

# SALEM DISTRICT GAZETTE

#### **EXTRAORDINARY**

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## Local and Municipal Notification

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#### SOLID WASTE MANAGEMENT POLICY FOR METTUR MUNICIPALITY

(Following the SWM Rules 2016)

#### CHAPTER-I

#### BACKGROUND

#### 1.1 INTRODUCTION

Managing waste properly is essential for building a sustainable and liveable habitat but remains a challenge for any urban local body in India today. Rapid urbanisation and changing lifestyles have led to the generation of huge amounts of garbage and waste in the urban areas, so much so, over the past few years, just handling this Municipal Solid Waste (MSW) has assumed the proportion of a major organizational, financial and environmental challenge.

Recognising this Ministry of Environment, Forests and Climate Change (MoEF&CC), Govt. of India had notified Municipal Solid Waste (Management & Handling) Rules, 2000 which was subsequently revised into Solid Waste Management Rules 2016. The above rule mandates each Urban Local body to frame Policy on Solid Waste management and Solid Waste Management Action Plan to address the growing concern of waste management in the concerned town.

#### 1.2 SOLID WASTE MANAGEMENT RULES 2016

The responsibilities of various Ministries. Departments and local bodies for sustainable solid waste management have been highlighted in the SWM Rule 2016.

#### 1.3 DUTIES OF LOCAL BODIES

It has been emphasised that it is the Duty of local bodies (as the prime responder for Solid waste management) to carry out the Collection, Transportation and Disposal of Solid waste in a scientific manner on day to day basis. The rule further facilitates the local bodies to apply penalty clause for the effective enforcement of the rule apart from the user charges. Accordingly bye laws had been framed by the Mettur Municipality and published in the District Gazette on 21.07.2017.

Moreover, the Duty of Waste generators to segregate the waste at source as Biodegradable & Non-biodegradable and handing over the same to waste collectors authorised by the local bodies has also been prescribed. In a bid to encourage this and 1.4 DUTIES OF WASTE GENERATORS improve stakeholder participation for achieving zero littering (in open public spaces, drains, and water bodies) and to slash open burning, extensive awareness programs have been directed to be carried out by local bodies.

Further the rule reduces the burden of local bodies by introducing the concept of Bulk waste generator and 1.5 DECENTRALISING THE WASTE MANAGEMENT PROCESS Decentralising the waste management process. Considering this, Government of Tamil Nadu have adopted a holistic State policy towards sustainable waste management. In accordance with this, Action plan for Mettur Municipality is framed.

# 1.6 STATE POLICY ON SOLID WASTE MANAGEMENT GOVERNMENT OF TAMIL NADU

The changing urban life style has resulted in both positive and negative effects. While the standard of living condition has considerably improved, a large volume of solid waste has become its bye product. Many new approaches have been adopted to process these wastes in a sustainable manner.

The Government of Tamil Nadu has felt the necessity to frame a State policy to cater to the needs of Solid waste management covering right from Primary collection to scientific processing and disposal of the Municipal Solid Waste in an 1.7 ZERO-WASTE CONCEPT eco-friendly manner. The policy is drafted in such a way that it provides necessary guidance to dispose all type and nature of waste generated scientifically to achieve the zero-waste concept. Each and every aspect such as Bio & Non-biodegradable waste (both recyclable and Non-recyclable), Domestic Hazardous waste, E-waste, street sweeping waste, highly littered public places with mixed wastes etc., are considered. The policy focuses on the technology suitable for the urban local bodies based on the Quality and the Quantity of waste that is being generated.

## 1.8 INFORMATION EDUCATION AND COMMUNICATION (IEC) ACTIVITIES

A part from this, Bulk waste generators are activated to develop onsite facilities for handling the waste generated by them. Moreover, Continuous and rigorous IEC programs are emphasized to inculcate behavioral changes among the public to encourage

