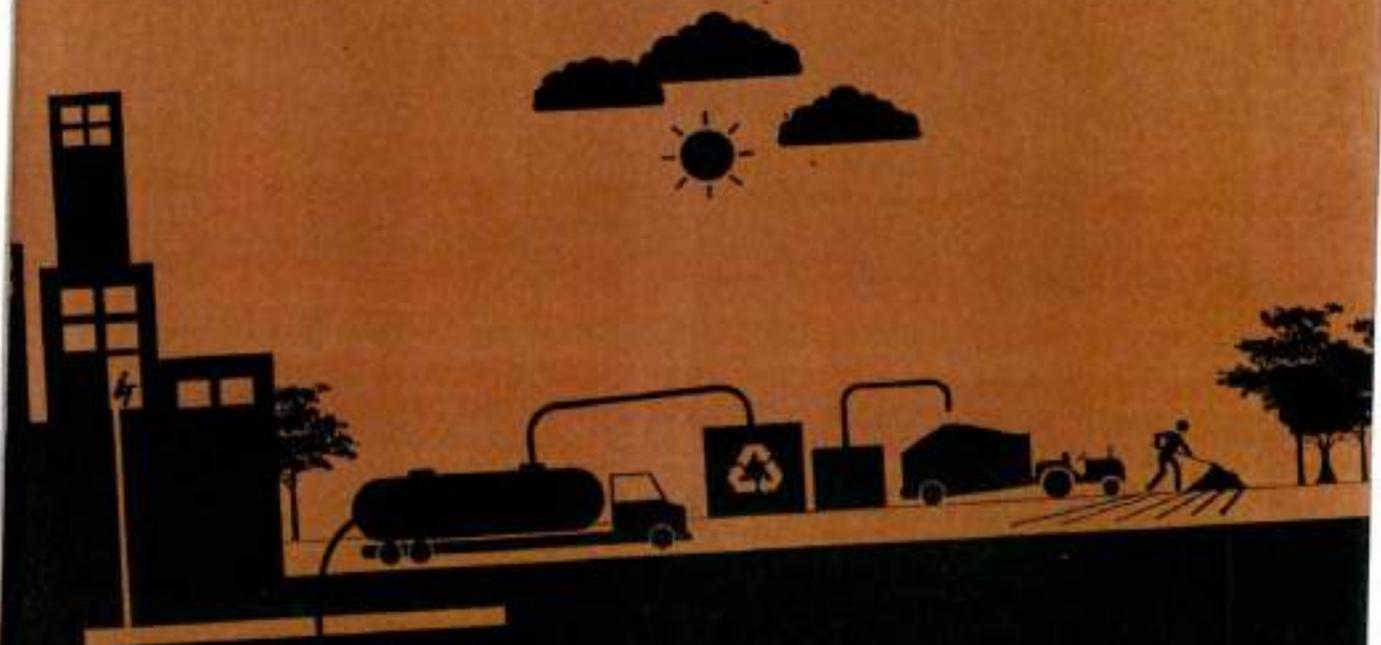
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29/8/18  
ASSISTANT DIRECTOR

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POLICY ON  
**FAECAL SLUDGE &  
SEPTAGE  
MANAGEMENT**



Government of Telangana  
September 2018



**Shri K. T. Rama Rao**  
Honble Minister for IT, MA & UD,  
Industries & Commerce, Public Enterprises,  
Mines & Geology, NRI Affairs,  
Government of Telangana

## MESSAGE

Government of Telangana, the youngest state in the country, has launched Swachh Telangana Mission and has successfully provided access to Individual Household Latrines (IHL), public toilets and community toilets to make all 74 Urban Local Bodies (ULBs) Open Defecation Free (ODF). Recognising the challenges experienced by women in the usage of toilets, we are the first state to issue a direction on exclusive toilets for women (SHE Toilets).

Sanitation is more than just building toilets. It is a system that addresses human waste from generation to its treatment, for reuse or safe disposal. Urban areas in Telangana, as in any state in India, are facing the burden of indiscriminate disposal of untreated septage (faecal sludge evacuated from pit latrines and septic tank periodically) by unregulated private operators causing unprecedented degradation of environment and harm to public health. Usage of toilets coupled with safe management of faecal sludge and septage is critical for better sanitation outcomes and building liveable cities.

To achieve the vision of Swachh Telangana, we now envision that all ULBs would achieve coveted 'ODF Plus' status through safe management of faecal sludge and septage. This policy on Faecal Sludge and Septage Management (FSSM) is introduced to regulate provision of toilets, safe collection, treatment and disposal/reuse of faecal waste in urban areas of Telangana. The policy promotes innovations and disruptive solutions in the sanitation sector. Decentralized Non-Sewer Sanitation (NSS) and faecal sludge and septage management is a move in this direction. The policy also nudges and incentivises ULBs to comply with The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act (2013).

With the support of Administrative Staff College of India (ASCI) and Bill & Melinda Gates Foundation, a state-of-the-art Faecal Sludge Treatment Plant (FSTP) is established in the city of Warangal. Efforts in mission mode are underway to establish FSTPs in all ULBs in the immediate future.

We thank our knowledge partner, ASCI, for assisting the government in developing this policy and extending handholding and capacity-building support to ULBs in FSSM.

I request Mayor/Chairpersons and Municipal Commissioners to operationalise this policy in letter and spirit.



**Shri Arvind Kumar, IAS**  
Principal Secretary,  
Municipal Administration & Urban Development,  
Government of Telangana

## MESSAGE

Safe and inclusive sanitation is a basic service for achieving improved public health outcomes and for making urban areas liveable and productive. Municipal Administration and Urban Development Department (MA&UD), Government of Telangana has prioritized sanitation and declared all urban areas Open Defecation Free (ODF) by universalising access and use of toilets.

Like in most urban areas in India, penetration of conventional sewerage infrastructure is limited to the urban areas of Telangana. It is now well-recognized that the conventional sewerage systems are capital intensive, requires large volume of water, are high on operation & maintenance and are prone to failure due to lack of skilled technical personnel in the ULBs. In view of this, MA&UD, Government of Telangana, is consciously promoting Non-Sewer Sanitation (NSS) to leap-frog the sanitation goals in ULBs.

This policy on Faecal Sludge and Septage Management (FSSM) is aimed at safe containment, collection, treatment and disposal of all human waste that is collected from NSS systems to achieve safe and sustainable sanitation for all. This policy will take urban areas to a next level in the sanitation service chain by helping them become 'ODF Plus'. The city of Warangal has taken a lead in achieving ODF Plus and has established a Faecal Sludge Treatment Plant (FSTP) using thermal technology. The Department of Town and Country Planning, Govt. of Telangana has integrated toilet design check in the IT enabled building plan approval system. Director of Municipal Administration, Govt. of Telangana, has drawn plans to scale up FSTPs in 72 ULBs under hybrid annuity model.

Telangana is now emerging as a Sanitation Innovation Hub for incubating new sanitation solutions. This hub will also help build municipal capacities for reinventing sanitation technologies and sustaining sanitation interventions. We are also promoting entrepreneurship in sanitation service delivery for employment generation and livelihoods.

We hope this policy will help in generating awareness and solutions for furthering the cause of FSSM and safe sanitation in urban areas in Telangana.

I would like to acknowledge Administrative Staff College of India, our key knowledge partner, for their unstinted support in drafting this policy and for building capacities of the ULBs. ASCI has been a great strength to our Department in sourcing and operationalizing new ideas.

I request all Municipal Functionaries particularly Municipal Commissioners, Sanitation and Health Officers to operationalize the policy in a time-bound manner and monitor performance.



Dr. T. K. Sreedevi, IAS  
Director of Municipal Administration,  
Government of Telangana

## MESSAGE

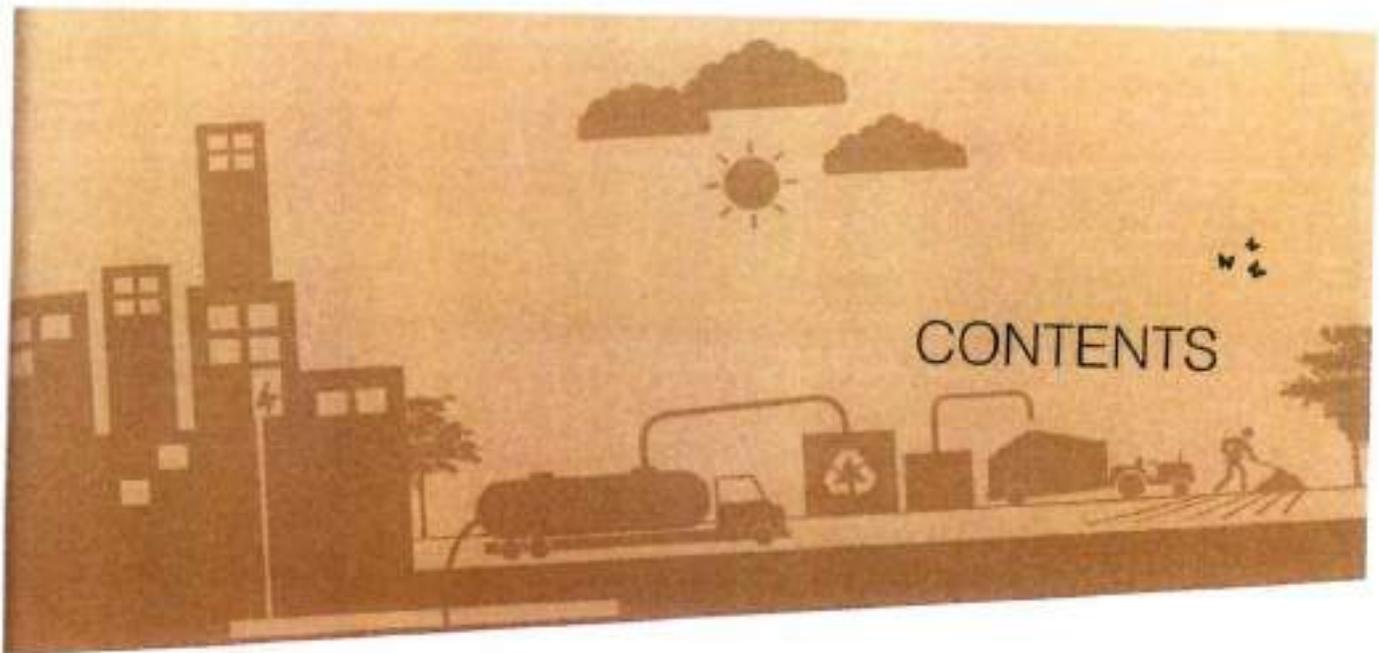
Sanitation is a critical determinant of human development. This is underscored by the Sustainable Development Goals and hitherto, by the Millennium Development Goals. The management of sanitation services involves going beyond building toilets, to taking a holistic approach focusing on each and every aspect of the sanitation value chain starting from the quality of containment systems, safe processes for emptying and transportation of waste and its safe treatment and reuse.

In line with Government of Telangana's vision of Swachh Telangana, all the Urban Local Bodies have ensured access to Individual Household Toilets as well as Public Toilets to achieve Open Defecation Free status. The ULBs are now geared up to achieve ODF Plus through safe management of faecal sludge and septage.

The challenges of ensuring safe sanitation are manifold and this policy on Faecal Sludge and Septage Management would guide the efforts of the ULBs. The policy highlights on the need to promote ingenious solutions towards bringing sanitation improvements along the value chain contributing to the achievement of health and environment outcomes in the cities and towns of Telangana. Decentralized Non-Sewer Sanitation(NSS) and Faecal Sludge and Septage Management is instrumental in achieving our goal of total sanitation. The policy identifies the key areas of focus and provides a step by step approach to be initiated towards achieving ODF Plus. It also identifies the areas for capacity building in the ULBs for ensuring appropriate delivery of the services to the citizens.

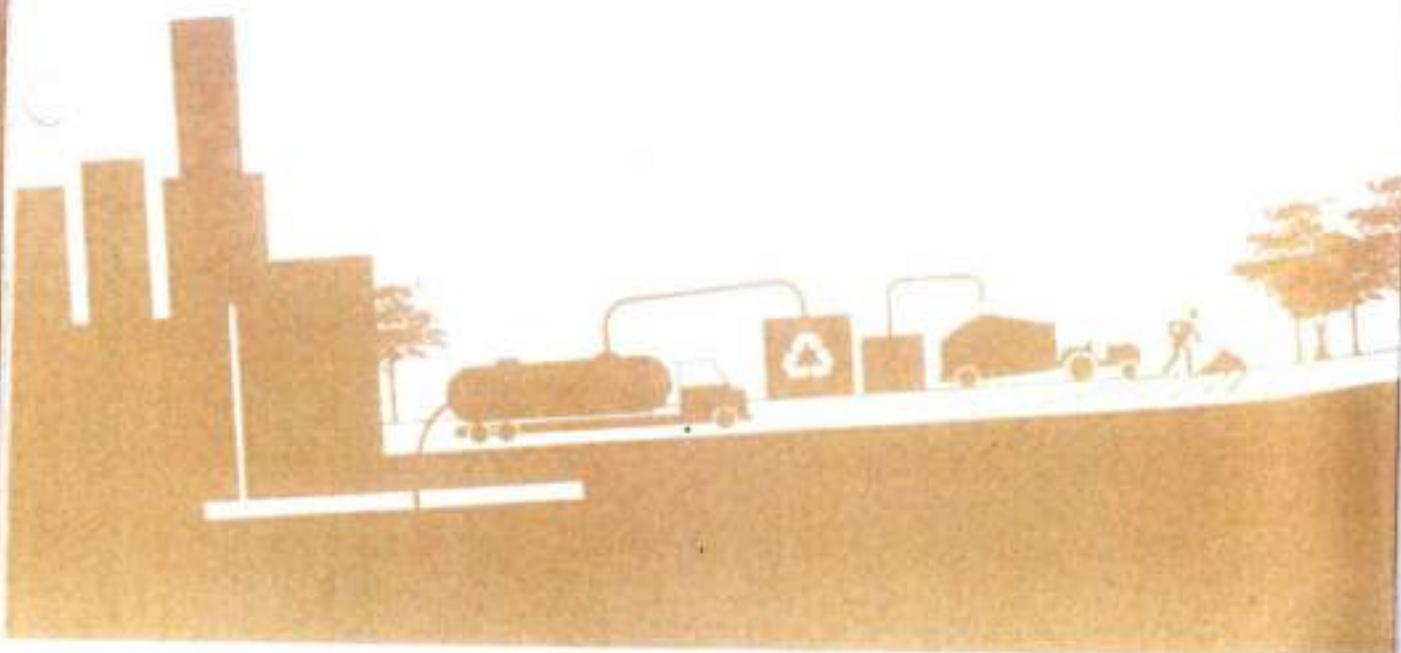
I urge all municipal functionaries particularly Municipal Commissioners, Sanitation and Health Officers to operationalize the policy in a time-bound manner and monitor performance.

I would like to thank the constructive support of each and every partner involved, especially Administrative Staff College of India, for their contribution in bringing out this policy document which would be one more stride in realizing the vision of a sustainable, environmental-friendly and livable Telangana.



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## ABBREVIATIONS

AMRUT	-	Atal Mission for Rejuvenation and Urban Transformation
BIS	-	Bureau of Indian Standards
CBO	-	Community Based Organisation
CDMA	-	Commissioner and Director of Municipal Administration
CDP	-	City Development Plan
CPCB	-	Central Pollution Control Board
CPHEED	-	Central Public Health and Environmental Organisation
CSE	-	Center for Science and Environment
CSP	-	City Sanitation Policy
CSR	-	Corporate Social Responsibility
CSTF	-	City Sanitation Task Force
FC	-	Finance Commission
FSSM	-	Faecal Sludge and Septage Management
FSTP	-	Faecal Sludge Treatment Plant
GHMC	-	Greater Hyderabad Municipal Corporation
HH	-	Household
IEC	-	Information, Education and Communication
IHHT	-	Individual Household Toilet
MA&UD	-	Municipal Administration and Urban Development
MIS	-	Management Information System
MoU	-	Memorandum of Understanding
MoUD	-	Ministry of Urban Development
NBC	-	National Building Code
NGO	-	Non-Government Organisation
NOC	-	No Objection Certificate
NUSP	-	National Urban Sanitation Policy
OSS	-	On site sanitation
SBM	-	Swachh Bharat Mission
STP	-	Sewage Treatment Plant
TSPCB	-	Telangana State Pollution Control Board
TURDC	-	Telangana Urban Finance and Infrastructure Development Corporation
UGD	-	Underground Drainage
ULB	-	Urban Local Body
WASH	-	Water, Sanitation and Hygiene

## GLOSSARY

**De-sludging:** The operation of removing sludge (and septage) from septic tanks, pit latrines or any other on-site treatment units is called de-sludging.

**Effluent:** The wastewater that flows out of a treatment system or supernatant liquid discharged from the septic tank.

**Faecal Sludge:** "Faecal Sludge" is raw or partially digested, in a slurry or semisolid form, the collection, storage or treatment of combinations of excreta and black water, with or without grey water. It is the solid or settled contents of pit latrines and septic tanks. The physical, chemical and biological qualities of faecal sludge are influenced by the duration of storage, temperature, soil condition, and intrusion of groundwater or surface water in septic tanks or pits, performance of septic tanks, and tank emptying technology and pattern.

Faecal sludge is the solid or settled contents of pit latrines and septic tanks. Faecal sludge (FS) comes from on-site sanitation systems. Examples of on-site technologies include pit latrines, non-sewered public ablution blocks, septic tanks, aqua privies, and dry toilets.

**Faecal Sludge Treatment Plants (FSTPs):** An independent septage and faecal sludge treatment facility for remedialing the solid and liquid components to prescribed standards for safe disposal and reuse.

**Grey Water or Sullage:** Domestic dirty water not containing human excreta. Sullage is also called grey water. It may be the waste water from house cleaning, kitchens and bathrooms.

**Pit Latrine:** Latrine with a pit for collection and decomposition of human excreta and from which liquid infiltrates into the surrounding soil.

**Pour-flush Latrine:** Latrine that depends for its operation of small quantities of water, poured from a container by hand, to flush away faeces from the point of defecation.

**Scum:** It is extraneous or impure matter like oil, hair, grease and other light material that floats at the surface of the liquid in the septic tank, while the digested sludge is stored at the bottom of the septic tank.

**Septage:** "Septage" is the liquid and solid material that is pumped from a septic tank, cesspool, or such on-site treatment facility after it has accumulated over a period of time. Usually, septic tank retains 60% - 70% of the solids, oil, and grease that enter it. The scum accumulates on the top and the sludge settles to the bottom comprising 20% - 50% of the total septic tank volume when pumped. Offensive odour and appearance are the most prominent characteristics of Septage. It is a host of many disease-causing organisms along with the contamination of significant level of grease, grit, hair, and debris. Septage is the combination of scum, sludge, and liquid that accumulates in septic tanks.

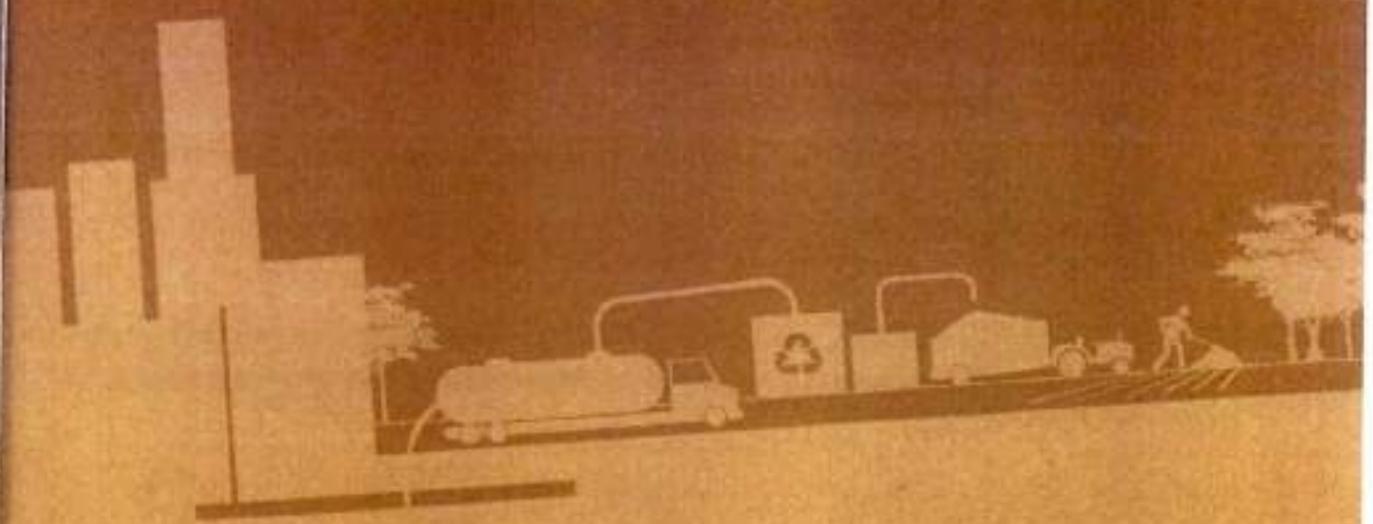
The accumulating sludge at the bottom of the septic tank however, has to be also removed and treated once it has reached the designed depth or at the end of the designed de-sludging frequency whichever occurs earlier. Such a removal is possible only by trucks. While sucking out the sludge, the liquid in the septic tank will also be sucked out. Such a mixture is referred to as septage.

**Septic Tank:** An underground tank that treats sewage by a combination of solids settling and anaerobic digestion. The effluents may be discharged into soak pits or small-bore sewers, and the solids have to be pumped out periodically.

**Sewage:** Sewage is defined as the wastewater containing human waste matter (faeces, urine etc), either dissolved or undissolved, discharged from toilets and other receptacles intended to receive or retain such human wastes. The effluent coming out of septic tanks or any such facility is also sewage.

**Sewerage System:** The underground conduit for the collection of sewage is called Sewer. A network of sewer appurtenances intended for the collection and conveyance of sewage generated from each of the properties to a sewage pumping station for pumping to sewage treatment plant for further treatment and disposal is called sewerage system.

# INTRODUCTION



## 1.1 WHAT IS FAECAL SLUDGE AND SEPTAGE MANAGEMENT?

Faecal Sludge and Septage Management (FSSM) is the process of safe collection, conveyance, treatment and disposal/reuse of faecal sludge and septage from on-site sanitation (OSS) systems such as pit latrines, septic tanks, etc., i.e. the management of the mixture of human waste (solid and liquid) that is not conveyed by a centralized sewerage system. A typical FSSM system involves mechanized de-sludging of a septic tank/pit latrine using a suction emptier machine, which then stores the collected waste in a sealed container and transports it to a treatment facility. In some cases, it is kept in a transfer station for temporary storage before being transported to a treatment facility by a different vehicle. At the treatment facility - either a dedicated Faecal Sludge Treatment Plant (FSTP) or co-treatment in Sewage Treatment Plant (STP) - the faecal sludge/septage undergoes pre-treatment, followed by primary and secondary treatment (even tertiary treatment and polishing). Some efficient treatment facilities also incorporate resource recovery (methane,

reuse of treated wastewater, manure/soil conditioner, etc.) in the treatment process. The final residual product from the treatment plant is either recycled/reused or disposed safely in the surrounding environment that would comply with all the pollution and quality standards.

There can be multiple deviations from this process at different stages of the sanitation value chain depending on site situation, techno-economic feasibility and capacities of the operators & regulators. Efficient FSSM operation entails streamlining all processes and components along the 'sanitation value chain for on-site sanitation systems' during planning, design, implementation, operation and monitoring.



CONTAINMENT > EMPTYING > TRANSPORT > TREATMENT > DISPOSAL OR REUSE

### FSSM SERVICE CHAIN

Successful FSSM operations need active coordination and participation among relevant stakeholders - State Government, Urban Local Bodies (ULBs), service providers, operators, residents/community groups, funding agencies, etc.

## 1.2 WHY FSSM?

Onsite Sanitation Systems (OSS) are the primary mode of sanitation system in India. Over 48 percent of urban households depend on onsite sanitation facilities (Census 2011) and this proportion is increasing, especially with the rapid pace of construction of individual and community toilets under SBM (Swachh Bharat Mission).

India's urban population of 377 million or 31 percent of the total population (as per Census 2011) is expected to increase to 600 million by 2031. Census 2011 also showed that in 4,041 statutory towns, 7.9 million households (HHs) do not have access to toilets and defecate in the open. Under the SBM, it is envisaged that nearly 80 percent of these 7.9 million HHs (i.e. nearly 6.3 million HHs) will meet their sanitation needs through newly-built individual household toilet (IHHT) and the remaining 20 percent (or nearly 1.6 million HHs) will rely on existing or newly-built community toilets.

Poor sanitation has significant health costs and untreated faecal sludge and septage from cities is the biggest source of water pollution in India. Human waste has clearly been identified as the leading polluter of water sources in India, causing a host of diseases including diarrhoea, agricultural contamination and environmental degradation. A collective need is felt for managing faecal sludge and septage from these OSS facilities through efficient, affordable and manageable FSSM services.

Accordingly, the Ministry of Housing and Urban Affairs (MoHUA), Government of India (GoI) formulated the National Urban Sanitation Policy (NUSP) in 2008 in order to provide urban Indians with clean, healthy, liveable, and sanitary community-driven cities and towns. A set of recommendations regarding septage (also known as faecal sludge) were included. The NUSP recommends septage to be collected, transported, and disposed off properly at well-maintained and purpose-built treatment facilities.

It also stipulates each State to formulate its own Sanitation Strategy & each city to develop a City Sanitation Plan (CSP) as a city level instrument for sanitation sector planning. The Telangana State Sanitation Strategy is a major fillip to guide the Municipal Administration & Urban Development (MA&UD) Department, GoT to prepare and operationalize CSPs as a supplementary tool to City Development Plans (CDPs) and Master Plans on Land Use. There are two major sources of standards and guidelines for septage management in India: The National Building Code, last revised in 2005 by the Bureau of Indian Standards (BIS), and The Manual on Sewerage and Sewage Treatment, prepared by the Central Public Health and Environmental Engineering Organization (CPHEEO) in 2012.

While the CPHEEO Manual assigned responsibility for checking sludge accumulation on a daily basis and determining emptying times to households, the CPHEEO Manual also recommended that state and municipal governments draw up action plans and implementation budgets for extracting, treating, and disposing of the sludge generated in on-site sanitation facilities in accordance with the "Septage Management Guidelines" (MOUD, 2013). Further, the MoUD in 2016 published a set of guidelines on FSSM which can provide further support to ULBs and has also advocated National Policy on Faecal Sludge and Septage Management in 2017.

# 1.3 BACKGROUND – SANITATION IN TELANGANA

The State of Telangana was formed on 2<sup>nd</sup> June, 2014, with the enactment of Andhra Pradesh Reorganization Act 2014, with Hyderabad as its capital. The state comprises of 31 districts, with an urban population of 13.72 million representing 36 percent of total population, as per 2011 Census. The newly formed state is experiencing rapid urbanization, growth and development. It is estimated that the current level of urbanization has reached 42 percent. Most of the net increase in the urban population is contributed by five districts of Hyderabad (100 percent), Rang Reddy (70.32 percent), Warangal (28.34 percent), Adilabad (27.66 percent) and Karimnagar (26.06 percent). The urban population of the state is spread across 74 ULBs, consisting of 6 Corporations and 68 Municipalities of all grades.

All the 74 ULBs are self-declared ODF, of which 58 ULBs are certified as ODF and the remaining 16 ULBs are in the process of receiving certification. Over 90 percent of urban HHs in Telangana have access to toilets and toilet facilities and the balance 10 percent of HHs is being provided through public and community toilets. Greater Hyderabad Municipal Corporation (GHMC), and 3 cities have partial Under Ground Drainage (UGD) facility. This amounts to 57.07 percent of Telangana's urban population being connected to Piped Sewerage network with GHMC itself accounting for 99 percent of the UGD coverage in the state. Lack of formal mechanism of sewage management is leading to disposal of sewage or faecal sludge into drains and open areas in and around the cities without any treatment in 74 ULBs of the state.

Lack of formal mechanism of sewage management is leading to unsafe emptying, indiscriminate disposal, and absence of treatment facilities. None of the 74 ULBs in the state have facilities to treat the faecal sludge generated. Currently the state has about 22 STPs. The ULB-wise capacities of existing STPs is given in the table overleaf.

TABLE 1: ULB-WISE CAPACITY OF STPs (2016)

Sl.No.	City/Town	STP Location	Status	Capacity(MLD)
1	Greater Hyderabad Municipal Corporation (GHMC)	Amberpet	Operational	339
2		Nagole		172
3		Saroonagar		2.5
4		Langar Houz		1.2
5		Safilguda		0.6
6		Mir Alam Tank		10
7		Pedda Cheruvu (Nacharam)		10
8		Durgam Cheruvu		5
9		Necklace Road (Khairatabad)		20
10		Nalla Cheruvu (Uppal)		30
11		Kattedan, (Noor Mohammad Kunta)		4
12		Kukatpally		12
13	Manchiryala Municipality	Reddy Colony	4	
14		Saikunta	2.5	
15	Ramagundam Municipality	Malkapur, Godavarikhani	14	
16		Ramagundam	4	
17	Miryalaguda	Miryalaguda (Thalagadda & Ramnagar Bandam)	$11.52+5.45 = 16.97$	
18	Karimnagar	Karimnagar	38	
19	Vikarabad	Vikarabad	13	
20	Siddipet	Siddipet	$7.25+11+0.8+(0.4*3) = 20.25$	
21	Nalgonda	Nalgonda	Under Const.	$17.16+2.55 = 19.71$
22	GHMC	Attapur, Hyderabad		51
<b>Total</b>				<b>789.73</b>

The containment facilities that are not connected to UGD need to be emptied periodically. When emptied, the refuse from these tanks, called "faecal sludge" and "septage," is usually thrown directly into the environment without any processing or treatment and is disposed directly into rivers or onto fields, often within municipal boundaries.

Source: Commissioner and Director of Municipal Administration, 2016

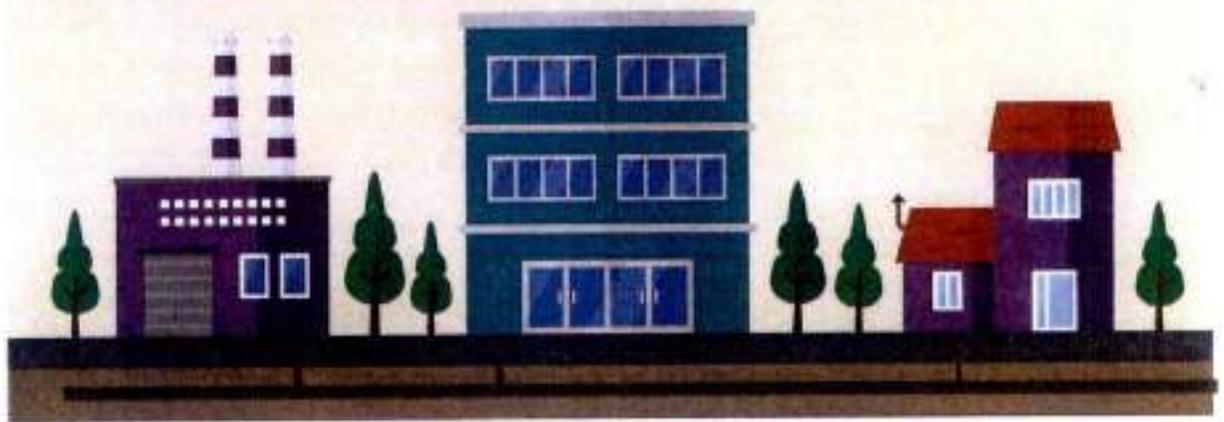
"Faecal Sludge" includes liquids, solids, as well as fats, oils and grease (scum) that accumulate in containment units over time, while "Septage" usually refers to the refuse of septic tanks in particular. As a variety of containment typologies exist in Telangana, these regulations will primarily refer to faecal sludge and septage, though the two terms are used here interchangeably. This refuse, called either faecal sludge or septage, is harmful and contains many pathogens which are hazardous to human health. The unregulated dumping of faecal sludge into the environment is an ongoing public health and environmental crisis in Telangana, as it is in the rest of the country.

A well-managed onsite sanitation system provides safe sanitation options at a much lower cost than a sewerage system. For a well-managed onsite sanitation system, the problem of faecal sludge and septage must be addressed in a holistic manner. FSSM includes the entire process of design, collection, safe treatment & disposal of faecal sludge/septage based on generation of waste. A comprehensive program that regulates periodic cleaning of on-site containment, as well as septage transport, treatment, reuse and disposal, is important in the context of our rapidly urbanizing state.

## 1.4 KEY SANITATION ISSUES AND CHALLENGES - TELANGANA

The trend and nature of urbanization in the state of Telangana leads to the following inferences:

- The urban growth is rapid as compared to other states and this will continue to place pressure on the sanitation infrastructure in the urban centers.
- Need for policy formulation for the rapidly urbanizing areas in the state.
- Urbanization has to be viewed differently in case of the State of Telangana given its diverse topography including Eastern Ghats and plateau areas that have varying environmental carrying capacity for the sanitation infrastructure and services.



Although Telangana is currently in the process of developing and extending underground sewerage systems, about 90% of the households in the urban areas of Telangana state have on-site sanitation systems. Almost 30.32% of them are connected to septic tanks, 3.45% to pit latrines while households having connection to the centralized sewer system are about 51.54%. Despite the large proportion of on-site installations, limited attention has been accorded to proper construction, maintenance management and safe disposal of septage from septic tanks and pit latrines.

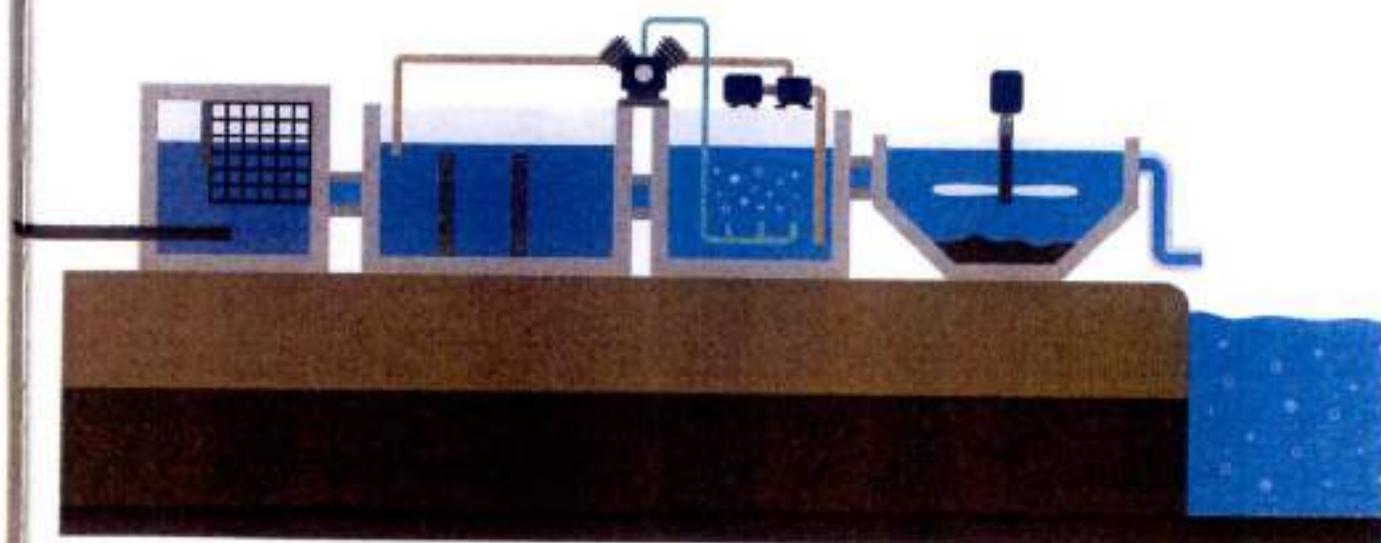
The installations are subject to local practices and considerable variations are observed. In ULBs septic tanks are often dramatically undersized, faultily designed and poorly constructed. Septic tanks are frequently installed underneath homes, driveways or sidewalks due to small lot sizes, thus making access for inspecting or de-sludging difficult. In many instances, systems referred to as "septic tanks" are not septic tanks at all but are instead just seepage pits or cesspools. These unlined, earthen receptacles not only do a very poor job at treating sewage, but also frequently serve as direct conduits to aquifers, resulting in faecal contamination that can impact precious drinking water supplies.

Limited capacities and resources with ULBs and absence of regulations on maintenance and cleaning of septic tanks and pits are a major challenge. In many instances, septage is dumped in drains and open areas posing considerable health and environmental risks. Sanitary workers also work in hazardous conditions manually cleaning on-site pits and tanks without adequate protective gear and equipment. The new legislation prohibits hazardous manual cleaning of septic tanks and sewers, so as to ensure that health and safety of sanitary workers is not compromised.

There is a general lack of awareness on septic tanks and how these should be

planned, designed, installed, operated and maintained, especially among the system owners and ULBs which results in pollution of the ground and surface water bodies, thus impacting public health. Across the world, governments are realizing that conventional sewerage systems, while advantageous in certain situations, are not a sanitation panacea as they require huge capital expenditures, consume significant amounts of water, need extensive operation and maintenance throughout their existence and high skill set at municipal level to maintain. As a result of these factors, FSSM is a necessary component of the efforts to ensure towns and cities of Telangana are clean and sanitary. These efforts will require developing detailed rules and regulations, refurbishing existing septic tanks and latrines and developing de-sludging, transportation and treatment infrastructure.

While municipalities plan for Faecal sludge treatment infrastructure, they shall pursue short-term incremental improvements simultaneously through operationalizing steps outlined in this document. These incremental improvements may be prioritized for the first year after these guidelines become operative, after which point focusing on longer-term solutions will take priority. This policy will regulate collection, treatment, and disposal of Faecal sludge and septage in urban areas in Telangana.



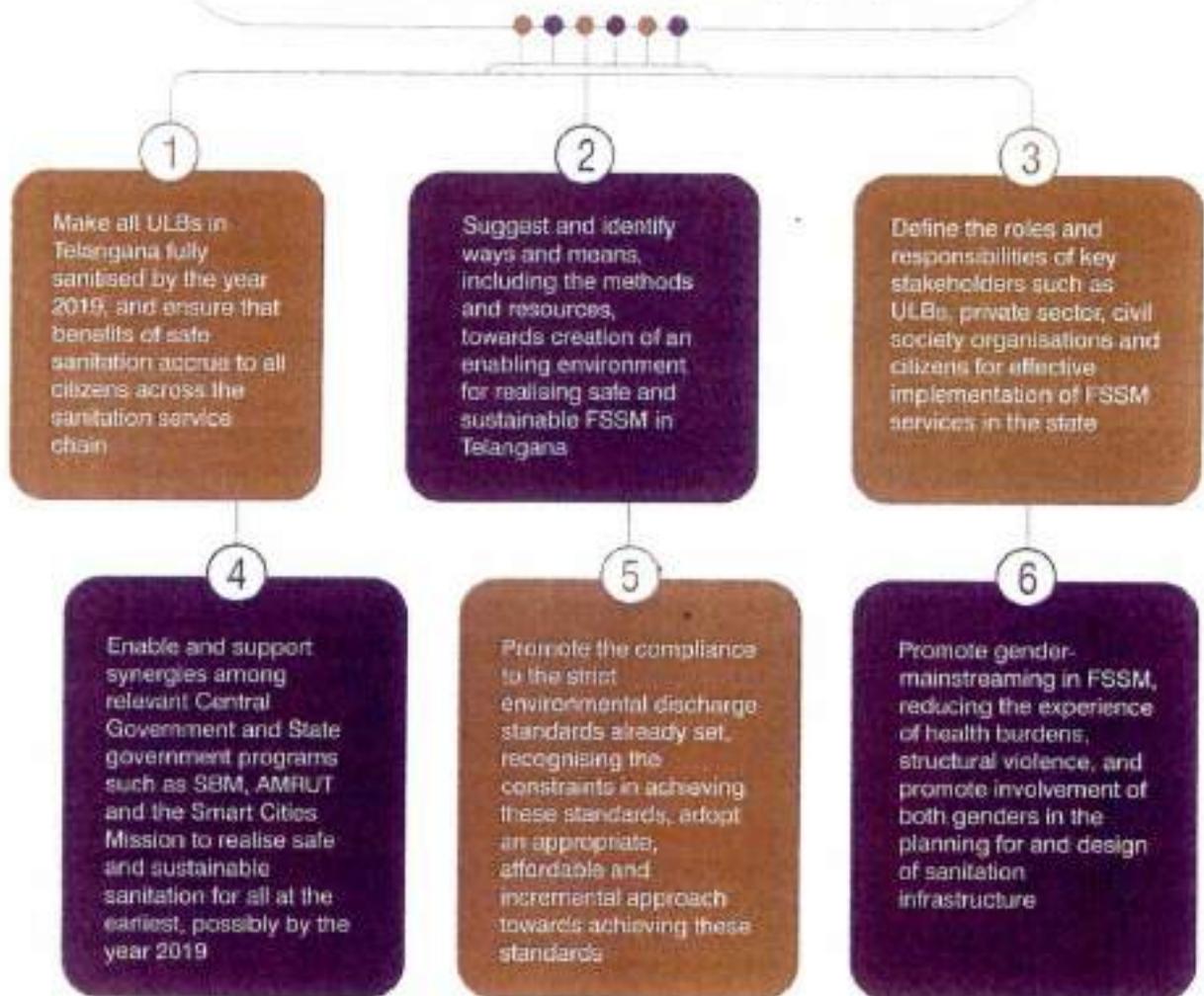


## VISION OF TELANGANA STATE SANITATION

"All cities and towns in Telangana to become totally clean, sanitized, healthy and liveable ensuring and sustaining good public health and environmental outcomes for all citizens, with a special focus on hygienic and affordable sanitation for the urban poor and women"

## 2.1 OBJECTIVES AND SCOPE OF THE POLICY

The key objective of this policy is to support ULBs in Telangana to implement FSSM plan in their ULBs and to achieve safe and sustainable sanitation. It sets the direction and priorities for citywise implementation of FSSM services in all ULBs. More specifically, the policy will:



The scope of this FSSM policy will cover onsite sanitation facilities and areas served by such facilities, while it will not cover network or conventional sewerage system (including treatment plants) of wastewater/ sewage management. However, the synergy between septage management and sewerage systems or Municipal Solid Waste (MSW) management, e.g., co-treatment of septage at sewage treatment plants or co-treatment and management of septage with municipal solid waste, is recognised, and these approaches will be encouraged. This policy addresses the entire service chain of transport, treatment and reuse or disposal of faecal sludge and septage.

## 2.2 APPLICABILITY OF THE POLICY

The policy shall be applicable (unless specified otherwise) to all schemes, programs, projects, plans, future policies. It shall be considered as a base for framing up different guidelines of Telangana government (relevant ministries, departments, agencies, authorities, Special Purpose Vehicles, etc.) and urban local bodies in Telangana with respect to initiatives such as urban development, urban sanitation services, tourism development, heritage conservation, housing projects, slum development, economic development, livelihood generation industrial/economic zones, etc. for urban areas (as defined by census – Statutory towns, Outgrowths and Census towns), peri-urban areas and places of pilgrims/historical/religious importance as notified by state government within Telangana.

The provisions shall also be applicable to approved schemes, activities, projects and initiatives by the private sector, including corporates, donor agencies, Non-Government Organizations (NGOs), non-profit

organisations, etc. as well as multilateral and bilateral organizations, within the state of Telangana.

The guidelines of faecal sludge and septage shall also be addressed in a holistic manner, with a strategy that provides for minimum needs and is appropriate and affordable for all areas and population considering the urban situation.

The policy would address the enabling provisions in the form of suitable regulation and institutional framework, capacity building, education and awareness among all stakeholders. It also seeks to address the efficiency of systems in place for on-site sanitation whereof the faecal sludge/septage output needs to be managed in an environmentally safe manner including proper engineering design, construction and maintenance of septic tanks, pit latrines and such other systems generating faecal sludge/septage.

## 2.3 EXPECTED OUTCOMES OF THE POLICY

This Policy will be implemented across the state. Some key projected outcomes are:

- Entire urban population will have access to and use safe and hygienic sanitation facilities and arrangements so that no one defecates in the open. Access to all households with safe sanitation facilities will include individual toilets, community toilets and even public toilets with proper disposal systems. Urban poor communities as well as other residents of informal settlements will be given priority.
- Containment of all human waste in 100% of the towns and cities with all the toilets having some means of safe disposal system (septic tanks connected with soak pit or settle sewer/lined drains or twin pits in case of onsite system).
- Safe and cost-effective solution for collection and conveyance of faecal sludge and septage to treatment sites through mechanised transportation system.
- Scheduled or regular emptying of septic tanks or other containment systems at an interval of 2-3 years as recommended by CPHEEO Manual, MoUD advisory on Septage Management (2013) and National FSSM Policy.
- Safe disposal of all collected faecal sludge and septage at designated sites (sewage treatment plants, faecal sludge treatment facilities for safe and scientific disposal, etc.) with appropriate use of cost-effective treatment technologies.
- Preventing contamination of water bodies and groundwater from human waste (faecal matter) in all the towns and cities across the state.
- Maximum reuse of treated sludge as fertilizer in farmlands, parks, gardens and other such avenues, reuse of treated sewage, as source of energy where feasible, and any other productive uses.
- Awareness generation about sanitation and its linkages with public and environmental health amongst communities and institutions.
- Promoting mechanisms to bring about and sustain behavioural changes aimed at adoption of healthy sanitation practices.

These outcomes will be achieved by each ULB through implementation of an FSSM plan. ULBs will be required to prepare FSSM plan as per the framework presented in Annexure 1. The FSSM Plan will cover the entire sanitation service chain starting from design of septic tank, collection, conveyance, safe treatment and reuse or safe disposal of faecal sludge and septage. FSSM plan will include activities related to asset creation in terms of septic tanks, procurement of vehicles or involve private sector to ensure regular/scheduled cleaning cycle of 2-3 years and establishment of faecal sludge and septage treatment facilities. Additionally, ULBs will also formulate bye-laws related to onsite sanitation, create database on onsite sanitation arrangements in the city, explore possibilities for private sector involvement in FSSM and levy tax/charges to finance FSSM activities.

The strategic points on Policy Actions would outline the broad provision to address the aforementioned issues and lay out a roadmap for effective implementation of FSSM in urban areas across the state. The provisions of the policy are broad-based and a detailed State FSSM Guidelines shall be formulated that will elaborate upon the provisions of this policy and aid relevant stakeholders in planning, designing, implementing, managing, monitoring and capacity building of various components under FSSM in urban areas of Telangana. The Strategic Policy Actions have been classified under the following categories:

## STRATEGIC POLICY ACTIONS



### 3.1 ROLES AND RESPONSIBILITIES

Operationalising the policy would require a multi-stakeholder participation. The key roles and responsibilities of the different stakeholders are given in the table below:

**TABLE 2: ROLES AND RESPONSIBILITIES OF STAKEHOLDERS**

Agency	Roles and Responsibilities
<b>Commissioner and Director of Municipal Administration</b>	Nodal Agency for managing FSSM operations for Telangana
	Implementation of State level FSSM initiatives
	Overall supervision and coordination of FSSM operations in Telangana
	Formulating a roadmap for realisation of the State FSSM Policy
	Responsible for preparation of the State FSSM Guidelines, Standard Operating Procedures, User Manuals, Model FSSM Rules for ULBs, drafting State Acts and Policies related to urban sanitation and FSSM, etc.
	Establishment of a dedicated cell at CDMA for guiding all ULBs for implementing city level FSSM strategy, plans and projects during planning, operation and monitoring stages
	Coordinating networking among various stakeholders
	Responsible for building partnerships
	Prepare a Training Calendar to conduct training sessions and workshops across the state, customized to target various stakeholders such as ULB officials, service providers, NGOs, CBOs, Corporates and Public. Coordination with the ULBs and engage Professionals to provide training and capacity building on FSSM.

Agency	Roles and Responsibilities
<p><b>Telangana State Pollution Control Board</b></p>	<p>Ensure compliance of FSSM operations through inspections, environmental monitoring, etc.</p> <p>Provide guidance and training to ULBs on the applicable regulations with respect to FSSM</p> <p>Address grievance related to environmental hazards due to FSSM operations</p> <p>Assist in formulation of relevant advisories, guidelines, manuals, etc. to ensure environmental compliance for FSSM operations</p>
<p><b>Other State Government Departments</b></p>	<p>Sufficiently incorporating the provisions of this policy in their projects, schemes, programs, policies, plans, guidelines, activities, etc.</p> <p>Provide necessary sectoral inputs towards State FSSM strategy, rules, acts, guidelines, etc.</p>
<p><b>Urban Local Bodies</b></p>	<p>Formulating citywide FSSM strategy</p> <p>Timely preparation of city FSSM plan</p> <p>Notification of citywide FSSM rules to regulate all FSSM operations in the city</p> <p>Create an enabling environment for private sector participation in citywide FSSM</p> <p>Ensuring overall O&amp;M of FSSM operations in the city-involvement of private sector</p> <p>Creation of a City Sanitation Cell (as part of sanitation or health department) within all ULBs to oversee the FSSM related operations and management at city/ward level</p> <p>Formation of City Sanitation Task Force (CSTF) groups with responsibilities of planning, supervision and monitoring of the Septage Management and Treatment Operation</p> <p>Licensing of all private de-sludging operators based on pre-determined eligibility criteria</p> <p>Design an appropriate tariff structure to fund FSSM operations and its timely collection – service charges, sanitation tax, tipping fee from operators, etc.</p> <p>Ensuring financially and environmentally sustainable operations – reducing reliance on state and central government grants</p> <p>Incorporation of model septic tank design, location, zoning, effluent disposal standards, toilet design, etc. into building bye-laws</p> <p>Develop training programmes for masons to build requisite skills in construction of quality septic tanks as per ISO norms</p> <p>Undertake awareness generation and behavioural change campaigns and regular public engagement to ensure active participation by the residents</p> <p>Devise a system of appropriate incentives and penalties for residents and service providers to induce desirable behaviour</p> <p>Ensuring capacity building and training – manpower, financial, equipment, exposure visits etc.</p>

Agency	Roles and Responsibilities
Urban Local Bodies	<p>Overall monitoring and evaluation of FSSM operations – benchmarking, ensuring compliance, performance monitoring of de-sludging operators, etc.</p> <p>Providing NOC for licensing of de-sludging trucks and location of treatment plants</p> <p>Assigning land and utilities required to construct and maintain FSTPs</p>
Mayors/ Chairpersons/ Corporators/ Ward members	<p>Leading ward-level campaigns for awareness and behavioural change</p> <p>Encouraging households for active participation in scheduled de-sludging</p> <p>Represent ward-level/community level issues related to sanitation</p> <p>Assigning a 'Swachh Dhool' in every neighbourhood for community-scale monitoring</p> <p>Overseeing the implementation of the process</p>
Households	<p>Periodic cleaning and de-sludging of septic tanks as per Schedule</p> <p>Timely payment of service charge/ other fees, if any, towards FSSM services</p> <p>Regular maintenance and monitoring of septic tanks</p>
De-sludging Operators	<p>Timely collection of waste from households as per schedule and disposing waste at designated locations only or FSTPs</p> <p>Strict adherence to code of conduct/standard operating procedure as per city</p> <p>Regular maintenance of equipment and vehicles</p> <p>Maintaining up-to-date logs, manifests and reports</p>
Service Providers – Masons, Designers	<p>Acquiring requisite skills through training and capacity building to design and construct quality septic tanks as per ISO norms</p> <p>Discourage cost-cutting by employers/house owners from cheap and sub-par construction of toilets, septic tanks, soak pits, etc.</p>
Private Sector	<p>Active participation in service delivery of FSSM at state and city level</p>
Multilateral, Bilateral and other International Institutions	<p>Integrating provision of FSSM Policy into existing programs, projects and activities</p> <p>Designing future projects and programs in accordance with the provisions of the policy</p>
Academic, Research and Civil Society Organisations	<p>Undertaking primary research to further safe and sustainable FSSM</p> <p>Developing models for safe and sustainable delivery of FSSM services to all</p> <p>Supporting implementation of FSSM activities at ground level</p> <p>Raising awareness and sensitization on the importance of FSSM among the general population</p> <p>Providing monitoring support to the ULB on any unsafe practices that impact effective FSSM</p> <p>Setting up regular interactions with the ULB to discuss operational issues and be part of the solution</p>

## 3.2 TECHNOLOGY OPTIONS FOR SEPTAGE MANAGEMENT

Septage containment and treatment technology options are included according to SBM Guidelines in the following table. In any given context, the technology choice for conveyance system generally depends on the following factors:

1. Type and quantity of products to be transported
2. Distance from containment facilities
3. Accessibility
4. Topography
5. Soil and groundwater characteristics
6. Financial resources
7. Availability of a service provider
8. Management considerations

Treatment options for faecal sludge/septage are based on four treatment objectives.

These four mechanisms enable sludge to be handled, disposed of, and/or re-used safely.

- a) **Solid liquid separation:** Solid liquid separation is the first step for successful treatment of faecal sludge, as refuse must be brought to some sort of uniform consistency.
- b) **Dewatering:** Before treatment, faecal sludge is over 80-90% water by volume. de-watering is necessary to reduce volume/weight and destroy the habitat that allows dangerous pathogens to grow.
- c) **Stabilization:** Stabilization refers to several biological and chemical processes through which ongoing biological-chemical reactions run their course and nutrients are consumed by bacteria.
- d) **Reuse applications:** Once the previous three steps have been accomplished, sludge can be reused for productive purposes or sent on for further treatment (such as co-composting with solid waste) depending on its chemical/biological profile.

Technologies for Faecal Sludge management based on the above objectives can be adopted as mentioned in Table 3. Urban Local Bodies/CDMA can choose from a range of treatment options available in the market, depending upon their needs and available finances.

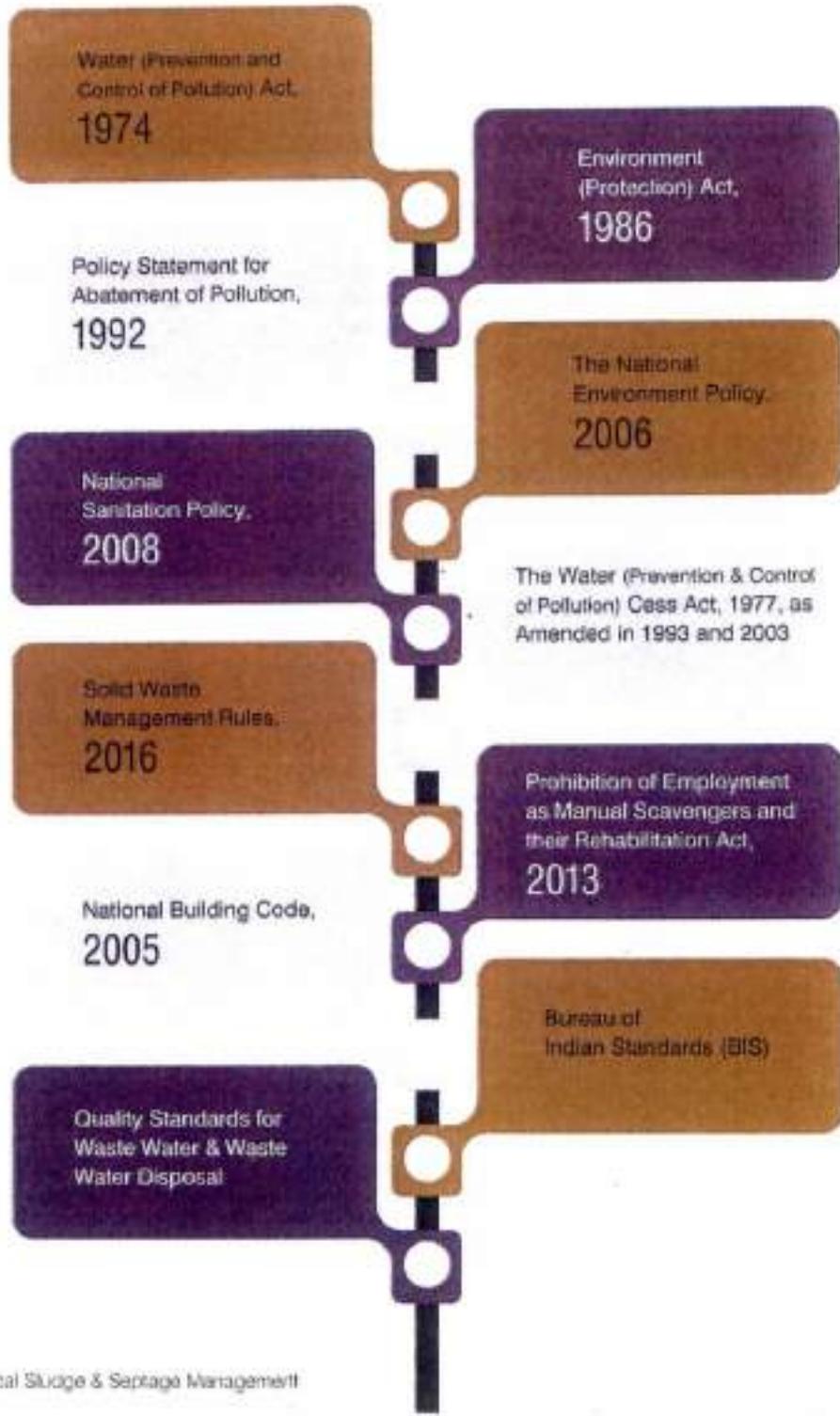
**TABLE 3: TECHNICAL OPTIONS ACROSS THE  
FAECAL SLUDGE VALUE CHAIN\***

Containment	Transport	Treatment			Reuse
		Solid /Liquid	Dewatering	Further Treatment	
Septic Tank (preferred)	Small Vacuum Truck (1,500 - 3,000 liters)	Imhoff Tanks	Mechanical	Co-composting	Soil Conditioner
Twin Pit System	Large Vacuum Truck (3,000 liters)	Settling/ Thickening Tanks	Unplanted Drying Beds	Deep Row Entrenchment	Irrigation
Aerobic Bio-digester			Thermal Drying	Sludge Incineration/ Pyrolysis	Building Material
Anaerobic Bio-digester			Solar Drying	Anaerobic Digestion	Bio-fuel
			Planted Drying Beds	Black Soldier Flies/Vermi-composting	Proteins
				Lime/Ammonia	
				Co-treatment with Wastewater up to 3% FS of Current STP Load	

\*Adopted from IWA publication Faecal Sludge Management Systems Approach for Implementation and Operation, IWA Publications, 2014.

### 3.3 LEGISLATIVE AND REGULATORY CONTEXT

Presently there is no single regulation for safe handling, transport and disposal of septage in India. However, there are many laws dealing with water, wastewater and sanitation services. The legal context for this FSSM policy is guided by the following central laws and regulations:



## The Rules and Regulations for FSSM in the State of Telangana include:

- The urban local bodies in Telangana are largely steered by the Telangana Municipalities Act 1965 for the Municipalities and Telangana Municipal Corporations Act 1955 for the Municipal Corporations.
- The Telangana Town Planning Act, 1920 provides for the preparation of town planning schemes in respect of all lands within the municipal area to ensure regulated development of towns to secure their present and future amenities and conditions.
- The Telangana Urban Areas (Development) Act, 1975 has been enacted in the state that guides the planning of urban development through master plans or general town planning schemes, zonal development plans, area development plans and road development plans. The Municipal Corporations, Municipalities and Nagar Panchayats exercise the powers of development, control and enforcement delegated to them under the Telangana Urban Areas (Development) Act, 1975.

The Water (Prevention and Control of Pollution) Act of 1974 restricts discharges of pollutants to water bodies and created Central and State Pollution Control Boards with authority to set standards and enforce water pollution rules. The Water (Prevention and Control of Pollution) Cess Act of 1977 established a levy on industries using water, using the funds thus generated to augment the resources of the Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs).

The Environment (Protection) Act of 1986 is an umbrella act on all issues related to environmental protection and provides for the audit of all facilities that require permits under water pollution, air pollution and hazardous waste rules. The CPCB is the main authority that

sets pollutant discharge standards while the SPCBs have the mandate to monitor performance and take enforcement action. The CPCB has developed General Discharge Standards that apply to all discharges including those from STPs. Discharge standards have been developed for 33 parameters under four categories: discharges to inland surface waters, in marine coastal areas, to public sewers, and on land for irrigation.

The ULBs shall formulate their own bye-laws for implementation of the above stated rules. In addition, the state and appropriate development authorities would need to review the building regulations to ensure proper construction of adequate on-site sanitation facilities, which in turn need to be disseminated to the construction industry. The bye-laws and rules shall address design, construction, operation & maintenance of sanitation systems along the entire sanitation value chain; methods of approval of building plans, or retro-fitting existing installations, tariffs for sanitation management, penalty clauses for violation of rules, laws, regulations, issuance of permit/licenses to private operators providing services.

The CDMA also shall, for the purpose of setting up faecal sludge and septage treatment plants, form the ULBs into clusters and finalise the technology and incur capital cost for their establishment. However the O&M cost shall be met by respective ULBs. In case of setting up of cluster-based treatment plants, CDMA in consultation with ULBs, shall issue separate guidelines for execution of the projects.

### 3.4 FINANCING FSSM

While FSSM treatment options are significantly more cost-effective than conventional sewerage options, they still require capital costs that some municipalities cannot bear. Most of the initial source of funding across the sanitation value chain shall be provided by the central and state government programs. The funding options for State and ULBs include:

- Information Education & Communication (IEC) and Capacity-building funds: SBM provides IEC funds, which can be utilized for various awareness generation activities for implementing FSSM plan. Capacity building for ULB staff, septage transporters, treatment plant operators and residents of city will be undertaken.
- Funds from 14<sup>th</sup> Finance Commission will be recommended for implementing FSSM plans.
- Convergence with existing schemes/activity: ULBs may utilize funds for projects proposed as part of FSSM Plans through its ongoing schemes like AMRUT, SBM etc. or any other State/Centrally sponsored Scheme as per the directions of CDMA/Government. However, the emphasis will be on improving the efficiency of existing sanitation infrastructure and service delivery.

#### OTHER FUNDING MODELS INCLUDE

- Private sector participation across sanitation service chain can be engaged by ULB/CDMA for provision of FSSM services.
- Sanitation tax/user charges can be levied by the ULBs to meet the O&M cost for effective FSSM operations as per the provisions under Telangana Municipalities Act, 1965, for the municipalities, and Telangana Municipal Corporations Act, 1994, for the municipal corporations, and GHMC Act, 1955.
- Funding from CSR and other external agencies for implementing FSSM plans can be explored by ULBs/CDMA.



### 3.5 PARTNERSHIP BUILDING



A strong network of partners in various sectors and of various backgrounds would be established, including renowned specialists/experts, corporates, research/academic institutions, civil society groups/CBOs/NGOs, private service providers, donor agencies, bilateral/multilateral agencies, etc. for bolstering capacities and knowledge in the sector.

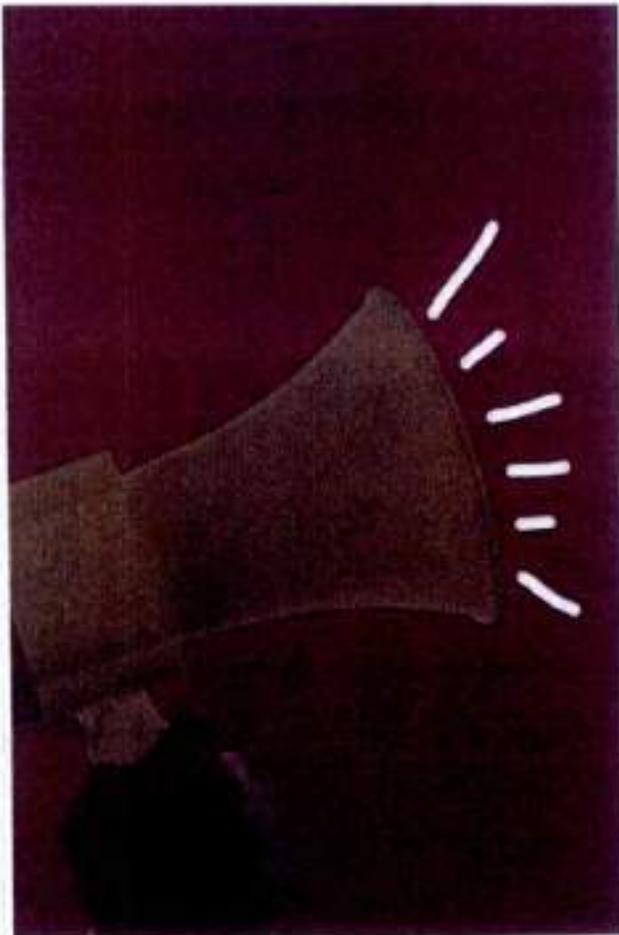
There is an increased need to encourage greater private sector participation in service delivery and financing of FSSM activities by creating an enabling regulatory environment and creating opportunities.

Backward and Forward linkages shall be established with private players, other government departments, trade and farmer associations, etc. for optimum reuse of treated sludge and wastewater. Possibility shall be explored on whether treated and stabilized sludge can be used as organic fertilizer for farming and gardening, bio-gas recovered can be locally distributed for cooking or production of electricity, while treated wastewater could be reused by industries/power plants/irrigation, etc.

Necessary platforms shall be established such as periodic conferences, workshops, summits, meetings, events, forming groups/associations, and others for regular interaction among various stakeholders and partners for knowledge sharing, peer-learning, progress review, information dissemination, etc.

Commissioner and Director of Municipal Administration will be the Nodal Agency for channelling and utilizing funds (loans and grants) from external sources for sanitation and FSSM projects.

An agreement (such as MoUs) will be drawn which may be signed with prominent partners outlining a common agenda for development and provision of FSSM services in Telangana. Various agencies can be designated with specific charge for providing their inputs, such as 'Knowledge Partner', 'Sanitation Technology Partner', 'Media Partner', 'Campaign Partner', 'Capacity Building Partner', etc.



## 3.6 IEC & STAKEHOLDER PARTICIPATION

A rigorous awareness campaign should be undertaken to educate various stakeholders about FSSM. ULBs can be tasked with spreading awareness among residents about Government schemes, benefits of scheduled de-sludging, various incentives for the same, good sanitation practices and monitoring of FSSM operations. This would be done with the involvement of ward councillors, community leaders, CBOs, etc. Various neighbourhood and city level institutions such as schools, colleges, CBOs, etc. would be actively engaged as volunteers in these campaigns.

Integration of other States and Central Government campaigns for IEC and awareness generation for sanitation with related schemes and programs such as SBM, AMRUT, local WASH programs, etc. CDMA shall identify institutions and agencies to undertake awareness and communication operations at state and ULB level.

Multiple channels may be used for the same - such as media (social, print, broadcast, etc.), advertising, flyers/ brochures/ booklets, workshops, road shows, rallies, announcements, meetings, etc. All IEC and awareness material would be in multiple languages, especially local dialects.

### 3.6.1 AWARENESS GENERATION FOR RESIDENTS

Members of Resident Welfare Associations, Community Organizers, Self-Help Groups and general public should be sensitized periodically regarding the need for a safe faecal sludge management system including a three-year cycle. The health hazards associated with improper collection and treatment of waste, and the ill-effects of sewage discharge into fresh water/ storm water drains should be explained to the residents. Awareness generation activities should be carried out at the beginning of introducing a scheduled service in all wards and then repeated periodically over the three-year cycle.

### 3.6.2 GENDER INCLUSIVITY

It is crucial that Municipalities look at FSSM through a lens considering gender, particularly concerning the empowerment of women and girls. Women should be equitably involved in the planning of FSSM activities or the formation of local regulations, and any CSTF or sub-committee that discusses FSSM should have a membership consisting of at least one-third women, at minimum.

Institutions such as Administrative Staff College of India, Hyderabad can be deployed for training of different cadre of officers and stakeholders associated with FSSM as detailed above.



## 3.7 TRAINING AND CAPACITY BUILDING

### 3.7.1 CAPACITY BUILDING FOR MUNICIPAL STAFF

Municipal Commissioners, Engineers, Health Officers, Sanitary Inspectors, and Sanitary Workers should be well-trained in safe FSSM and its best practices. This involves regular training sessions on safe collection, treatment and disposal. Information regarding standard septic tank design, the need for periodic inspection and de-sludging of septage; design of a treatment facility, tender details for engaging licensed transporters, etc. should be disseminated widely to achieve a safe FSSM system. Training should also be provided on safety standards.

Commissioner and Director of Municipal Administration will be the Nodal Agency for channelling and utilizing funds (loans and grants) from external sources for sanitation and FSSM projects.

An agreement (such as MoUs) will be drawn which may be signed with prominent partners outlining a common agenda for development and provision of FSSM services in Telangana. Various agencies can be designated with specific charge for providing their inputs, such as 'Knowledge Partner', 'Sanitation Technology Partner', 'Media Partner', 'Campaign Partner', 'Capacity Building Partner', etc.

### 3.7.2 CAPACITY BUILDING FOR SEPTAGE TRANSPORTERS/ PRIVATE VENDORS

ULBs should ensure that all safety norms are clearly explained to the septage transporters. Private Operators and Transporters should be well trained in safe collection and transportation of sewage including vehicle design, process of de-sludging, safety gears and safe disposal at the nearest treatment facility.

Institutions such as Administrative Staff College of India, Hyderabad can be deployed for training of different cadre of officers and stakeholders associated with FSSM as detailed above.



## 3.8 MONITORING & EVALUATION

- **Role of ULBs:** ULBs will be responsible for monitoring and evaluating its performance related to FSSM activities across sanitation service chain.
- **Information System:** ULBs will have to develop a database related to on-site sanitation system viz. data on HHs attached to onsite disposal systems, septic tank emptying details, related complaints as well as service provider details for FSSM related activities. All ULBs will be required to create information on toilet and its disposal system in next cycle of property tax assessment survey and integrate it in existing e-governance system. This system can be supported by a robust grievance redressal mechanism for complaints related to septic tank emptying.
- **Community Monitoring:** Local communities and local groups can be involved in monitoring and ensuring compliance of FSSM operations, with encouragement by the elected representatives. These communities will be encouraged to be active in reporting incidences of mismanagement by de-sludging operators, unsafe sanitation practices in neighbouring households, poor maintenance at community toilets, etc.

## KEY COMPONENTS OF FSSM POLICY

FSSM for the urban local bodies includes both residential and non-residential/commercial waste (though not industrial waste). This policy on FSSM seeks to empower municipalities with knowledge, procedures and facilities for planning and implementing FSSM. In particular, CSTF should take up an active planning and advisory role in cooperation with municipal councils in order to dedicate appropriate resources and attention to the challenges of FSSM.

The objective of these guidelines is to promote a comprehensive and integrated approach to septage management covering collection, storage, desludging, transportation, treatment, disposal and reuse and ensure compliance with various national level guidelines and regulations. The guidelines cover the following key elements of septage management:

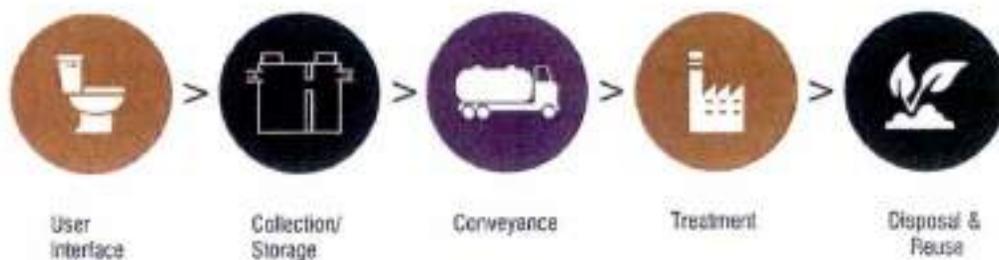
- USER INTERFACE, COLLECTION & STORAGE
- CONVEYANCE/TRANSPORTATION
- TREATMENT, DISPOSAL AND REUSE OF SEPTAGE
- RECORD-KEEPING AND REPORTING (MIS)
- PRIVATE SECTOR PARTICIPATION

## STEP BY STEP APPROACH TO OPERATIONALIZING FAECAL SLUDGE AND SEPTAGE MANAGEMENT:

Citywide assessment of FSSM is the key step for FSSM process planning. The cities shall undertake assessment of the current situation of FSSM around the five areas detailed out below for developing an FSSM plan that would be technically appropriate and financially feasible at local level. Assessment in each area entails review of available information at city level, identifying information gaps, and conducting field studies where necessary. Assessing service performance across the sanitation value chain through a town level assessment is the first step in planning process. It is an important exercise, which provides an initial sense of the state of FSSM facility in the town, helping in understanding the context and identifying gaps in key services.

### THE SANITATION VALUE CHAIN CONSIDERS THE FOLLOWING 5 STAGES:

Performance Assessment is required across the Sanitation Service Chain



Detailed assessment of services will need to be done across each link in the chain through appropriate field assessments. As policies and regulations already exist for ensuring toilet access, this policy on FSSM focuses on the last four stages of the value chain: collection and/or storage, transportation, treatment, and disposal or reuse.

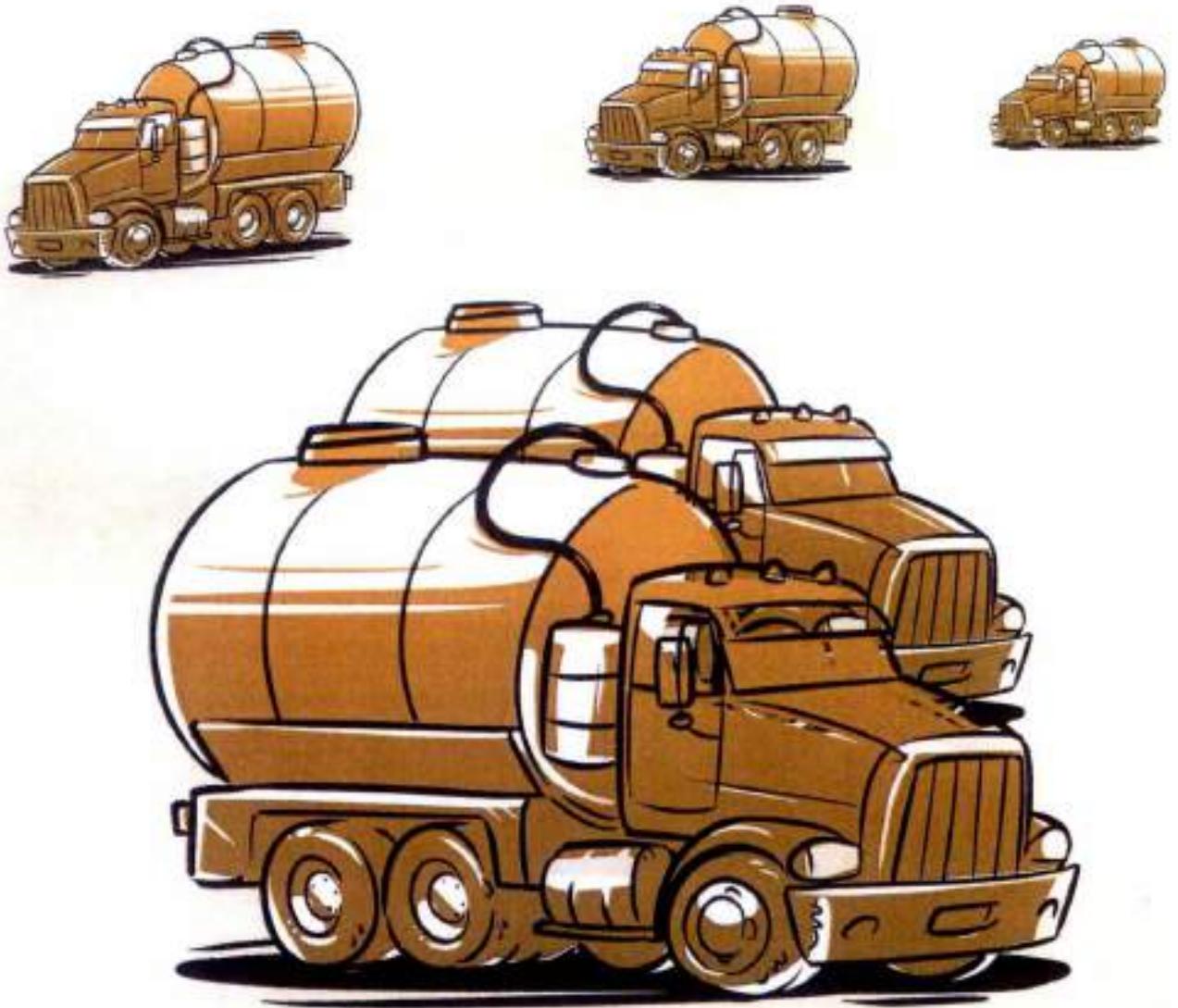
## 4.1 USER INTERFACE, COLLECTION & STORAGE

Collection and Storage describes the ways of collecting, storing, and sometimes initially treating the excreta generated by toilets. The toilet may be connected to sewerage system; on-site sanitation systems like septic tanks with soak pits, leach pits, or may be functioning as Ecosan / Composting toilets. Similarly, for gray water disposal, the households may be connected to sewerage system or drains of any kind.

**Assessment of all existing toilets and containment facilities in order to create a comprehensive database.**

Steps are listed below:

- a) Town-level assessment for coverage of toilet and on-site sanitation facility using the existing database (like property tax module) or based on recent survey carried out under SBM.
- b) If the ULB does not have a database, then ULB shall create database of toilets and containment units. All the ULBs shall collect information related to toilet availability, type of toilet, containment typology (septic tank, pit latrine, soak pit, etc.), and its connection with waste water outlet (Annexure 1). This information should be linked to property tax databases on governance platform. While this evaluation may require an extended timeline, municipalities should develop a plan and timeline to be shared and monitored by the State Government.
- c) ULB shall keep updated database related to toilet availability and on-site sanitation system through property tax assessment surveys carried out from time to time.
- d) Municipalities shall evaluate existing containment units and other storage/treatment systems and modify (in case of variation) based on design mentioned in Annexure 2.
- e) Notices should be issued to all property owners whose containment facilities do not meet the standard septic tank design. National/State aid may be sought in order to financially support the conversion of improper containment units into sanitary toilets.
- f) Identify insanitary toilets and convert them to sanitary latrines for safe collection and disposal of waste as per norms set out in Annexure 3.
- g) All existing containment facilities should have access covers for each chamber, so that they can be easily opened during emptying process. Where such covers are not available, it should be made compulsory for all property-owners to provide proper covers.
- h) Pursuant to the previous steps, municipalities must take efforts to build the capacity of masons and builders to teach them how to construct proper toilets and refurbish improper already-built containment units. Details regarding the codes that must be followed are included in the next item.
- i) When new containment facilities need to be built, they should be built as septic tanks designed and constructed as instructed in the National Building Code, 2005 and CPHEEO Manual, 2013 which takes reference of design norms from IS:2470 on Code of Practice for Installation of Septic Tanks-Part 1: Design and Construction; and Part 2: Secondary Treatment and Disposal of Septic Tank Effluent, 1985 (Reaffirmed 1996). The design norms as per CPHEEO Manual, 2013 is compiled in Annexure 2.



## 4.2 CONVEYANCE / TRANSPORT

Transport describes the movement of sludge across the service-chain from individual septic tanks and latrines, to municipal or regional treatment facilities. Currently, these services are largely unregulated across Telangana, particularly in smaller cities and towns. Municipalities must take on two tasks: first, they must regulate operators by establishing a system of licensing, which will facilitate the enforcement of health and safety standards and the prevention of open dumping; second, they must design a plan to conduct a system of scheduled emptying in which every containment facility is emptied at least every three years (with more frequent emptying for public accommodations, community/public toilets, and the like). This scheduled emptying will be contingent on having completed, a detailed survey of individual containment facilities (as referred to in Section 4.1), and so may not be operationalized immediately, nevertheless, ULBs shall develop plans to do so.

#### 4.2.1 ASSESSMENT FOR QUANTITY OF VEHICLES

- a) Determine how many households use on-site containment systems and how much sludge they can contain in order to determine the amount of sludge that will be emptied every year (presuming a three-year emptying cycle for individual households and more accelerated cycles on an assessed basis for public and commercial facilities).
- b) Determine how many septic tanks/pits are emptied annually and what volume of sludge is disposed off at present by looking at actual on-ground practices.
- c) Determine the average price per emptying (and accounting how it may differ based on different volume and containment facility locations) that operators are charging.
- d) Use the above data to determine how many trucks would be needed if septic tanks were emptied on a three-year basis and design a database for maintaining a register of containment facilities that are emptied (Annexure 4)
- e) Create a Registration System for private truck operators which permit them to legally empty septic tanks within the ULB. However, these permits will require that they adhere to safety and hygiene standards, both in emptying and disposal; ULB shall establish certain regulated tariffs for emptying septic tanks and make receipts mandatory to track emptying and disposal. The permits and receipts required for this system are included in annexures 4, 5, and 6. Pursuant to this, ULBs should establish a system for penalizing trucks that operate without valid permits/licenses.
- f) ULBs should mobilize enough vehicles, either through public or private means, to support a three-year emptying system. This should be done in line with the growth in demand for emptying services, so that trucks are not left underutilized.
- g) ULBs shall ensure operator's safety by strictly following the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act of 2013. All men and women workers operating or associated with collection, transport and disposal of faecal sludge/septage shall be trained and provided with Identity Cards by licensing authority (ULB). Survey of all men and women who are participating in such works should be undertaken and health records shall be maintained.
- h) If required, the ULBs can utilise 14th Finance Commission grants for purchasing the required vehicles.

### 4.2.2 REGULATION OF PRIVATE DE-SLUDGING OPERATORS

1. Private de-sludging operators should clean their surroundings before leaving, and after de-sludging; residents should not find their homes or surroundings dirtier.
  - Display the licence at a prominent place on the vehicle
  - The vehicle shall have valid permits and shall be road worthy.
  - They shall not dump faecal sludge at any other place except the treatment site.
  - They shall coordinate with the designated person of the ULB appointed by the Municipal Commissioner during emptying and at treatment facility.
  - Non-licensed vehicles shall not be permitted to de-sludge the septic tanks in the ULB. Penalties shall be levied on the defaulting operators.
2. Operator needs to obtain a license from the ULB on the payment of fees fixed by the ULB (format for license is mentioned in Annexure 5). This is valid for a period of one year.
3. Proper safety gear (including uniform, tools, and well-maintained vehicles) must be used by the operator while de-sludging/emptying the septic tanks/pits. The rules under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 provide for a comprehensive list of safety gear that should be used while providing these services. .
4. No fire or flame should be used near the septic tanks as there may be inflammable gases inside septic tanks during de-sludging.
5. The septic tanks should not be fully emptied; small amount of sludge of around 1 to 2 inches should be left in the septic tank to facilitate decomposing of incoming faecal waste.
6. The Municipal Commissioner shall identify and keep a record of all the private de-sludging operators working in the ULB.





## 4.3 TREATMENT, DISPOSAL, AND REUSE

**Treatment:** ULBs must not dispose the faecal sludge/septage collected from septic tank/pits without any treatment and ULBs must comply with CPCB and TSPCB norms before disposal of septage. ULBs should assess the load of septage and assess the requirement of capacity for treatment plant. ULBs should first try and assess the possibility of setting up faecal sludge treatment facilities at the solid waste treatment/disposal site or at sewage treatment plants within the city or utilizing co-treatment, pending the advice and recommendations of the appropriate engineering authorities. In particular, the state recommends co-locating purpose-built infrastructure, i.e. building faecal sludge treatment plants next to either sewage treatment plants or solid waste management plants, in order to gain advantage from synergies in operation and maintenance (effluent from FSTP can go to STP, or output of FSTP can be co-composted with solid waste, etc.)

**Reuse/disposal** refers to the methods in which products are ultimately returned to the environment, as either useful resources or reduced-risk materials. The treated septage can be used as a soil enricher or as filling material at construction sites. ULB should carry out primary assessment for availability of market and demand for reuse.

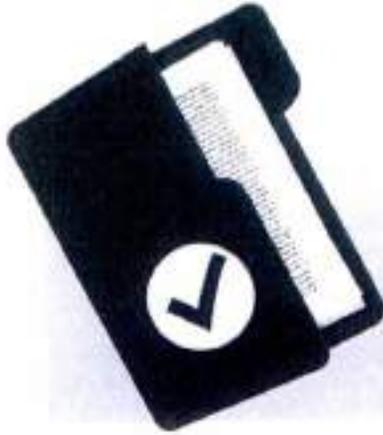
## ULBs shall take the following steps in order to properly treat faecal sludge.

- a) Operators shall be forbidden by regulation to dispose off sludge collected from the septic tanks or pits into fields, rivers, nallas, forests, etc. These regulations shall be enforced and any violation shall be subject to advertise financial and/or legal penalties. These penalties should come into force as soon as there is a sanitary location for dumping faecal sludge.
- b) ULB should first assess the possibility of sludge treatment at existing STP in the city or STP of nearby city through appropriate agreements with STP operators and receiving ULBs.
- c) Some STPs are under construction in different cities. Proper tests and assessment should be carried out by STP operators before receiving faecal sludge/septage.
- d) If STP is not available in the city or nearby that can receive the sludge, then ULB should plan for new faecal sludge treatment facility. The newly-identified faecal sludge treatment plant should be designed to cater to expected volumes of septage generated in urban local body and if faecal waste is expected from nearby rural areas or ULBs.
- e) Input quality of the collected septage should be tested at the treatment facility for checking presence of any metal or traces of industrial waste.
- f) The faecal sludge treatment plant should be operational during working hours only and a responsible person should be appointed to ensure that no industrial waste is unloaded in these facilities.
- g) Septage should be reused/disposed off only after it meets the parameters in **Annexure 7**.

## Measures to be taken while planning for Faecal Sludge Treatment Plant

Identification of faecal sludge and septage treatment site is crucial for effective implementation of septage management plan. Following parameters to be taken into consideration before finalization of treatment sites:

- a) **Distance of the treatment site:** Distance from emptying to delivering and accessibility of the treatment site are major issues. The transport of relatively small faecal sludge volumes on congested roads over long distances in large urban areas is financially unfeasible. A site that is too far away implies fewer trips per day, less revenue and more fuel costs to private operators.
- b) **Reliability of electricity:** It is also important to assess the availability and reliability of electricity if treatment technology has mechanically-operated parts; as in case of fluctuations, it will increase treatment time and will affect optimal utilization of treatment capacity.
- c) **Neighbourhood:** A treatment site may generate objectionable odors. For this reason, it should be located at an appropriate distance from the residential areas and residents should be consulted during the process of identifying and designating land to build a treatment plant.
- d) **Land availability:** Projects are often delayed because of non-availability or high price of land. ULBs should identify the land for treatment facility. ULBs should also explore the possibility of developing faecal sludge and septage treatment facilities near solid waste dumping sites or already existing sewage treatment plants in order to streamline disposal processes: effluent from FSTPs may be treated at an STP, and the treated sludge may be co-composted with solid waste.
- e) **Geological parameters:** Assessment of existing geological conditions onsite, including ground water table, type of soil, flooding risk is always recommended to ensure that the structure can be safely constructed and sludge will not enter the environment through either porous soil or frequent floods.



## 4.4 RECORD-KEEPING, REPORTING, MONITORING AND FEEDBACK SYSTEMS

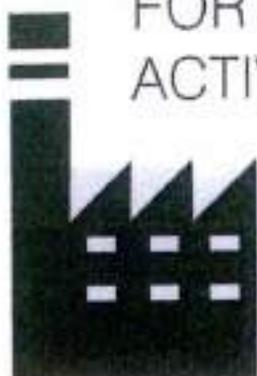
Record-keeping and manifest forms should be an integral part of a comprehensive septage management program. Record-keeping requirements should be codified into the law governing the program. A sample manifest form is detailed out in **Annexure 6**

- a) The completed document or documents with signatures of the household/ property, suction truck operator, and treatment plant operator should be submitted to the local government for their records. These documents would validate that the sludge collected from households is disposed off at proper treatment facilities.
- b) A database system such as the one discussed in access and collection needs to be developed and maintained.
- c) Wherever possible, GIS should be used to plan the route of suction emptier trucks and track emptying trucks for regular record-keeping.
- d) Consumer grievance redressal system for faecal sludge management should also be set up as a part of ULB record-keeping systems and Helpline numbers to be shared with residents as a part of monitoring and record-keeping systems for faecal sludge management.

Training, survey of the workers and licensing arrangement can be taken up with organisations such as ASCI, NAC etc. These organisations should take up end-to-end training and certification to ensure that all the operations are bio-safe from health and environmental aspects.

Latest technologies and innovations to avoid direct contact with excreta/sludge should be suggested and introduced.

## 4.5 PRIVATE SECTOR PARTICIPATION FOR SEPTAGE MANAGEMENT ACTIVITIES



For effective operationalization of scheduled septic tank emptying service and treatment facilities, ULBs may also explore the option for private sector participation. Following points to be taken into consideration by ULB:

- a) Explore private sector participation for various activities like procurement, operation and maintenance of the suction emptier trucks, construction and operations of septage treatment facility and possible reuse of treated septage within the city as well as in nearby cities.
- b) Develop performance-based contracts, so that, payment is linked to the performance of private sector for providing the services.

Annexure 1: Format to Collect the Information related to Toilet Availability, Type of Toilet; Containment Typology

SN	Name of the Town	Total Population	Total Number of HHs	Total Number of Toilets	Number of Toilets with Septic Tank	Number of Toilets with Pit Latrines	Number of Insanitary Toilets	% Population Defecating in Open
1								
2								
3								
4								
5								

## Annexure 2: Septic Tank Specifications, Guidelines, and Designs

Depending on the geography, soil condition, water seepage capacity of the soil, the design can be prepared and approved by the Urban Local Bodies. Proper septic tank design considers the following factors:

- Sized properly with appropriate sludge detention time, volume and hydraulic retention time
- Proper inlet and outlet structures
- At least one baffle separating the tank into multiple compartments
- Watertight
- Access port for each compartment that allows for inspection and pumping

Number of Users	Length (M)	Breadth (M)	Liquid Depth for a Cleaning Interval of 03 years (M)
5	1.50	0.75	1.05
10	2.00	0.90	1.40
15	2.00	0.90	2.00
20	2.30	1.10	1.80
50	5.00	2.00	1.24
100	7.50	2.65	1.24
150	10.00	3.00	1.24
200	12.00	3.30	1.24
300	15.00	4.00	1.24

(Note: The CPHEEO Manual and NBC code IS 2470 Part I 1985 may be referred for exact calculations)

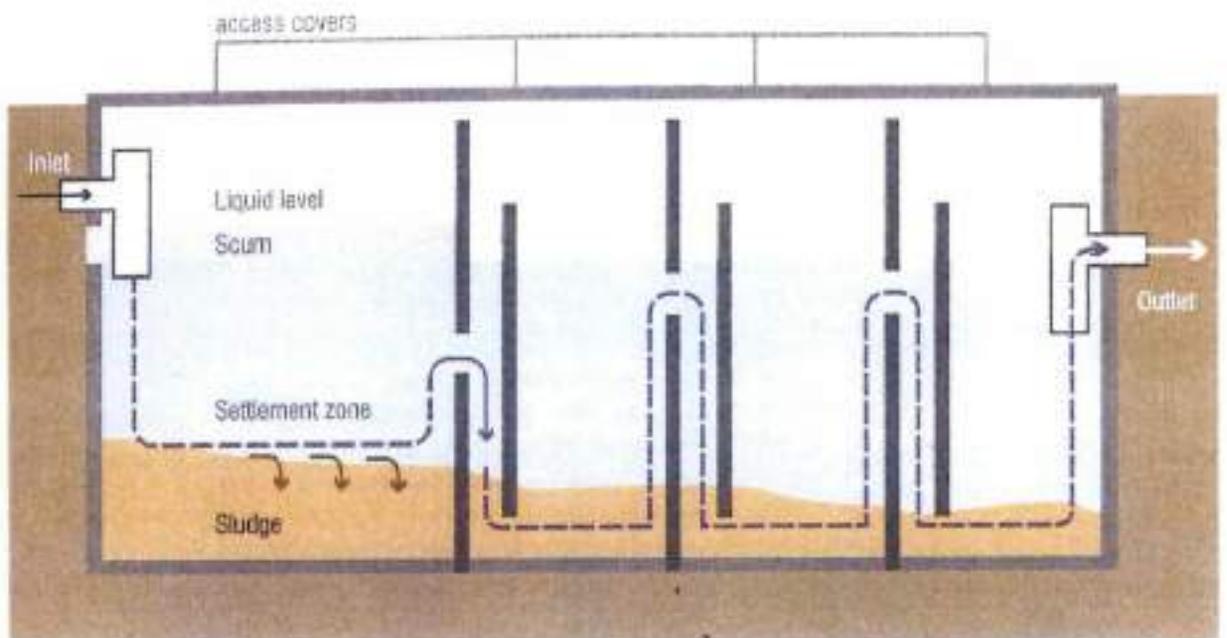
## Existing Guidelines for Design and Construction of Septic Tanks

Parameters	Existing Guidelines	Source of Guideline	General Observations
Location	Septic tanks are recommended only for individual homes, small communities and institutions whose contributory population size doesn't exceed 300	CPHEEO Manual	While all existing guidelines state that the location of septic tank should be given due consideration, in reality, the location of the septic tanks are practically based on the land availability within the household vicinity.
	A sub soil dispersion system shall not be closer than 18 meters from any source of drinking water, such as well, to mitigate the possibility of bacterial pollution of water supply	NBC, Part 3: Development Control Rules and General Building Requirements	
	Septic tank should be located at a place open to sky, as far away as possible from the exterior of the wall of building and should not be located in swampy areas or areas prone to flooding.	IS 2470: Part- 1	
Design and Construction	Septic tanks should have a minimum width of 750 mm, depth of 1 meter below water level and a minimum water capacity of 1 cubic meter. The length of the tank shall be 2 to 4 times the width.	NBC, Part 3: Development Control Rules and General Building Requirements	The criterion governing the design and construction broadly is the land availability and the funds available with the house owner/property builders.
	The minimum nominal diameter of the pipe shall be 100 mm.  Further at junctions of pipes in manholes, direction of flow from a branch connection shall not make an angle exceeding 45 degrees with the direction of flow in main pipe.		
	Every septic tank shall be provided with a ventilation pipe of at least 50 mm diameter.		
	The liquid depth should be 2-3 m and the length to depth ratio should be 2-3 to 1. The liquid depth of the septic tank should be calculated depending on the cleaning interval of the septic tank (For detail length, breadth and liquid depth for various number of users please refer the Manual); A provision of 300 mm should be made for free board.		

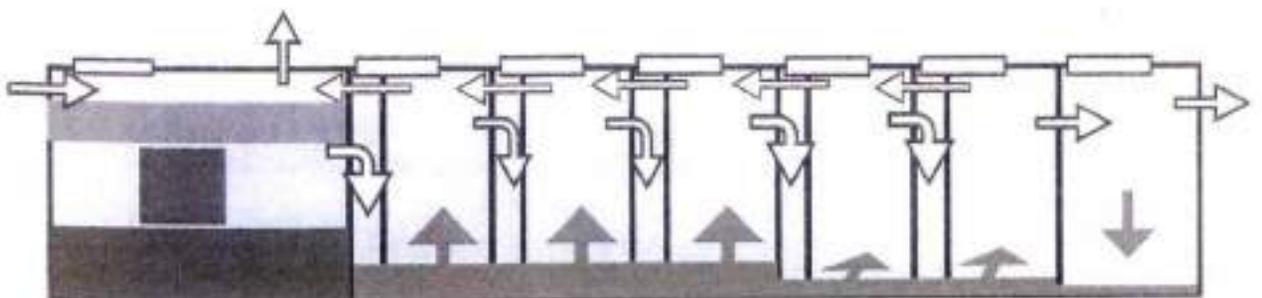
## Existing Guidelines for Design and Construction of Septic Tanks

Parameters	Existing Guidelines	Source of Guideline	General Observations
Design and Construction	When served for a population above 100, the septic tank may be divided into independent parallel chambers for operation and maintenance.		
	Baffles are provided at inlet and outlet and should dip 25 to 30 cm into and project 15 cm above the liquid. The invert of the outlet pipe should be provided at 5 to 7 cm below the invert level of inlet pipe.		
	The height of the ventilation pipe should extend at least 2 m above the height of the highest building within 20 meters radius.		
	"Improved Septic Tank" - the walls of the conventional septic tank can be replaced with baffle walls to have a multi-chambered baffled septic tank. The paper states "This movement of wastewater inside the tank helps in creating the turbulent flow which causes enhanced mixing of the raw sewage with already existing activated sludge and accelerates the decomposition of the solids because of intensive contact between the activated sludge and fresh influent".	CSE Policy Paper on septage management in India	

### Design for Improved Septic Tank Three Chambers with Anaerobic Baffled Reactor



### Anaerobic Decentralized Wastewater Treatment Systems (DEWATs)



### Annexure 3: Guidelines for Conversion of Insanitary Latrines into Sanitary Toilets

Parameters	Existing Guidelines	Source
Size (05 members)	Dia - 1000 mm preferred but 750 mm also permitted where space is a constraint.  Depth - 1300 mm.	CPHEEO
Emptying	Single pit - 6 years, Twin pit - 3 years each.	CPHEEO
Shape	Circular preferred; but rectangular, oval and square also allowed where space is a constraint.	CPHEEO
Location	Pits should be placed symmetrically at the back side of the pan. Can be located within premises, under footpath/road/narrow lane.  The distance between foundation and pit should be between 0.2 to 1.3 m.  A minimum distance of 3 to 10 m from water sources such as tube wells and 3 to 10 m from water mains.  Water pipe should not cut across the pit.	CPHEEO
Design and Construction	The pits should be lined to avoid collapsing. Bricks joined in 1:6 mortar commonly used for lining. Stones or laterite bricks of cement concrete rings could also be used.  Lining brick work 115 mm thick (half brick) with honey combing up to the invert level of incoming pipe or drain.  Size of holes 50 mm wide up to the height of brick course. Pit bottom should be left in natural condition. RCC slab is used for pit cover.  Toilet pan is connected to the pit through a 75 mm brick channel of U shape.	CPHEEO

## Annexure 4: Application Form for the License of Collection, Transportation and Disposal of Septage in Telangana

1. Name of the Applicant: Mr./Mrs. ....

2. Nationality: Indian ..... Other: .....

3. Address: Regd. Office: .....

Head Office: .....

4. Telephone No.: (O) ..... Mobile No.: .....

Email id: .....

5. Registration No. of Vehicle: .....

6. Pollution Certificate of the Vehicle valid up to: .....

7. Insurance No. and Date valid up to: .....

8. Fitness of the Vehicle valid up to: .....

9. Whether Vehicle is Fitted with GPS. (Yes/No) .....

10. Details of the Vehicle (Model, Type, Capacity, Leak-proof, Odour, Spill-proof, having proper Vacuum/Suction and Discharging Arrangement (relevant Document Proof may be enclosed).

11. Processing Fee for License: Rs 1000/- (Non-refundable)

D.D.No.: ..... Date: ..... Bank: .....

12. I/We certify that information given by me/us in column 1 to 11 are true to the best of my knowledge and belief. I also certify that I have read and understood the attached terms and conditions 1 to 13 and agree to abide by them. I agree that if any information given by me is found wrong, the application for license will be liable for cancellation at any time.



Signature(s) of Applicant(s)  
Date: .....

No. of documents attached: .....

- Documents to be enclosed:
- 1. Copy of registration certificate | 2. Pollution under control certificate | 3. Copy of the driving licence of the driver
  - 4. Insurance copy | 5. Fitness certificate

## Municipal Administration Department

Office of the Municipal Council, ..... Municipality

Progs Rec No: ..... Date: .....

Sub: Municipal Council, ..... Municipality- Issue of License for  
Collection and Transportation of Faecal Sludge Operators- Orders - Issued - Reg

Ref: 1. Application Date: ..... of .....

2. Chalan No: ..... Date: ..... for ₹ .....

## ORDER:

Mr./Mrs. ...., residing at....., has requested for issuing him/her  
the license for collection and transportation of faecal sludge in the Municipality vide references cited.In view of the above, and powers conferred under Section 164, read with Section 326 and 330 of Telangana  
Municipalities Act, 1965, permission is hereby accorded to Mr./Mrs...... for collection and transportation of faecal sludge from  
septic tanks, pit latrine, soak pit, etc., within the Municipality for a period of one year  
from..... to..... subject to following conditions:

1. The license is not transferable to any other person and shall be produced before the Municipal authorities on demand.
2. The de-sludging of septic tank or pits shall be done in a safe manner and should be transported only to the designated Faecal Sludge Treatment Plant. Indiscriminate dumping of faecal sludge is liable for penalty and prosecution.
3. He/She shall take safety measure for all the workers and ensure that de-sludging of septic tanks and pit latrines are done through mechanised methods only and no manual scavengers are engaged.
4. He/She shall keep the vehicle in roadworthy condition and all vehicles shall be covered under active insurance policy.
5. He/She shall maintain the registers of de-sludging as prescribed by the undersigned.
6. He/She shall maintain the cleanliness of the premises after de-sludging.
7. The present license is liable to be cancelled at any time by the undersigned on the grounds of violation of conditions and necessary punitive action shall be initiated as per rules.

Municipal Commissioner

..... Municipality

To:

Sri .....

## Annexure 6: Collection and Transport Records

Sample Form to be filled by Operator/Transporter of Faecal Sludge

		In English	తెలుగులో	
1	Truck ID (Vehicle No. Last 4 digits )		ట్రాక్ ఐడి (ఐండి నంబర్లోని చివరి 4 అంకాలు)	
2	Date		తేది	
3	Type of Establishment	Select one from below	భవనం/ టెలింగ్ రకం	క్రింది వాటిలో ఏదో ఒకటి ఎంచుకొనండి
		Household		ఇల్లు
		Hospital		ఆసుపత్రి
		School		స్కూల్
		Public Toilet		ప్రజామరుగు దొడ్డి
		Govt. Establishment		గవర్నమెంట్ టెలింగ్
		Pvt. Establishment		ప్రైవేటు టెలింగ్
Other	పైవి ఏవి కావు			
4	Name		వ్యక్తి / ఆఫీసర్ పేరు	
5	Email ID		ఇమెయిల్ ఐడి	
6	Mobile No.		ఫోన్ నెం	
7	House No.		ఇల్లు / ఆఫీసర్ నెంబర్	
8	Area, Ward No.		వీధి / ప్రాంతం పేరు	
9	City		ఉరి పేరు	
10	Type of Containment	Select one from below	మరుగు దొడ్డి గుంత రకం	క్రింది వాటిలో ఏదో ఒకటి ఎంచుకొనండి
		Single Chamber Septic Tank		ఒక్కటి అర ఉన్న ట్యాంక్
		Double Chamber Septic Tank		రెండు అరలు ఉన్న ట్యాంక్
		Single Pit		వరలతో ఉన్న ఒక్కటి గొయ్యి/గుంత
		Double Pit		వరలతో ఉన్న రెండు గొయ్యిలు/గుంతలు
11	Quantity of Sludge Collected	Select one from below	ఎంత మలబరద తోదారు	క్రింది వాటిలో ఏదో ఒకటి ఎంచుకొనండి
		3KL or less		3000లీ లేదా తక్కువ
		3KL to 6KL		3000లీ నుండి 6000లీ
		6KL or more		6000లీ కంటే ఎక్కువ
12	Next Desludging Period	Select one from below	మళ్ళీ ఎస్టు సెంట్లో ట్యాంక్ తోదారి.	క్రింది వాటిలో ఏదో ఒకటి ఎంచుకొనండి
		6 months		6 నెలలు
		9 months		9 నెలలు
		12 months / 1 year		12 నెలలు / 1 సంవత్సరం
		24 months / 2 years		24 నెలలు / 2 సంవత్సరాలు
	36 months / 3 years	36 నెలలు / 3 సంవత్సరాలు		

The undersigned being duly authorized, does hereby certify to the accuracy of the source and type of wastewater collected and transported

Date: ..... Signature: ..... Proposed Date for Next De-sludging (Year): .....

I Acceptance by ..... Municipality's authorized FSTP/STP

The above transporter delivered the described faecal sludge to this disposal facility and it was accepted.

Date: ..... Amount Collected from Transporter: .....

Signature of Authorized Signatory and Title: .....

NOTE: SUBJECT TO THE TERMS AND CONDITIONS OF ..... MUNICIPALITY

**Annexure 7: Safe Reuse and Disposal of Treated Septage**

Parameter	Concentration not to exceed (mg/kg dry basis, except for pH and carbon to nitrogen ratio)
Arsenic	10
Cadmium	5
Chromium	50
Copper	300
Lead	100
Mercury	0.15
Nickel	50
Zinc	1000
C/N ratio	20 – 40
pH	5.5 – 8.5

For de-watered septage/sludge used as fertilizer in agriculture application, it should satisfy the following criteria of Class A Bio-solids of US EPA: A faecal coliform density of less than 1000 MPN/g total dry solids, Salmonella sp. density of less than 3 MPN per 4 g of total dry solids. WHO (2006) suggests Helminth egg concentration of < 1/g total solids and E coli of 1000/g total solids in treated septage for use in agriculture.

MSW Rules (2016) recommended the quality for compost as referred to in Table 7. In the absence of any standards, it is recommended that these be adopted until such time standards are notified by the Central Pollution Control Board. Properly treated sludge can be reused to reclaim parched land by application as soil conditioner, and/or as a fertilizer. Deteriorated land areas, which cannot support the plant vegetation due to lack of nutrients, soil organic matter, low pH and low water holding capacity, can be reclaimed and improved by the application of treated septage. Septage sludge, as a result of lime stabilization has pH buffering capacity that is beneficial for the reclamation of acidic soils. Treated septage contains nutrients in considerable amounts, which supports the growth of a number of plants.

Drip irrigation is the preferred irrigation method for settled septage effluent when irrigation is feasible. Crops which could be safely grown are corn, fodder, cotton, trees including fruit trees, eucalyptus and poplar.

Aquaculture can be practiced for settled septage effluent when freshwater is available to achieve dilution to ensure dissolved oxygen is above 4 mg / l. Fish species, such as, Tilapia and Carp are preferred since they can tolerate low-dissolved oxygen. Both drip irrigation and aquaculture need land and are feasible at city outskirts.

Source: Advisory note: Septage Management in Urban India, Ministry of Urban Development, Government of India (2013) and Guidelines for Septage Management in Maharashtra (2016)

## Discharge Standards as per MoUD Advisory Note on Septage Management

For de-watered septage/sludge used as fertilizer in agricultural application, it should satisfy the following criteria of Class A Bio-solids of US EPA:

- A faecal coliform density of less than 1000 MPN/g total dry solids
- Salmonella sp. density of less than 3 MPN per 4 g of total dry solids

WHO (2006) suggests

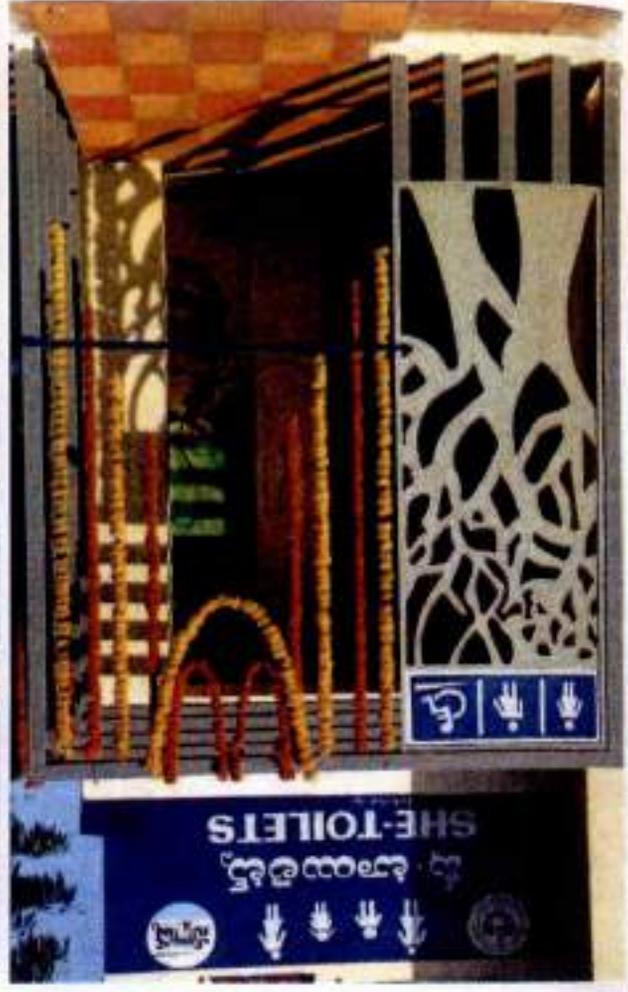
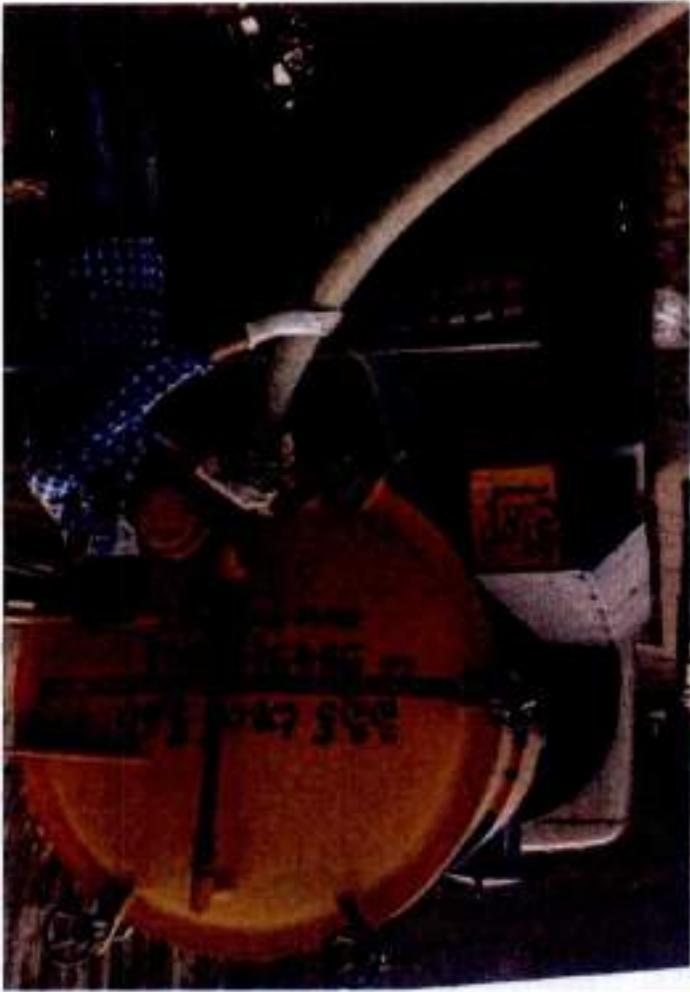
- Helminth egg concentration of < 1/g total solids and
- E coli of 1000/g total solids in treated septage for use in agriculture.

### Urban India, 2013 National Level: CPCB, 2016

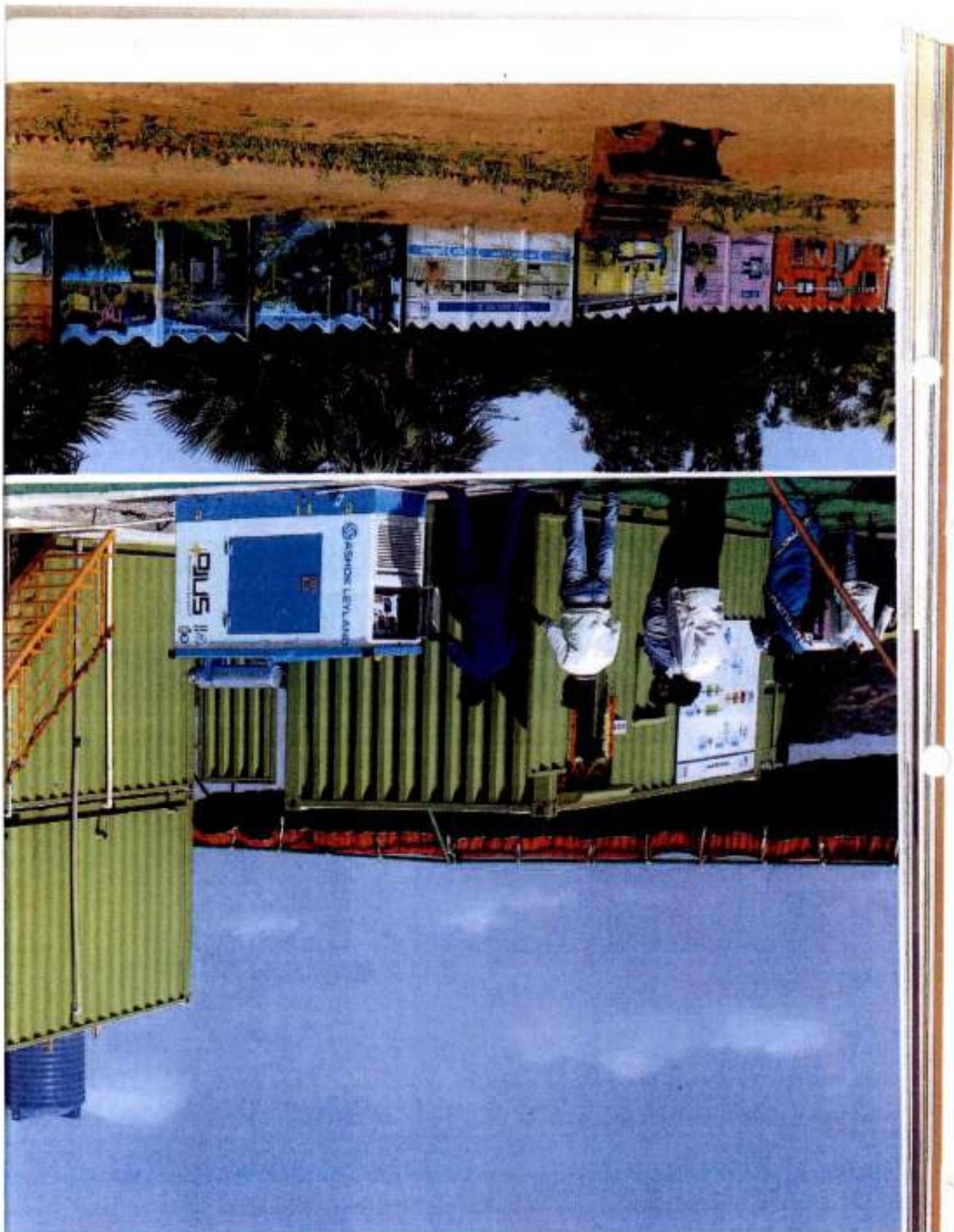
Industry	Parameter	Standard (applicable for all modes of disposal) Concentration values are in mg per liter except pH & Faecal Coliform
Sewage Treatment Plants (STPs)	pH	6.5 - 8.5
	Bio-Chemical Oxygen Demand (BOD)	10
	Chemical Oxygen Demand (COD)	50
	Total Suspended Solids (TSS)	10
	Ammonical Nitrogen (NH <sub>4</sub> -N)	5
	Total Nitrogen (N-total)	10
	Faecal Coliform (MPN/100 ml)	<230
	Phosphate (PO <sub>4</sub> -P)	2

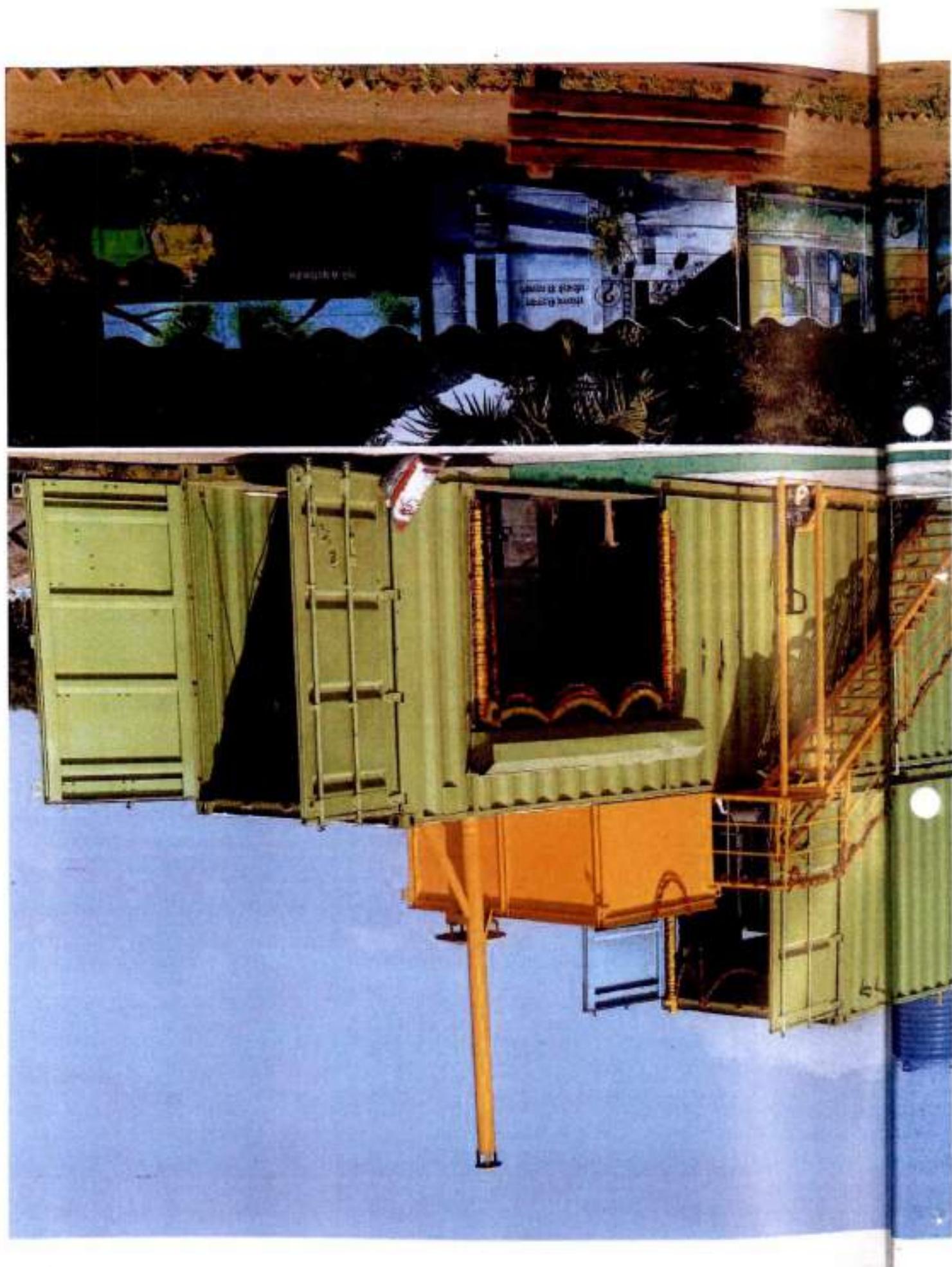
**Note:**

- (i) New STPs planned after date of notification shall be designed to meet the specified standards. Existing STPs shall meet the specified standards within 02 years from date of notification.
- (ii) The standards for Faecal Coliform shall not be applicable for use of treated sewage in industrial purposes.
- (iii) Any housing/residential complex and any other establishment generating sewage and if such area is sewered with sewer terminating to STP, such complexes/establishment shall meet the prescribed standards of General Standards for Discharge of Environmental Pollutants for sewer. In case of standalone complexes / establishments either not having sewer or terminal STP, shall be required to meet these standards.

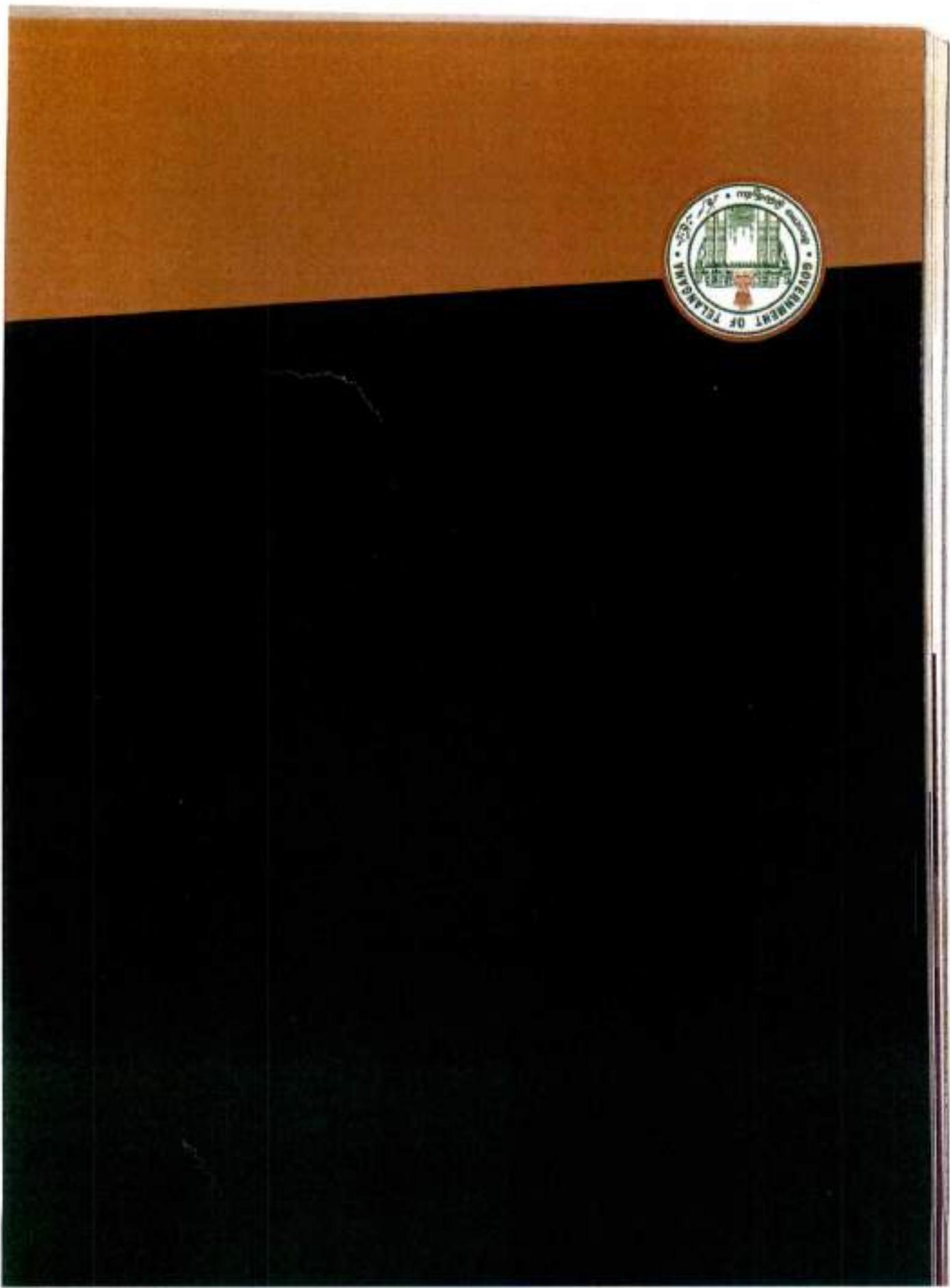


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**GOVERNMENT OF TELANGANA  
ABSTRACT**

EFS & T Department - Plastic Waste (Management & Handling) Rules, 2016 issued under Environment (Protection) Act, 1986 - Ban on manufacture, stock, sale and use of plastic carry bags less than 50 microns in thickness - Orders - Issued.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (For.III) DEPARTMENT

G.O. Ms. No. 79



Dated: 30.12.2016  
Read the following.

1. G.O. Ms. No. 46, E.F.S. & T (ENV), Dept., Dated 20.06.2013.
2. Government of India Ministry of Environment, Forest and Climate Change Notification No. S.O. No. G.S.R. 320(E), dt. 18.03.2016.

\*\*\*\*

**ORDER:**

In exercise of the powers conferred by sections 3,6 and 25 of the Environment (Protection) Act, 1986 (Act No. 29 of 1986) and in supersession of the Plastic Waste (Management and Handling) Rules, 2011, the Central Government notified the Plastic Waste (Management and Handling) Rules, 2016 under Environment (Protection) Act, 1986. In View of the above, the following order is hereby issued superceding the earlier order issued by the Environment, Forests, Science and Technology Department, Government of Andhra Pradesh vide G.O. 1<sup>st</sup> read above.

**2. The Salient features of the notification are:-**

**Conditions** - (1) The manufacture, importer stocking, distribution, sale and use of carry bags, plastic sheets or like, or cover made of plastic sheet and multilayered packaging, shall be subject to the following conditions, namely:-

- a) carry bags and plastic packaging shall either be in natural shade which is without any added pigments or made using only those pigments and colourants which are in conformity with Indian Standard : IS 9833:1981 titled as "List of pigments and colourants for use in plastics in contact with foodstuffs, pharmaceuticals and drinking water", as amended from time to time;
- b) Carry bags made of recycled plastic or products made of recycled plastic shall not be used for storing, carrying, dispensing or packaging ready to eat or drink food stuff;
- c) carry bag made of virgin or recycled plastic, shall not be less than fifty microns in thickness;
- d) plastic sheet or like, which is not an integral part of multilayered packaging and cover made of plastic sheet used for packaging, wrapping the commodity shall not be less than fifty microns in thickness except where the thickness of such plastic sheets impair the functionality of the product;
- e) the manufacturer shall not sell or provide or arrange plastic to be used as raw material to a producer, not having valid registration from the concerned State Pollution Control Board.
- f) sachets using plastic material shall not be used for storing, packing or selling gutkha, tobacco and pan masala;
- g) recycling of plastic waste shall conform to the Indian Standard: IS 14534:1998 titled as Guidelines for Recycling of Plastics, as amended from time to time;

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- h) The provision of thickness shall not be applicable to carry bags made up of compostable plastic. Carry bags made from compostable plastics shall conform to the Indian Standard: IS 17088:2008 titled as Specifications for Compostable Plastics, as amended from time to time. The manufacturers or seller of compostable plastic carry bags shall obtain a certificate from the Central Pollution Control Board before marketing or selling; and
- i) plastic material, in any form including Vinyl Acetate - Maleic Acid - Vinyl Chloride Copolymer, shall not be used in any package for packaging gutkha, pan masala and tobacco in all forms.

**3. Plastic waste management-** (1) The plastic waste management by the urban local bodies in their respective jurisdiction shall be as under:-

- a) Plastic waste, which can be recycled, shall be channelized to registered plastic waste recycler and recycling of plastic shall conform to the Indian Standard: IS 14534:1998 titled as Guidelines for Recycling of Plastics, as amended from time to time.
- b) Local bodies shall encourage the use of plastic waste (preferably the plastic waste which cannot be further recycled) for road construction as per Indian Road Congress guidelines or energy recovery or waste to oil etc. The standards and pollution control norms specified by the prescribed authority for these technologies shall be complied with.
- c) Thermo set plastic waste shall be processed and disposed off as per the guidelines issued from time to time by the Central Pollution Control Board.
- d) The inert from recycling or processing facilities of plastic waste shall be disposed of in compliance with the Solid Waste Management Rules, 2000 or as amended from time to time.

**4. Responsibility of local body -** (1) Every local body shall be responsible for development and setting up of infrastructure for segregation, collection, storage, transportation, processing and disposal of the plastic waste either on its own or by engaging agencies or producers.

(2) The local body shall be responsible for setting up, operationalisation and co-ordination of the waste management system and for performing the associated functions, namely:-

- (a) Ensuring segregation, collection, storage, transportation, processing and disposal of plastic waste;
- (b) ensuring that no damage is caused to the environment during this process;
- (c) ensuring channelization of recyclable plastic waste fraction to recyclers;
- (d) ensuring processing and disposal on non-recyclable fraction of plastic waste in accordance with the guidelines issued by the Central Pollution Control Board;
- (e) creating awareness among all stakeholders about their responsibilities;
- (f) engaging civil societies or groups working with waste pickers; and

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(g) ensuring that open burning of plastic waste does not take place.

(3) The local body for setting up of system for plastic waste management shall seek assistance of producers and such system shall be set up within one year from the date of final publication of these rules in the Official Gazette of India.

(4) The local body to frame bye-laws incorporating the provisions of these rules.

**5. Responsibility of Gram Panchayat-** (1) Every gram panchayat either on its own or by engaging an agency shall set up, operationalise and co-ordinate for waste management in the rural area under their control and for performing the associated functions, namely,-

- (a) ensuring segregation, collection, storage, transportation, plastic waste and channelization of recyclable plastic waste fraction to recyclers having valid registration; ensuring that no damage is caused to the environment during this process;
- (b) creating awareness among all stakeholders about their responsibilities; and
- (c) ensuring that open burning of plastic waste does not take place

**6. Responsibility of waste generator -** (1) The waste generator shall.-

- (a) take steps to minimize generation of plastic waste and segregate plastic waste at source in accordance with the Solid Waste Management Rules, 2000 or as amended from time to time.
- (b) not litter the plastic waste and ensure segregated storage of waste at source and handover segregated waste to urban local body or gram panchayat or agencies appointed by them or registered waste pickers', registered recyclers or waste collection agencies;

(2) All Institutional generators of plastic waste, shall segregate and store the waste generated by them in accordance with the Municipal Solid Waste (Management and Handling) Rules, 2000 notified vide S.O. 908(E) dated the 25th September, 2000 under the Act or amendment from time to time and handover segregated wastes to authorized waste processing or disposal facilities or deposition centers either on its own or through the authorized waste collection agency.

(3) All waste generators shall pay such user fee or charge as may be specified in the bye-laws of the local bodies for plastic waste management such as waste collection or operation of the facility thereof, etc.;

(4) Every person responsible for organizing an event in open space, which involves service of food stuff in plastic or multilayered packaging shall segregate and manage the waste generated during such events in accordance with the Municipal Solid Waste (Management and Handling) Rules, 2000 notified vide S.O. 908(E) dated the 25th September, 2000 under the Act or amendment from time to time.

**7. Responsibility of producers, Importers and Brand Owners** - (1) The producers, within a period of six months from the date of publication of these rules, shall work out modalities for waste collection system based on Extended Producers Responsibility and involving State Urban Development Departments, either individually or collectively, through their own distribution channel or through the local body concerned.

(2) Primary responsibility for collection of used multi-layered plastic sachet or pouches or packaging is of Producers, Importers and Brand Owners who introduce the products in the market. They need to establish a system for collecting back the plastic waste generated due to their products. This plan of collection to be submitted to the State Pollution Control Boards while applying for Consent to Establish or Operate or Renewal. The Brand Owners whose consent has been renewed before the notification of these rules shall submit such plan within one year from the date of notification of these rules and implement with two years thereafter.

(3) manufacture and use of non- recyclable multilayered plastic if any should be phased out in Two years' time.

(4) The producer, within a period of three months from the date of final publication of these rules in the Official Gazette shall apply to the state Pollution Control Board for grant of registration.

(5) No producer shall on and after the expiry of a period of Six Months from the date of final publication of these rules in the Official Gazette manufacture or use any plastic or multilayered packaging for packaging of commodities without registration from the concerned State Pollution Control Board.

(6) Every producer shall maintain a record of details of the person engaged in supply of plastic used as raw material to manufacture carry bags or plastic sheet or like or cover made of plastic sheet or multilayered packaging.

**8. Protocols for compostable plastic materials** -Determination of the degree of degradability and degree of disintegration of plastic material shall be as per the protocols of the Indian Standards listed in Schedule-I to these rules.(Annexure -I)

**9. Marking or labeling** -(1) Each plastic carry bag and multilayered packaging shall have the following information printed in English/Telugu/Hindi namely,-

- (a) name, registration number of the manufacturer and thickness in case of carry bag;
- (b) name and registration number of the manufacturer in case of multilayered packaging; and
- (c) name and certificate number [Rule 4(h)] in case of carry bags made from compostable plastic

(2) Each recycled carry bag shall bear a label or a mark "recycled" as shown below and shall conform to the Indian Standard: IS 14534: 1998 titled as "Guidelines for Recycling of Plastics", as amended from time to time;

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(3) Each carry bag made from compostable plastics shall bear a label "compostable" and shall conform to the Indian Standard : IS or ISO 17088:2008 titled as Specifications for "Compostable Plastics".

**10. Prescribed authority-** (1) The State Pollution Control Board shall be the authority for enforcement of the provisions of these rules relating to registration, manufacture of plastic products and multilayered packaging, processing and disposal of plastic wastes.

(2) The concerned Secretary-in-charge of Urban Development of the State shall be the authority for enforcement of the provisions of these rules relating to waste management by waste generator, use of plastic carry bags, plastic sheets or like, covers made of plastic sheets and multilayered packaging.

(3) The concerned Gram Panchayat shall be the authority for enforcement of the provisions of these rules relating to waste management by the waste generator, use of plastic carry bags, plastic sheets or like, covers made of plastic sheets and multilayered packaging in the rural area of the State.

(4) The authorities referred to in sub-rules (1) to (3) shall take the assistance of the District Magistrate or the Deputy Commissioner within the territorial limits of the jurisdiction of the concerned district in the enforcement of the provisions of these rules.

**11. Registration of producer, recyclers and manufacturer-** (1) No person shall manufacture carry bags or recycle plastic bags or multilayered packaging unless the person has obtained a registration from the State Pollution Control Board prior to the commencement of production;

(2) Every producer shall, for the purpose of registration or for renewal of registration, make an application to the State Pollution Control Board in **Form I** (Annexure-II)

(3) Every person recycling or processing waste or proposing to recycle or process plastic waste shall make an application to the State Pollution Control Board for grant of registration or renewal of registration for the recycling unit, in **Form II**. (Annexure-III)

(4) Every manufacturer engaged in manufacturer of plastic to be used as raw material by the producer shall make an application to the State Pollution Control Board for the grant of registration or for the renewal of registration, in **Form III**. (Annexure-IV)

(5) The State Pollution Control Board shall not issue or renew registration to plastic waste recycling or processing units unless the unit possesses a valid consent under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) long with a certificate of registration issued by the District Industries Centre or any other Government agency authorized in this regard.

(6) The State Pollution Control Board shall not renew registration of producer unless the producer possesses and action plan endorsed by the Secretary in charge of Urban Development of the concerned State for setting of plastic waste management system.

(7) On receipt of the application completed in all respects for the registration for recycling or processing of plastic waste under sub-rule (3), the State Pollution Control Board may, after such inquiry as it considers necessary and on being satisfied that the applicant possesses appropriate facilities, technical capabilities and equipment to handle plastic waste safely, may grant registration to the applicant on fulfilment of the conditions as may be laid down in terms of registration.

(8) Every State Pollution Control Board shall take a decision on the grant of registration within ninety days of receipt of an application which is complete in all respects.

(9) The registration granted under this rule shall initially be valid for a period of one year, unless revoked, suspended or cancelled and shall subsequently be granted for three years.

(10) State Pollution Control Board shall not revoke, suspend or cancel registration without providing the opportunity of a hearing to the producer or person engaged in recycling or processing of plastic wastes.

(11) Every application for renewal of registration shall be made at least one hundred twenty days before the expiry of the validity of the registration certificate.

**12. Responsibility of retailers and street vendors-** (1) Retailers or street vendors shall not sell or provide commodities to consumer in carry bags or plastic sheet or multilayered packaging, which are not manufactured and labeled or marked, as prescribed under these rules.

(2) Every retailers or street vendors selling or providing commodities in, plastic carry bags or multilayered packaging or plastic sheets or like or covers made of plastic sheets which are not manufactured or labeled or marked in accordance with these rules shall be liable to pay such fines as specified under the bye-laws of the local bodies.

**13. Explicit pricing of carry bags-**(1) The shopkeepers and street vendors willing to provide plastic carry bags for dispensing any commodity shall register with local body. The local body shall, within a period of six months from the date of final publication of these rules in the Official Gazette of India notification of these rules, by notification or an order under their appropriate state statute or byelaws shall make provisions for such registration on payment of plastic waste management fee of minimum rupees forty eight thousand @ rupees four thousand per month. The concerned local body may prescribe higher plastic waste management fee, depending upon the sale capacity. The registered shop keepers shall display at prominent place that plastic carry bags are given on payment.

(2) Only the registered shopkeepers or street vendors shall be eligible to provide plastic carry bags for dispensing the commodities.

(3) The local body shall utilize the amount paid by the customers for the carry bags exclusively for the sustainability of the waste management system within their jurisdictions.

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**14. State Level Monitoring Committee-** (1) The State government shall, for the purpose of effective monitoring of implementation of these rules, constitute a State Level Advisory Committee consisting of the following persons, namely:-

a	The Secretary, Department of Urban Development	Chairman
b	Director from State Department of Environment	Member
c	Member Secretary from State Pollution Control Board	Member
d	Municipal Commissioner	Member
e	One expert from Local Body	Member
f	One expert from Non-Governmental involved in Waste Management	Member
g	Commissioner, Value Added Tax or his nominee	Member
h	Sales Tax Commissioner or Officer	Member
i	Representative of Plastic Association, Drug Manufacturers Association, Chemical Manufacturers Association	Member
j	One expert from the field of Industry	Member
k	One expert from the field of academic institution	Member
l	Director, Municipal Administration	Convener

The State Level Advisory Body shall meet at least once in Six Month and may invite experts, if it considers necessary.

**15. Annual reports** -(1) Every person engaged in recycling or processing of plastic waste shall prepare and submit an annual report in **Form-IV** to the local body concerned under intimation to the concerned State Pollution Control Board by the 30th April, of every year. (Annexure-V)

(2) Every local body shall prepare and submit an annual report in **Form -V** to the concerned Secretary In-charge of the Urban Development Department under intimation to the concerned State Pollution Control Board by the 30th June, every year. (Annexure-VI)

(3) Each State Pollution Control Board or Pollution Control Committee shall prepare and submit an annual report in **Form VI** to the CPCB on the implementation of these rules by the 31st July, of every year. (Annexure-VII)

(4) The CPCB shall prepare a consolidated annual report on the use and management of plastic waste and forward it to the Central Government along with its recommendations before the 31st August of every year.

**16. District Level Committees:**

The District Level Committee under Chairmanship of District Collector with the following members to Implement Plastic Waste (Management & Handling) Rules, 2016 is constituted with the following members:-

- All the Commissioners of Municipal Corporations/Municipalities in the Districts.
- The General Manager, District Industries Centre.
- A NGO working in the field of Plastic Waste Management.
- A representative from Plastic Manufacturing Association/Plastic Distribution Agency.
- The Regional Officer, Telangana State Pollution Control Board -- Member Convener.

**17. Levy of Penalties:** The following penalties will be levied in accordance with Acts and Rules in force:-

- a) The manufacturing units, found to be violating the rules, relating to manufacture, recycling, thickness and marking, shall be fined Rs.50,000/- for the first offence and the license/consent of the unit shall be cancelled for the subsequent offence in addition to confiscating the machinery used for the manufacture;
- b) The retailers, vendors and other establishments found to be violating the rules, relating to the use of plastic carry bags of banned category, shall be fined Rs.2,500/- to 5,000/- for the first offence and the trade license of the violator shall be cancelled for the subsequent offence, under relevant Municipal Laws and shops and Establishments Act;
- c) The individuals found to be littering public places with plastic bags shall be fined Rs.250/- to 500/- per offence.

**18.** These orders shall come into force with immediate effect.

**19.** Copy of this order is available on Internet and can be accessed at [goir.telangana.gov.in](http://goir.telangana.gov.in)

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

B.R. MEENA  
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Member Secretary, Telangana Pollution Control Board, Hyderabad  
All the District Collectors in the Telangana State.

Copy to:

The Municipal Administration and Urban Development Department.  
The Industries & Commerce Department.  
The Revenue (Endowment) Department.  
The Food & Civil Supplies Department.  
The Animal Husbandry, Dairy Development & Fisheries Department.  
The Information & Technology Communication Department.  
The Commissioner, Endowment Department  
The Commissioner of Police Hyderabad.  
The Commissioner of GHMC, Hyderabad.  
The Metropolitan Commissioner, HMDA, Hyderabad.  
The Member Secretary, A.P. Pollution Control Board, Hyderabad.  
The P.S. to Addl. Secretary to Chief Minister/ Minister (FES&T) /C.S.  
The P.S. to Principal, Secretary.  
S.f./S.c.

//FORWARDED :: BY ORDER//

*Venita*  
SECTION OFFICER  
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GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Department - Imposing of Ban on short life PVC and Chlorinated plastics in the State of Telangana - Draft notification - Issued.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (FOR.III) DEPARTMENT

G.O.Ms.No. 28

Dated: 10-07-2017

Read the following:-

1. Government of India, Ministry of Environment, Forest and Climate Change Notification No. G.S.R. 320 (E), dt. 18.03.2016 notifying the Plastic Waste Management Rules, 2016.
2. Government of India, Ministry of Environment, Forest and Climate Change Notification No. S.O. 1357(E), dt. 08.04.2016 notifying the Solid Waste Management Rules, 2016.
3. G.O. Ms. 79, E.F.S. & T. (For.III), Dept., Dated 30.12.2016.
4. Orders of Hon'ble NGT, New Delhi, dt. 22.12.2016 in OA No. 199/2014 filed by Mrs. Almitra H. Patel.
5. From the MS, TSPCB, Hyderabad, letter No. TSPCB/MSW/U-IV/NGT-199/2016-3103, dt. 14.02.2017.

\*\*\*\*

ORDER:

In exercise of the powers conferred by sections 3,6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Plastic Waste (Management & Handling ) Rules, 2011, the Central Government notified Plastic Waste Management Rule, 2016 under Environment (Protection) Act, 1986. Similarly, in supersession of the Municipal Solid Waste (Management & Handling) Rules, 2000, the Central Government notified Solid Waste Management Rules, 2016 under Environment (Protection) Act, 1986.

2. In the G.O. 3<sup>rd</sup> read above orders were issued for implementation of Plastic Waste Management Rules, 2016 and ban on Manufacture, Stock, Sale and Use of plastic carry bags less than 50 microns in thickness.

The Hon'ble National Green Tribunal, Principal Bench, New Delhi vide its orders 4<sup>th</sup> read above, directed that :-

*" The MoEF&CC, and the State Governments to consider and pass appropriate directions in relation to ban on short life PVC and chlorinated plastics as expeditiously as possible and, in any case, not later than six months from the date of pronouncement of this judgment."*

The Member Secretary, Telangana State Pollution Control Board vide letter 5<sup>th</sup> read above requested the Government to issue necessary orders, in view of the orders of Hon'ble National Green Tribunal.

Government have decided to impose ban on short life PVC and Chlorinated Plastics in the State of Telangana. Accordingly, the following draft notification is published in the Extraordinary issue of the official Gazette of the State of Telangana for information of all persons likely to be affected thereby and notice is hereby given that the said draft will be taken into

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consideration after the expiry of a period sixty days from the date on which copies of the Telangana State Official Gazette containing this notification are made available to the public together with any objections or suggestions that may be received in respect thereto within the stipulated period.

Objections or suggestions in this behalf should be addressed to the Member Secretary, Telangana State Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad-500018.

DRAFT NOTIFICATION

In exercise of the powers conferred under section 5 read with section 23 of the Environment (Protection) Act, 1986 read with sub rule (3) of rule 5 of Environment (Protection) Rules, 1986 and in compliance of the judgment, dated 22.12.2016 pronounced by the Hon'ble National Green Tribunal in Original Application No.199 of 2014, the Government of Telangana hereby order that there shall be complete ban on usage of short life PVC and chlorinated plastics.

6. This notification shall come into force on the date of its final publication in the extraordinary issue of the official Gazette of the State of Telangana.

7. Copy of this order is available on Internet and can be accessed at [www.goir.telangana.gov.in](http://www.goir.telangana.gov.in).

( BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

Dr. RAJAT KUMAR  
PRINCIPAL SECRETARY TO GOVERNMENT

To  
The Commissioner, Printing & Stationery, Chanchalguda for notification of the above G.O. in the Extraordinary issue of State Gazette.  
All District Collectors, in the State.  
All Departments of Secretariat.  
The Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad.  
The Metropolitan Commissioner, Hyderabad Metropolitan Development Authority, Hyderabad.  
The Commissioner, Endowment Department.  
The Commissioner, Panchayat Raj Department.  
The Commissioner of Police, Hyderabad.  
The Member Secretary, Telangana State Pollution Control Board, Hyd.  
Copy to:  
The Secretary to Chief Minister (SS)  
The P.S. to Minister (EFS&T).  
The P.S. to Chief Secretary.  
The Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.  
The Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, Allganj, New Delhi-110003.  
The Law (C) Department, T.S. Secretariat, Hyderabad.  
S/F & S/C

// FORWARDED :: BY ORDER//

SECTION OFFICER

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ANNEXURE - IX

GOVERNMENT OF TELANGANA  
ABSTRACT

HM&FW Dept – Telangana State Pollution Control Board (TSPCB) - Bio Medical Waste Management Rules 2016 – Constitution of Advisory Committee for implementation of the provisions of the Bio Medical Waste Management Rules, 2016 - Orders – Issued.

HEALTH, MEDICAL & FAMILY WELFARE (C2) DEPARTMENT

G.O.Bt.No. 329

Dated: 15-04-2017

Read:

From the Member Secretary, TSPCB, Sanathnagar, Hyderabad,  
Lr. No. Gen.5/TSPCB/Unit-III/AC/2016-3126, dt. 15-2-2017.

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**ORDER:**

In the circumstances reported by the Member Secretary, Telangana State Pollution Control Board, Sanathnagar, Hyderabad in the reference read above, Government hereby constitutes a Committee with the following members for implementation of the provisions of the Bio Medical Waste Management Rules, 2016.

The Advisory Committee consists of the following Members:

1	The Spl. C.S. / Principal Secretary to Government, HM&FW, Telangana State	Chairman
2	The Principal Secretary to Government, Environment, Forest Science & Technology Department, Telangana State	Member
3	Special Secretary / Additional (Env.) to Govt, EFS&T Department, Telangana State	Member
4	Commissioner, T.S. Valdya Vidhana Parishad (TSVVP), Telangana State	Member
5	Commissioner, Greater Hyderabad Municipal Corporation, Hyderabad	Member
6	Commissioner & Director, Municipal Administration, Telangana State	Member
7	Director of Medical Education, Telangana State	Member
8	Director of Health, Telangana State, Hyderabad	Member
9	Director, Animal Husbandry, Telangana State	Member
10	President / General Secretary, Telangana Hospitals & Nursing Homes Association (THANA)	Member
11	President / General Secretary, IMA, Telangana State	Member
12	One representative from NGO (To be nominated by EFS&T Department)	Member
13	President / General Secretary, Telangana CBMWTF Association, Telangana State	Member
14	Member Secretary, Telangana State Pollution Control Board	Member-Convener

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The Member Secretary, Telangana State Pollution Control Board (TSPCB) Hyderabad, shall take necessary action accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

RAJESHWAR TIWARI  
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To  
The Member Secretary, Telangana State Pollution Control Board, Hyderabad  
The Director of Medical Education, T.S., Hyderabad  
The Commissioner, Telangana Vaidya Vidhana Parishad, Hyderabad  
The Director of Public Health & Family Welfare, Hyderabad  
The Members concerned through Telangana State Pollution Control Board,  
Hyderabad

Copy to:  
OSD to Minister (HM&FW)  
P.S. to Spl. C.S. to Govt, HM&FW Dept

// FORWARDED :: BY ORDER //

SECTION OFFICER

212

ANNEXURE-X

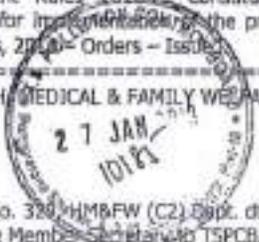
1 (0)

GOVERNMENT OF TELANGANA  
ABSTRACT

HMBFW Dept. - Telangana State Pollution Control Board (TSPCB) - Bio Medical Waste Management Rules, 2016 - Constitution of District Level Monitoring Committee (DLC) for implementation of the provisions of the Bio Medical Waste Management Rules, 2016 - Orders - Issue

HEALTH, MEDICAL & FAMILY WELFARE (C2) DEPARTMENT

G.O.Rt.No. 28



Dated: 16/01/2018

Read the following:

1. G.O.Rt.No. 320/HMBFW (C2) Dept. dt. 15.04.2017
2. From the Member Secretary, TSPCB, Lr. No. Gen 5/TSPCB/ BMW/AC/2015-2399, Dt. 06.11.2017

Handwritten notes: 14, 27, 2018, and a signature.

ORDER :

In the circumstances reported by the Member Secretary, Telangana State Pollution Control Board, Santhnagar, Hyderabad in the reference 2<sup>nd</sup> read above, the Govt. after careful examination of the matter hereby constitute District Level Monitoring Committee (DLC) with the following members for implementation of the provisions of the Bio Medical Waste management Rules, 2016.

Handwritten notes: On file or not, and a signature.

1	The Collector and District Magistrate	Chairman
2	The Concerned Regional Officer of Telangana State Pollution Control Board (TSPCB)	Member
3	The Executive Engineer, Public Health Engineering Department	Member
4	The Municipal Commissioner(s) in the District	Member
5	The Representative of Indian Medical Association	Member
6	The Representative of Telangana Hospitals & Nursing Homes Association (THANA)	Member
7	The Superintendent and Hospital Administrator of the District Hospital	Member
8	One or Two experts in the field of Bio-Medical Waste Management (To be nominated by the District Collector)	Member
9	The Representative (s) of Common Bio-Medical Waste Treatment Facility (s) operating in the district	Member
10	The District Medical and Health Officer	Member-Convener

Handwritten notes: Ee (conv) power, and a signature.

2. The District Level Monitoring Committee shall submit its report once in six months to the State Advisory Committee and under intimation to the Telangana State Pollution Control Board for taking further necessary action.

3. The Member Secretary, Telangana State Pollution Control Board (TSPCB), Hyderabad, shall take necessary action accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

A. SANTI KUMARI  
PRINCIPAL SECRETARY TO GOVERNMENT

To  
All District Collectors in the State of Telangana.  
All District Medical & Health Officers, in the State of Telangana  
All the Members concerned through DM&HOs concerned.

Copy to:  
The Member Secretary, Telangana State Pollution Control Board, Hyderabad  
The Director of Medical Education, T.S., Hyderabad  
The Commissioner, Telangana Valdyia Vidhara Parishad, Hyderabad  
The Director of Public Health & Family Welfare, Hyderabad  
OSO to Minister (HM&PW)  
P.S. to Principal Secretary to Government, HM&PW Dept

// FORWARDED :: BY ORDER //

Handwritten signature and text: SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Department - Constitution River Rejuvenation Committee - Orders - Issued .

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (FOR.III) DEPARTMENT

G.O.Rt.No. 191

Dated: 29-11-2018  
Read the following:-

- 1) Orders of Hon'ble NGT, (Principal Bench), New Delhi, Dated.20.9.18 in O.A.No.673 of 2018.
- 2) From the M.S., TSPCB, Hyd., Lr.No.680/TSPCB /LAB /RRC /2018-2304, dated: 23.10.2018.

\*\*\*\*\*

**ORDER:**

The Member Secretary, Telangana State Pollution Control Board, Hyderabad in his letter 2<sup>nd</sup> read above, with reference to the orders of Hon'ble NGT 1<sup>st</sup> read above has reported that the following directions are issued by Hon'ble NGT, Principal Bench, New Delhi:

- i. All States and Union Territories are directed to prepare action plans within two months for bringing all the polluted river stretches to be fit at least for bathing purposes (i.e BOD<3 mg/L and FC <500 MPN/100ml) within Six months from the date of finalization of the action plans.
- ii. The action plans may be prepared by four- member Committee comprising, Director, Environment, Director, Urban Development, Director, Industries, Member Secretary, State Pollution Control Board of concerned State. This Committee will also be the Monitoring Committee for execution of the action plan. The Committee may be called "River Rejuvenation Committee" (RRC). The RRC will function under the overall supervision and coordinate on of Principal Secretary, Environment of the concerned State/Union Territory.
- iii. The action plan will include components like identification of polluting sources including functioning/ status of STPs/ETPs/CETP and solid waste management and processing facilities, quantification and characterisation of solid waste, trade and sewage generated in the catchment area of polluted river stretch. The action plan will address issues relating to; ground water extraction, adopting good irrigation practices, protection and management of Flood Plain Zones (FPZ), rain water harvesting, ground water charging, maintaining minimum environmental flow of river and plantation on both sides of the river. Setting up of biodiversity parks on flood plains by removing encroachment shall also be considered as an important component for river rejuvenation. The action plan should focus on proper interception and diversion of sewage carrying drains to the Sewage Treatment Plant (STP) and emphasis should be on utilization of treated sewage so as to minimize extraction of ground or surface water. The action plan should have speedy, definite or specific timelines for execution of steps. Provision may be made to pool the resources, utilizing funds from State budgets, local bodies, State Pollution Control Board/ Committee and out of Central Schemes.

P.T.O

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- iv. The Action Plans may be subjected to a random scrutiny by a task team of the CPCB.
  - v. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate action plan, as directed.
  - vi. All States and Union Territories are required to send a copy of Action Plan to CPCB especially w.r.t Priority I & Priority II stretches for approval.
  - vii. The States and the Union Territories concern are directed to set up Special Environment Surveillance Task Force, comprising nominees of District Magistrate, Superintendent of Police, Regional Officer of State Pollution Control Board and one person to be nominated by District Judge in his capacity as Chairman of Legal Services Authority on the pattern of direction of this Tribunal dated 07.08.2018, in Original Application No. 138/2016 (TNHRC), "Stench Grips Mansa's Sacred Ghaggar River (Suo-Motu Case).
  - viii. The Task Force will also ensure that no illegal mining takes place in river beds of such polluted stretches.
  - ix. The RRC will have a website inviting public participation from educational institutions, religious institutions and commercial establishments. Achievement and failure may also be published on such website. The Committee may consider suitably rewarding those contributing significantly to the success of the project.
  - x. The RRCs will have the authority to recover the cost of rejuvenation in Polluter Pays Principle from those who may be responsible for the pollution, to the extent found necessary. In this regard, principle laid down by this Tribunal in order dated 13.07.2017 in O.A.No.200 of 2014, M.C Mehta Vs. U.O.I will apply. Voluntary donations, CSR contribution, voluntary services and private participation may be considered in consultation with the RRC.
2. The Member Secretary, Telangana State Pollution Control Board (TSPCB), Hyderabad in his letter 2<sup>nd</sup> read above has therefore requested the Government to constitute River Rejuvenation Committee with Director, Environment, Director, Urban Development, Director, Industries, Member Secretary, State Pollution Control Board for the State of Telangana for preparation and execution of action plans.

3. Government after careful consideration of the recommendation of the Member Secretary, Telangana State Pollution Control Board (TSPCB), hereby constitute the "River Rejuvenation Committee" for preparation and execution of action plans, with the following members for complying with the directions of the Hon'ble NGT at para (1) above:

1.	Chief Secretary to Government.	Chairman
2.	Spl.C.S /Pri. Secy/ Secy, Environment, Forests, Science and Technology Department.	Vice - Chairman
3.	Member Secretary, Telangana State Pollution Control Board.	Member Convenor

4.	Director General, Environment Protection Training and Research Institute.	Member
5.	Spl.C.S./ Prl. Secy/Secy, Municipal Administration and Urban Development Department.	Member
6.	Spl.C.S./ Prl. Secy/Secy, Industries Department.	Member
7.	M.D., Hyderabad Metropolitan Water Supply Sewage Board (HMWSSB).	Member
8.	M.D., Telangana State Industrial Infrastructure Corporation (TSIIC).	Member
9.	Principal Secretary to Government, Finance Department.	Member

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

AJAY MISRA  
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To  
The Chief Secretary, Government of Telangana.  
The Spl.C.S /Prl. Secy/ Secy, Environment, Forests, Science and Technology Department.  
The Member Secretary, Telangana State Pollution Control Board, Hyderabad.  
The Director General, Environment Protection Training and Research Institute, Hyderabad.  
The Spl.C.S./ Prl. Secy/Secy, Municipal Administration and Urban Development Department, Telangana State Secretariat, Hyderabad.  
The Spl.C.S./ Prl. Secy/Secy, Industries and Commerce Department, Telangana State Secretariat, Hyderabad.  
The Managing Director, Hyderabad Metropolitan Water Supply Sewage Board (HMWSSB), Hyderabad.  
The Managing Director, Telangana State Industrial Infrastructure Corporation (TSIIC), Hyderabad.  
The Principal Secretary to Finance Department, Telangana State Secretariat, Hyderabad.  
SF/SC.

// FORWARDED :: BY ORDER //

SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Deptt., - Constitution of Air Quality Monitoring Committee (AQMC) for preparation and implementation of Action Plan for attaining Ambient Air Quality(AAQ) for lowering of Air Pollution places of Hyderabad, Patancheru and Nalgonda, as per the orders of the NGT, dated:8.10.2018 in O.A.No.681 of 2018 - Orders - Issued .

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (FOR.III) DEPARTMENT

G.O.Rt.No. 182

Dated: 20-11-2018

Read the following:-

- 1) Orders of Hon'ble NGT, Dated.8.10.18 in O.A.No.681 of 2018.
- 2) Letter from the Regional Director, CPCB, Regional Directorate, Bengaluru, Tech/163/non-attainment/RDS/2018-19/1289, Dt.12.10.2018.
- 3) From the M.S., TSPCB, Hyd., Lr.No.93 /TSPCB /LAB/EPCA /2018-2494, dated: 9.11.2018.

\*\*\*\*\*

**ORDER:**

The Member Secretary, Telangana State Pollution Control Board, Hyderabad in his letter 3<sup>rd</sup> read above, with reference to the orders of Hon'ble NGT 1<sup>st</sup> read above and also as per the correspondence of CPCB 2<sup>nd</sup> read above has reported that the following directions are issued by the Hon'ble NGT in respect of Air Quality:

- i) all the states and union territories with nonattainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within 6 months from date of finalisation of the action plans;
- ii) the action plan may be prepared by 6 member committee comprising of Directors of Environment, Transport, Industries, Urban Development Agriculture and Member Secretary, State Pollution Control Board or committee of the concerned state/Union Territory. The committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring inter-sectoral coordination;
- iii) the action plans may take into account the GRAP, the CAP and the Action Plan prepared by CPCB as well as all other relevant factors. The action plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the committee as directed in Direction number vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution shall also consider measures for strengthening of ambient air quality monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools colleges and other academic Institutions and awareness programs;
- iv) the Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution;

(P.T.O)

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- v) the Action plan should be consistent with the carrying capacity assessment of the non-attainment cities in terms of vehicular pollution, Industrial emissions and population density, extent of construction and construction activities etc., The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc., Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment;
- vi) the committee shall examine the action plans and on the recommendation of the committee the Chairman, CPCB shall approve the same by 31-01-2019;
- vii) the Chief Secretaries of the State and Administrators/Advisors to Administrators of the union territories will be personally accountable for failure to formulate action plans, as directed;
- viii) the CPCBs, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS;
- ix) the CPCB and all the State Pollution Control Boards and Pollution Control Committees shall collectively workout and design a robust Nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all 12 notified parameters as per Notification No. B-29016/20/90 /PCI-L dated 18th November 2009 of CPCB. The Continuous Ambient Air Quality Monitoring stations should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite Action Plan with timelines for its execution which shall not be more than 3 months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals at least on weekly basis and ambient air quality on continuous basis on e-portal. MOEF&CC will provide the requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, MoRTH, Ministry of Petroleum and Natural Gas, Ministry of Agriculture Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country.

2. The Member Secretary, Telangana State Pollution Control Board (TSPCB) has also informed that Central Pollution Control Board (CPCB) prepared a list of non-attainment cities/towns based on the Ambient Air Quality (AAQ) data for the years 2011-2015. According to which Telangana state is having three non-attainment cities/towns viz., Hyderabad, Nalgonda and Patancheruvu. An action plan for lowering the air pollution in Hyderabad is under implementation. In Telangana state 3 non attainment cities / town are listed by CPCB as per the AAQ data from the year 2011 to 2015.

3. The Member Secretary, Telangana State Pollution Control Board (TSPCB) has therefore requested for constitution of the Air Quality Monitoring Committee (AQMC) at the earliest for reviewing and fine tuning of the existing action plan for Hyderabad and Patancheruvu with the latest developments has to be taken up along with the preparation of action plan for Nalgonda City, to enable the state to comply with the directions of the Hon'ble NGT in their orders 1<sup>st</sup> read above.

:3:

4. Accordingly, Government, hereby constitute the Air Quality Monitoring Committee (AQMC) with the following members for reviewing and fine tuning of the existing action plan for Air Quality for Hyderabad, Patancheru with latest developments and preparation of action plan for Nalgonda city:

- |  |                  |
|--|------------------|
| 1. Director General, Environment, Protection Training Research Institute, Hyderabad.   | - Member         |
| 2. Commissioner / Director of Transport, Hyderabad.                                    | -Member          |
| 3. Commissioner/Director of Industries, Hyd.   | -Member          |
| 4. Commissioner/Director of Municipal Administration and Urban Development, Hyderabad. | -Member          |
| 5. Commissioner/Director, of Agriculture, Hyderabad.                                   | -Member          |
| 6. Member Secretary, Telangana State Pollution Control Board, Hyderabad.               | -Member Convener |

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

AJAY MISRA  
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To

The Member Secretary, Telangana State Pollution Control Board, Hyderabad.  
The Director General, Environment Protection Training and Research Institute, Hyderabad.

The Commissioner / Director of Transport, Hyderabad.

The Commissioner/Director of Industries, Hyderabad.

The Commissioner/Director of Urban Development, Hyderabad.

The Commissioner/Director, of Agriculture, Hyderabad.

Copy to:

P.S. to C.S.,

P.S., to Spl. C.S., EFS&T Deptt.,

The TR&B Deptt., Telangana State, Secretariat, Hyderabad.

The Industries & Commerce Department Telangana State, Secretariat, Hyderabad.

The Municipal Administration & Urban Development Department, Telangana State, Secretariat, Hyderabad.

The Agriculture & Cooperation Deptt., Telangana State, Secretariat, Hyderabad.

The Central Pollution Control Board, Regional Directorate of (South) "Nisarga Bhawan", 1<sup>st</sup> Floor, Thimmalah Road, 7<sup>th</sup> 'D' Cross, Shivanagar, Bengaluru- 560079.

SF/SC

//FORWARDED :: BY ORDER//

SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Department - Constitution of District Level Air Quality Monitoring Committee for implementation of the Action Plan in HMDA Area and Nalgonda District - Reg.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (FOR.III) DEPARTMENT

G.O.Rt.No.33

Dated:14-3-2019.  
Read the following:-

1. Orders of the Hon'ble NGT, dated: 8.10.2018 in O.A.No.681 of 2018.
2. From the M.S., TSPCB, Hyd., Lr.No.93/ TSPCB/LAB /EPCA /2018-2494, dated: 9.11.2018.
3. G.O.Rt.No.182, EFS&T (For.III) Deptt., dated: 20.11.2018.
4. Minutes of the 2<sup>nd</sup> AQMC Meeting held on 23<sup>rd</sup> January, 2019.
5. From the M.S., TSPCB, Hyd., letter No.93/ TSPCB /LAB /EPCA/2018-3139, dated: 04.02.2019.

\*\*\*\*\*

**ORDER:**

As per the orders of the Hon'ble NGT 1<sup>st</sup> read above, The Member Secretary, Telangana State Pollution Control Board (TSPCB) has also informed that Central Pollution Control Board (CPCB) prepared a list of non-attainment cities/towns based on the Ambient Air Quality (AAQ) data for the years 2011-2015. According to which Telangana state is having three non-attainment cities/towns viz., Hyderabad, Nalgonda and Patancheru. An action plan for lowering the air pollution in Hyderabad is under implementation. In Telangana state 3 non attainment cities / town are listed by CPCB as per the AAQ data from the year 2011 to 2015. The Member Secretary, Telangana State Pollution Control Board (TSPCB) has therefore, requested the Government for constitution of the Air Quality Monitoring Committee (AQMC) at the earliest for reviewing and fine tuning of the existing action plan for Hyderabad and Patancheru with the latest developments has to be taken up along with the preparation of action plan for Nalgonda City, to enable the state to comply with the directions of the Hon'ble NGT in their orders 1<sup>st</sup> read above.

2. Accordingly, Government have constituted the Air Quality Monitoring Committee with six members vide G.O. 3<sup>rd</sup> read above.

3. The Member Secretary, Telangana State Pollution Control Board in his letter 5<sup>th</sup> read above as per the minutes of the 2<sup>nd</sup> AQMC meeting held on 23.1.2019 has requested the Government to constitute the District Level Monitoring committee in the GHMC area headed by the District Magistrates and with senior officers from the Department concerned to in put the progress and to ensure smooth implementation of the plan for Air Quality Management.

P.T.O

4. Accordingly, Government herewith constitute the District Level Monitoring Committee for Air Quality Management the following members for the Districts Hyderabad, Medchal, Rangareddy, Sangareddy, Medak, Yadadri and Siddipet Districts and Nalgonda District with the following Members:

1.	The District Collector, Magistrate of the District Concerned.	Chairman
2.	Nominee of the Regional RTA of the District Concerned.	Member
3.	Nominee of the officer of the traffic police Department of the district concerned.	Member
4.	Nominee of the civil supplies department of the district concerned .	Member
5.	Nominee from the Industries Department of the district concerned.	Member
6.	Nominees of the GHMC to the District concerned falling within jurisdiction of the GHMC .	Member
7.	Nominees of the HMDA to the District concerned falling within jurisdiction of the HMDA.	Member
8.	Nominees of the CDMA to the District concerned falling within jurisdiction of the CDMA .	Member
9.	Representative from the Legal Metrology of the Concerned District	Member
10.	Representative from state level oil co-ordinator.	Member
11.	Representative from Bhagyanagar Gas Limited.	Member
12.	The Regional Officer, TSPCB of the District Concerned.	Member Convenor

5. The above District Level Monitoring Committee shall ensure the implementation of the Action Plan and Air Quality at District Level.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

AJAY MISRA  
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To

The Member Secretary, Telangana State Pollution Control Board,  
Hyderabad.

The District Collector, Magistrate of the District  
Concerned.

The Regional RTA of the District Concerned.  
The Commissioner, Transport, Hyderabad.

The Director General of Police and Superintendent of Polices  
of the District Concerned (Traffic Police),

The Commissioner, & E.O. Secretary, Consumer Affairs, Food  
& Civil Supplies Department, Govt. of Telangana.

The Commissioner, Greater Hyderabad Municipal Corporation  
(GHMC), Hyderabad.

The Metropolitan Commissioner, Hyderabad Metropolitan  
Development Authority (HMDA), Hyderabad.

The Commissioner & Director, Municipal Administration  
(CDMA), 640, AC Gudards, Masab Tank, Opp. RTI  
Building, Hyderabad.

The Addl. DGP & Controller, Legal Metrology, 209,  
P.W.D. Buildings, Gandhinagar, Hyderabad.

The State Level Co-ordinator for Oil Industry Telangana  
State, C/o HPCL, 4<sup>th</sup> Floor, Sebastian Street-5, sarojinidevi  
Road, PB No.5, Secunderabad-500003.

The Managing Director, M/s. Bhagyanagar Gas Ltd., Parisram  
Bhavan, APIDC Building, Basheerbagh, Hyderabad.

through  
M.S., TSPCB,  
Hyderabad

// FORWARDED :: BY ORDER //

  
SECTION OFFICER

GOVERNMENT OF TELANGANA  
ABSTRACT

EFS&T Department - Constitution of a Committee for preparation of Action Plan for restoration of environmental Qualities with regard to the identified polluted industrial clusters - Orders - Issued.

ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (For.III) DEPARTMENT

G.O.Rt.No.2

Dated: 10.01.2019  
Read the following.

1. Orders of Hon'ble NGT, New Delhi, Dt.13-12-2018 in O.A.No.1038/2018.
2. From the MS, TSPCB, mail received, dt.8.1.2019.

\*\*\*\*

**ORDER:**

The Member Secretary, Telangana State Pollution Control Board (TSPCB) in his letter 2<sup>nd</sup> read above, has brought to the notice of the Government that, the Hon'ble NGT in its orders 1<sup>st</sup> read above, have directed to the State Pollution Control Boards /Committees to finalize the time bound action plans with regard to identified polluted industrial clusters in accordance with the revised norms laid down by the Central Pollution Control Board (CPCB) to restore environmental qualities within the norms. Such action plan be finalized within three months from the date of receipt of copy of the orders of the NGT. The action plan to be prepared in the States may be done by the Committee constituted by the Chief Secretary within one month. It is also laid down that the final preparation of the Action Plan including its execution may be overseen by the Chief Secretary of the State concerned.

2. Accordingly, the Member Secretary, Telangana State Pollution Control Board has requested to constitute the committee for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution clusters with the following members:

- |      |  |                     |
|------|--|---------------------|
| i)   | Special Chief Secretary / Principal Secretary / Secretary to Govt., EFS&T Department, Government of Telangana. | - Chairman.         |
| ii)  | Commissioner / Director of Industries, Govt of Telangana.  | - Member            |
| iii) | Representative of Medical, Health & Family Welfare Department  | - Member            |
| iv)  | VC&MD, TSIIC, Govt of Telangana.   | - Member            |
| v)   | MD, HMWS&SB, Govt of Telangana.  | - Member            |
| vi)  | Commissioner, PR&RD Department   | - Member            |
| vii) | Member Secretary, Telangana State Pollution Control Board, Hyderabad.  | - Member - Convener |

:2:

3. Government after careful consideration of the above request of the Member Secretary, Telangana State Pollution Control Board hereby constitute the committee for preparation of Action Plan for restoration of environmental qualities in respect of identified pollution clusters with the following members:

- |      |   |                        |
|------|---|------------------------|
| i)   | Special Chief Secretary/Principal Secretary / Secretary to Government, EPS&T Department, Government of Telangana. | - Chairman.            |
| ii)  | Commissioner / Director of Industries, Govt of Telangana.   | - Member               |
| iii) | Representative of Health, Medical, & Family Welfare Department  | - Member               |
| iv)  | VC&MD, TSIIC, Govt of Telangana.  | - Member               |
| v)   | MD, HMWS&SB, Govt of Telangana.   | - Member               |
| vi)  | Commissioner, PR&RD Dept.   | - Member               |
| vii) | Member Secretary, TSPCB, Hyderabad.   | - Member -<br>Convenor |

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

AJAY MISRA  
SPECIAL CHIEF SECRETARY TO GOVERNMENT (FAC)

To  
The Special Chief Secretary / Pri. Secretary / Secretary to Govt., EPS&T Department, Government of Telangana.  
The Commissioner / Director of Industries, Government of Telangana.  
The Health Medical, & Family Welfare Department, Telangana State Secretariat, Hyderabad.  
The Vice Chairman & Managing Director, Telangana State Industrial Infrastructure Corporation, Government of Telangana, Hyderabad.  
The Managing Director, Hyderabad Metropolitan Water Supply and Sewerage Board, Government of Telangana, Hyderabad.  
The Commissioner, Panchayat Raj and Rural Development Department, Telangana State Secretariat, Hyderabad.  
The Member Secretary, Telangana State Pollution Control Board, Hyderabad.  
Copy to:  
The Industries and Commerce Department, Telangana State Secretariat, Hyderabad.  
The Health, Medical & Family Welfare Department, Telangana State Secretariat, Hyderabad.  
The Panchayat Raj and Rural Development Department, Telangana State Secretariat, Hyderabad.  
SF/SC

// FORWARDED :: BY ORDER //

  
SECTION OFFICER

**GOVERNMENT OF TELANGANA  
ABSTRACT**

MINES & MINERALS - REGULATION OF SAND MINING - NEW SAND MINING POLICY, 2014 - FORMULATION OF TELANGANA STATE SAND MINING RULES - 2015 (TSSMR-2015) - ORDERS - ISSUED

INDUSTRIES & COMMERCE (MINES-I) DEPARTMENT

G.O.MS.No.3,

DATED:08-01-2015,  
Read

G.O.Ms.No.38, Industries & Commerce (Mines.I) Department,  
Dated:12-12-2014.

\*\*\*\*\*

The following Notification shall be published in an Extraordinary Issue of Telangana State, Gazette dated:08-01-2015.

**NOTIFICATION**

In exercise of the powers conferred by Section 15(1) of Mines & Minerals (Development & Regulation) Act, 1957 (Central Act 67 of 1957), the Governor of Telangana, in supersession of all earlier orders issued in the composite State and in accordance with the New Sand Mining Policy-2014 for the State of Telangana as announced in G.O.Ms.No.38, Industries & Commerce (Mines.I) Department, Dated:12-12-2014, hereby makes the following Rules to regulate the Mining and Transportation of sand in the State of Telangana and for the purposes connected therewith, namely:-.

**1. Short title and commencement:-**

- (i) These Rules may be called the Telangana State Sand Mining Rules, 2015.
- (ii) It extends to the entire State of Telangana.

**2. Regulation of extraction/disposal of Stream/River Sand**

- (i) Sand extraction and sale *other than* de-casting patta lands and in respect of I and II order streams, in the State shall be through Telangana State Mineral Development Corporation Limited (TSMDC) only.
- (ii) Regulation of Stream/River sand extraction/disposal from the areas other than falling in Schedule Areas be done by the authorities specified under Rule **3(6)**.
- (iii) Allocation of specified sand bearing areas located partially/fully in Scheduled Areas shall be as per the Panchayats Extension to Scheduled Areas (PESA) Rules, 2011 or any suitable subsequent rules/amendments to be issued by Government from time to time with Technical and Administrative support from Integrated Tribal Development Authorities (ITDA) /Telangana State Mineral Development Corporation Limited (TSMDC Ltd.) under the direct supervision and control of the Agency Magistrate/District Collector concerned. Operational guidelines shall be issued by the District Collector from time to time.

### 3. Sand extraction in I and II order streams:

Sand extraction shall not be permitted in notified over-exploited areas except for local use in villages or towns bordering the Streams for bonafide purposes other than commercial operations/public trading/stocking etc. The Sand extraction:-

- (1) Shall be as per Rule 23-(1) (a) of Water Land and Tree Rules, 2004 or any suitable subsequent rules/amendments to be issued by Government from time to time.
- (2) Shall be for local use:
  - (a) Free of cost:
    - (i) For weaker section housing schemes on a certificate issued by the District Collector or any authorized officer;
    - (ii) For own use basing on the actual requirement to be certified by Panchayath Secretary concerned and
  - (b) For local use of sand in Government works on payment of seigniorage fee.
- (3) The Panchayath Secretary of concerned Gram Panchayath shall issue way bills as prescribed by the Mandal Authority under WALTA, 2002 or any suitable subsequent rules/amendments to be issued by Government from time to time for the purposes mentioned under sub-rule (2) within the jurisdiction.
- (4) Transportation of sand shall be by means of bullock carts/Tractors only within the jurisdiction.
- (5) The District shall be treated as a unit for free movement of sand within the jurisdiction.
- (6) The District Collector shall put in place proper administrative mechanism for enforcement of extraction and transportation of sand in I and II order Streams comprising of:
  - a) Revenue Divisional Officer concerned.
  - b) Tahsildar concerned
  - c) Representative of Deputy Director, Ground water Department.
  - d) Executive Engineer (concerned), RWS/Irrigation Dept.
  - e) Sub-Divisional Police Officer.
  - f) Motor Vehicle Inspector (concerned) from Transport Dept.

### 4. Constitution of Sand Monitoring Committee (SMC)

In partial modification to G.O.Ms.No.38, dated 12.12.2014, the District Collector & Magistrate shall be the Chairman of the District Level Sand Committee. There will be a State Level Committee with Chief Secretary of the State as Chairman.

## (1) Constitution of District Level Sand Committee (DLSC)

The identification of sand bearing areas in III, IV and above order streams/rivers for extraction shall be by the District Level Sand Committee. The District Collector shall be the Chairman of the District Level Sand Committee, other members will consist of the following officers:

- |  |                       |
|--|-----------------------|
| (a) District Collector   | : Chairman            |
| (b) Joint Collector  | : Vice-Chairman       |
| (c)*Project Officer, ITDA concerned.   | : Member              |
| (d) District Panchayat Officer   | : Member              |
| (e) Dy. Director, Ground Water Dept.   | : Member              |
| (f) Executive Engineer, Irrigation/<br>River Conservator.                      | : Member              |
| (g) Executive Engineer, Rural Water Supply                                     | : Member              |
| (h) Environmental Engineer, Telangana State<br>Pollution Control Board.        | Member                |
| (i) Nominee of Telangana State Mineral<br>Development Corporation Ltd. (TSMDC) | : Member              |
| (j) Asst. Director of Mines & Geology<br>concerned.                            | : Member-<br>Convenor |

\*In case of sand reaches falling partly or fully in Scheduled Areas.

(i) The District Collector may invite any other officer like the Superintendent of Police and District Transport Officer as deemed fit.

(ii) The Assistant Director of Mines & Geology concerned shall identify the potential sand bearing areas on regular basis and place proposals before District Level Sand Committee.

(iii) The Chairman, District Level Sand Committee shall order for joint inspection of identified sand bearing areas and obtain reports from the following:

(a) The Ground Water Department shall issue the feasibility report under Water, Land and Tree Rules, 2004 or any suitable subsequent rules/amendments to be issued by Government from time to time with geo-coordinates of the specified sand bearing areas, with specific recommendations on the mode of sand extraction.

(b) The Executive Engineer/River Conservator shall issue clearance for the ramps with Geo-coordinates.

(c) The Revenue Department shall demarcate the specified sand bearing area and furnish plan on village map.

(d) The Assistant Director of Mines & Geology shall arrive at the quantity of sand basing on the Ground Water Dept., feasibility report.

- (iv) (a) The Collector & Chairman, District Level Sand Committee shall finalize the specified sand bearing areas as per sub-rule (iii) and issue in-principle allotment notice to Telangana State Mineral Development Corporation calling for Approved Mining Plan, Environmental Clearance and Consent for Operation within (3) months.

On application filed by the Telangana State Mineral Development Corporation, the Chairman DLSC may give a (3) months extension for submission of Statutory Clearances.

(b) Telangana State Mineral Development Corporation shall obtain the following statutory clearances:

- (i) Approved mining plan from the Deputy Director of Mines & Geology of the Region concerned.
- (ii) Environmental Clearance (EC) from State Environment Impact Assessment Authority.
- (iii) Consent for Establishment (CFE)/Consent for Operation (CFO) from Telangana State Pollution Control Board.

(c) On submission of Statutory Clearances, the Chairman, District Level Sand Committee shall allot the specified sand bearing area to Telangana State Mineral Development Corporation Limited for extraction of sand.

(d) M/s Telangana State Mineral Development Corporation Limited shall execute a lease deed in **Form-S1** with Assistant Director of Mines and Geology concerned within (15) days from the date of allotment order.

On application filed by M/s Telangana State Mineral Development Corporation Limited, the Chairman, District Level Sand Committee may condone the delay and extend the time for a period of (15) days for execution of lease deed.

(v) Extraction of sand from specified sand bearing areas:

Telangana State Mineral Development Corporation after execution of lease deed shall:

- (a) Extract sand by engaging a raising contractor from the specified sand bearing area to an approved stock yard. The raising contractor will be selected under strict competitive bidding process.
- (b) The sand extraction shall be under electronic surveillance and electronic documentation linked to a central documentation monitoring facility to be developed by Telangana State Mineral Development Corporation.
- (c) The extraction of sand shall be manual or mechanized as per the approved mining plan and Environment Clearance.
- (d) The extracted sand shall be moved to stock yards and weighed or by volumetric analysis before unloading at the stockyard.
- (e) The purchaser of the sand shall pay the sale price to Telangana State Mineral Development Corporation and obtain transit pass /way bill
- (f) Loading of sand from the stockyard shall be as per the approved capacity of the vehicle through weighment.
- (g) The transit pass shall have the security seal of Telangana State Mineral Development Corporation stamp with date, time and indicate the destination/route for tracking by way of GPS facility to be developed.

- (vi) Telangana State Mineral Development Corporation shall dispose sand from the stockyard as per the sale price fixed by the Government from time to time.
- (vii) The Member-Convenor shall convene the District Level Sand Committee (DLSC) meetings frequently to ensure sand availability in the District.
- (viii) The period of allotment for extraction shall be for five (5) years from the date of agreement subject to:
- (a) Assessment of annual replenishment of sand to sustain the extraction.
- (b) Feasibility report by Ground Water, Irrigation Dept., with Approved Mining Plan and CFO from TSPCB every year.
- (c) The period of sand extraction from the allotted area shall be as per the local conditions, reflected in the Approved Mining Plan and CFO.
- (d) During the subsistence of allotment, the DLSC shall review the status before (30) days from the date of expiry of first year/subsequent year period or exhaustion of estimated quantity and order for joint inspection to explore continuation of extraction after fulfilment of Rule 4(viii)(b).
- (e) If the specified sand bearing area is feasible for sand extraction, the Chairman-DLSC shall call for Mining Plan, CFO and approve for continuation of extraction.
- (f) If the specified sand bearing area is not feasible for sand extraction, the Chairman-DLSC shall order for stoppage of sand extraction for a specified period and Telangana State Mineral Development Corporation shall safeguard the area.
- (g) Due to any reason, the allottee can surrender the area allotted by making an application to the Chairman, DLSC through the Member-Convenor.

(2) Constitution of State Level Committee (SLC):

The State Level Committee shall consists of the following Officers:

(a)	Chief Secretary	:	Chairman
(b)	Director General of Police	:	Member
(c)	Spl. C.S. & CIP, Ind.&Com.Dept.	:	Member
(d)	Pr. Secy. Revenue Dept.	:	Member
(e)	Pr. Secy., Rural Development	:	Member
(f)	Pr. Secy. I&CAD Dept.	:	Member
(g)	VC&MD, TSMDC	:	Member
(h)	Commissioner, Rural Development	:	Member
(i)	Commissioner, Transport Dept.	:	Member
(j)	Member-Secretary, TSPCB	:	Member
(k)	Director, Ground Water Dept.	:	Member
(l)	Engineer-in-Chief, Irrigation Dept.	:	Member
(m)	Director of Mines & Geology.	:	Member-Secretary

The State Level Committee shall meet periodically to take up review of the performance, the matters referred by District Level Sand Committee for review of any statutory provisions and issue necessary guidelines for proper implementation of the Rules.

**5. Responsibility of the M/s Telangana State Mineral Development Corporation Ltd:**

- (1) Telangana State Mineral Development Corporation shall:
  - (a) Enter into an agreement with Assistant Director of Mines and Geology by furnishing bank guarantee for an amount equivalent to 10% of the total seigniorage fee on assessed quantity as security deposit.
  - (b) Extract sand as per the Approved Mining Plan and other conditions laid in the clearances issued under the River Conservancy Act, 1884, the Water Land & Trees Act, 2002 and the Environment Protection Act, 1986 and Air & Water Pollution Prevention Act, 1974 and amendments thereon or any suitable subsequent Act/rules/amendments to be issued by Government from time to time.
  - (c) No transfer or subletting of the allotted sand bearing area.
  - (d) Extract and dispatch sand from the allotted sand bearing area to approved stockyard alongwith the way bill in **Form-S2** issued by the Asst. Director of Mines and Geology concerned after paying the Seigniorage fee and other taxes as per the prevailing scheduled rate or revised from time to time.
  - (e)
    - (i) Establish a stockyard near to the lifting point having good road facilities and also additional stockyards near urban habitations, especially the Municipal Corporations.
    - (ii) Shall obtain Mineral Dealer License for the stockyard under Mineral Dealer Rules, 2000 from the competent authority. The validity of Mineral Dealer License shall coterminous with the period of agreement.
    - (iii) If any sand stocks leftover after the period of agreement, on representation by the allottee, the validity of Mineral Dealer License may be extended by the Licensing Authority after report by the Asst. Director of Mines & Geology.
    - (iv) The period of extension shall be based on verification of stocks and the previous daily dispatches.
  - (f) Sand from stockyard shall be dispatched by Telangana State Mineral Development Corporation with transit pass (Form-E) issued by Assistant Director of Mines and Geology concerned alongwith the computerized weighment slip.
  - (g) The dispatch of sand from the stockyard shall be under electronic surveillance and electronic documentation linked to a central documentation monitoring facility.

(h) Use of machinery is permitted for making ramps, pathways and maintenance.

(i) Extraction of sand from sand bearing area shall be by manual or mechanized means subject to permission from the District WALTA Authority on a condition that there is no impact on ground water table.

(j) (i) Maintain daily production and dispatch register at the allotted sand bearing area.

(ii) Maintain daily stock and dispatch register at the mineral Dealer stockyard.

(iii) Shall submit returns under A.P. Minor Mineral Concession Rules, 1966 and A.P. Mineral Dealer Rules, 2000 or any suitable subsequent rules/amendments to be issued by Government from time to time to the Competent Authorities.

(k) Be penalized for any extraction of sand beyond the specified area; beyond the specified thickness and for any other violations.

Penalty of Rs.1,00,000/- or Rs.500/- per Cu.Mt. of sand quarried beyond the specified limits or in excess of thickness stipulated, whichever is higher.

(2) In the event of contravention of any of these rules and the conditions specified in Agreement of allotment during extraction of sand, the allotting authority shall after giving an opportunity, impose an appropriate penalty.

#### **6. Regulation of Sand extraction in III and above order streams/Rivers:**

(1) The transportation of sand extracted from III and above order Streams/Rivers shall be utilized anywhere within the State.

(2) The District Collector shall put in place a proper administrative mechanism for enforcement of extraction and transportation of sand comprising of:

(a) Joint Collector/Addl. Jt. Collector.

(b) Project Officer, ITDA concerned (in respect of Scheduled areas).

(c) Deputy Transport Commissioner/RTO

(d) Asst. Director of Mines & Geology.

(e) Executive Engineer, Irrigation/River Conservator.

(f) Any other nominee(s) by the District Collector."

#### **7. De-casting sand from Pattalands:**

In case of the sand cast in pattalands, the pattadar shall be allowed to de-cast sand to make the land fit for agriculture.

To eliminate vested interests, no Agent/GPA/Lease holders other than the pattadar shall be involved in de-casting process.

- (1) De-casting in pattalands abutting the river course:
  - (a) The pattadar shall apply to the Asst. Director of Mines & Geology concerned alongwith copy of pattadar pass book and Title deed book and location of the land on village map.
  - (b) Asst. Director of Mines & Geology concerned shall take up joint inspection of the pattaland with the following:
    - (i) Tahsildar shall identify the pattaland, possessor/occupier and furnish attested sketch demarcating the area. The boundaries will then be fixed on ground.
    - (ii) Mandal Agriculture Officer shall certify that without de-casting the pattaland is not fit for agriculture.
    - (iii) The Ground Water Dept. shall record the geo-coordinates of the pattaland as per boundaries fixed by the Tahsildar, assess the thickness, quantify the sand to be de-casted and give specific recommendation on the mode of de-casting i.e. manual or mechanized.
    - (iv) Asst. Director of Mines & Geology shall certify the suitability of sand for construction.
    - (v) Executive Engineer, Irrigation Dept., concerned shall report on the location of patta land with reference to river course/bed.
- (2) After receipt of joint inspection report, the Asst. Director of Mines & Geology shall submit the proposals duly stipulating the period of de-casting to the District Collector.
- (3) District Collector after scrutiny shall submit proposal to the Govt.
- (4) After receipt of orders from the Govt. the Asst. Director of Mines & Geology concerned shall collect the seigniorage fee for the entire assessed sand quantity in advance, security deposit in the form of Bank Guarantee in favour of Asst. Director of Mines & Geology equivalent to seigniorage fee on the assessed sand quantity and enter into an agreement in **Form-S5** before issue of dispatch permits in **Form-S3**.

If Ad valorem rate of seigniorage fee is imposed, the Telangana State Mineral Development Corporation rate will be the bench mark for payment of seigniorage fee for de-casting sand from pattalands.

- (5) Responsibilities of the pattadar:
  - (a) Shall extract sand from the pattaland by manual/mechanized means as recommended by Ground Water Department and transport to the stockyard by tractors capacity not more than 3 cu. mt. alongwith transit form issued by the Asst. Director of Mines & Geology.
  - (b) Shall establish a stockyard by obtaining registration under MDR, 2000 or any suitable subsequent rules/amendments to be issued by Government from time to time from the Competent Authority at a location having proper road connectivity.

- (c) Shall dispatch sand from the stockyard to the consumers with Transit Pass in **Form-E** issued by Asst. Director of Mines & Geology concerned under MDR, 2000 or any suitable subsequent rules/amendments to be issued by Government from time to time.
- (d) Shall dispose sand from the stockyard as per the sale price fixed by the Government from time to time.
- (e) Loading of sand from the stockyard shall be as per the approved capacity of the vehicle with transit pass duly indicating the destination, date and time.
- (f) Any contravention by the pattadar during the de-casting, the Chairman, DLSC may order for collection of:
  - (i) Rs.1,00,000/- or Rs.500/- per cu.mt. whichever is higher shall be collected as penalty on de-casting of sand beyond the specified limits or in excess of permitted depth.
  - (ii) Repeated violations will result in cancellation of permission and forfeiture of security deposit.
  - (iii) Penalty of Rs.10,000/- per ton on vehicles carrying more than the permitted capacity from the stockyard
- (6) To prevent indiscriminate removal of sand from pattalands abutting the Riverbed, more rigorous vigilance and inspections shall be taken up.
- (7) The District Level Sand Committee shall issue operational guidelines for de-casting sand from pattalands abutting river bed.
- (8) The pattalands located in the midst of the river course/bed:

In case of pattalands located in the midst of the river bed/course, the pattadar shall enter into an agreement for removal of sand by Telangana State Mineral Development Corporation Ltd.

The Chairman, District Level Sand Committee shall allot the pattalands located in the midst of the river course/bed to Telangana State Mineral Development Corporation Limited as per Rule 2(i) readwith Rule 4 (iv) (c).

#### **8. Applicability of these Rules on sand sourced in the process of de-silting:**

The Superintending Engineer, Irrigation & Command Area Development Department concerned shall:

- (a) Obtain the administrative approval from the Competent Authority for de-siltation of Reservoirs and Tanks as defined by the Irrigation & Command Area Development Department, to enhance the storage capacity of the reservoirs and augment Ground Water recharge in Command Areas.
- (b) With approval of District Level Sand Committee shall notify the reservoirs proposed for de-siltation in March every year.

- (c) All the notified reservoirs and tanks shall be handed over to the Telangana State Mineral Development Corporation Ltd. for de-siltation.
- (i) The disposal of sand out of de-siltation of Reservoirs and Tanks shall be in accordance with the procedures under these TSSM Rules, 2015 or any amendments issued from time to time.
  - (ii) Sand de-silted shall be dispatched to the stock yard registered under A.P. Mineral Dealer Rules, 2000 by competent authority with **Form-S4** issued by the Asst. Director of Mines & Geology concerned.
  - (iii) Sand shall be disposed from the stockyard as per the sale price fixed by the Govt. from time to time with Transit Passes in **Form-E** issued by the Asst. Director of Mines & Geology concerned.
- (d) Sand sourced out of de-silting operations shall be utilized from the stock yards for various civil works with preference to Govt. Depts.,
- (e) The orders issued earlier for continuation of 2<sup>nd</sup> or subsequent year if any, after payment of required fees or upset price to Government allotted to any agency on nomination basis or by other means shall be seized after completion of its allotted/to be allotted period.

**9. Crushed Stone Sand as alternative to natural sand:**

Alternate to River sand in the form of Crushed Stone Sand (Manufactured Sand) shall be encouraged from the conservation point of view to River bed/in-Stream sand quarrying operations at affordable cost be made available to meet the requirement of bulk consumers by following:

- (i) By according industry status as long as the unit manufactures 100% sand for availment of VAT and power subsidy prospectively.
- (ii) Regular incentives will be extended for new units.
- (iii) Preference in quarry lease allotment
- (iv) Existing Stone Crushers will be accorded ancillary status subject to crushed stone sand certified by ISO/NAC/NCCBM
- (v) The Government Departments shall be mandated to use at least 50% of manufactured sand in Government constructions.

**10. Fixation/Revision of rates of sand and seigniorage fee:**

(i) The Government shall fix the rates and revise the rates of seigniorage fee as per the situation/demand warrants.

If ad-valorem rate of seigniorage fee is imposed, Telangana State Mineral Development Corporation rate will be the Bench mark for collection of seigniorage charges on sand from de-casting as well as de-silting.

(ii) The price of sale of sand per Cu.Mt./Ton shall be determined by the respective District Level Sand Committee keeping in view of the prevailing cost of production and logistics therein and submit to the Govt. for approval.

**11. Apportionment of Seigniorage Fee to Zilla Parishad General Funds:**

100% Seigniorage Fee shall be remitted to the General Funds under the Head of Account of Zilla Parishad concerned. The same shall be apportioned in the ratio of 25:50:25 among Zilla Parishad, Mandal Parishad and Gram Panchayat respectively.

**12. Ban on sand transportation across border:**

No transportation of sand from the State shall be made across the border to other States.

**13. Offences:**

Any sand lorry found without valid waybill issued by Telangana State Mineral Development Corporation or by the pattadar (de-casting) will be deemed illegal and the vehicle shall be seized.

- (1) Any machinery and vehicles used for extraction and transportation of sand in contravention to these rules shall be seized.
- (2) The following officers in the State are authorized under these rules to seize a machinery or vehicle involved in illegal sand extraction and transportation.
  - a) Sub-Collector/Revenue Divisional Officer (concerned).
  - b) Tahsildar (concerned) Mandal.
  - c) Sub-Divisional Police Officer (concerned).
  - d) Station House Officer (concerned).
  - e) District/Divisional Panchayat Officer
  - f) Asst. Director of Mines & Geology (concerned).
  - g) Any other officer nominated by the Dist. Collector (concerned).
- (3) An officer authorized to seize any machinery/vehicle as per sub-rule (1) shall keep machinery/vehicle with Station House Officer concerned or Tahsildar concerned for safe custody and shall submit a report of such seizure to the Competent Court of Law.
- (4) An authorized officer who seizes any machinery/vehicle shall order confiscation of the machinery/vehicle so seized.
- (5) No order of confiscation of any machinery/vehicle shall be made under sub-rule (4) unless the person from whom the machinery/vehicle is seized is given:-
  - (a) A notice in writing informing the person of the grounds on which it is proposed to confiscate such property.
  - (b) An opportunity of making a representation in writing within such time as may be specified in the notice against the grounds for confiscation; and
  - (c) A reasonable opportunity of being heard in the matter.
- (6) Officers seized the vehicle shall issue order of confiscation of machinery/vehicle. The confiscated machinery or vehicle shall be disposed in public auction.

**14. Disposal of seized sand:**

The Tahsildar (or) the officers nominated by Tahsildar at Mandal Level; Sub-Collector/Revenue Divisional Officer (or) the officers nominated by the Sub-Collector/Revenue Divisional Officer at Divisional Level; the Joint Collector/the District Collector (or) the Officers nominated by the Joint Collector/the District Collector at District Level shall seize illegal sand stocks. Such seized sand shall be kept under safe custody of concerned Tahsildar and the same shall be disposed through Telangana State Mineral Development Corporation.

**15. Appeal and Revision:**

- (i) In case of I and II order streams:
  - (a) Any person aggrieved by an order passed by the Mandal Authority/ may prefer the appeal before the Joint Collector within fifteen (15) days from the date of receipt of such order.
  - (b) Any person aggrieved by an order of the Joint Collector may prefer revision before the District Collector within fifteen (15) days from the date of receipt of such order.

- (ii) In case of III and above order streams/rivers.

Any order passed by the Chairman, DLSC, Deputy Director of Mines & Geology or Asst. Director of Mines & Geology, the allottee may prefer an appeal to the Govt. within (30) days from the date of receipt of such order.

**16. Restriction on issue of licence for stocking /storing /trading of sand :**

No other person or agency other than Telangana State Mineral Development Corporation and a pattadar having permission for de-casting of sand from his /her patta land from the competent authority for the specified area mentioned therein shall be issued licence for stocking /storing /processing /trading of sand including manufactured sand under AP Mineral Dealer Rules, 2000 or under any suitable subsequent rules /amendments to be issued by the Government from time to time.

**17. Powers to Issue Orders/Clarifications/Guidelines:**

The Government shall be the Authority to issue clarifications; guidelines or relaxation orders from time to time, in implementation of these rules.

**18. Saving Clause:**

- (1) Leases which have not yet started shall be continued by the terms and conditions of the grant until expiry of lease except in those cases wherein the Government in the public interest decides otherwise.
- (2) Leases under operation shall be continued by the terms and conditions of the grant until expiry of lease except in those cases wherein the Government in the public interest decides otherwise.

**19. Applicability of General Provisions:**

The General provisions of Minor Mineral Concession Rules, 1966 or any suitable subsequent rules/amendments to be issued by Government or the orders, guidelines, clarifications issued by Government in this regard from time to time shall apply for cases which are not explicitly mentioned herein.

**[BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA]**

K. PRADEEP CHANDRA  
SPECIAL CHIEF SECRETARY TO GOVERNMENT AND  
COMMISSIONER FOR INDUSTRIAL PROMOTION

**To**

The Commissioner of Printing, Stationary & Stores Purchase (Ptg. Wing) Hyderabad.  
(He is requested to publish the above Notification in the Extra- Ordinary Issue of Telangana Gazette, and arrange to send 2500 copies of the same to Government in Industries & Commerce (M.I) Department)  
The Director of Translation, Telangana, Hyderabad. (He is requested to furnish the Telugu version of the Notification direct to the Commissioner, Printing, Stationary & Stores Purchase (Ptg.Wing), Hyderabad)  
The Director of Mines and Geology, Telangana State, Hyderabad  
The Vice Chairman & Managing Director,  
Telangana State Mineral Development Corporation Ltd., Hyderabad.  
All the District Collectors/Joint Collectors in the state of Telangana through Director of Mines and Geology, Hyderabad.  
The Irrigation & CAD Department.  
The Panchayat Raj & Rural Development Department  
The Revenue Department.  
The Commissioner of Panchayat Raj, Hyderabad  
All the Departments of Telangana Secretariat.

**Copy to :**

P.S. to Principle Secretary to the Hon'ble Chief Minister.  
P.S to Hon'ble Minister for Mines and Geology.  
P.S. to Hon'ble Minister for Panchayat Raj & Information Technology.  
P.S. to Hon'ble Minister for Irrigation.  
P.S. to Chief Secretary to Government.  
P.S. to Special Chief Secretary to Government & CIP, Ind & Com Dept.  
P.S. to Secretary to Government, Ind & Com Dept.,  
The Joint Directors/Deputy Directors/Assistant Directors of Mines and Geology Deptt., through the Director of Mines & Geology, Hyderabad.  
The Law Department.  
The General Administration (Cabinet) Department.  
Sf/Sc. (C.No.9060/M.I(1)/2014)

//FORWARDED :: BY ORDER//

SECTION OFFICER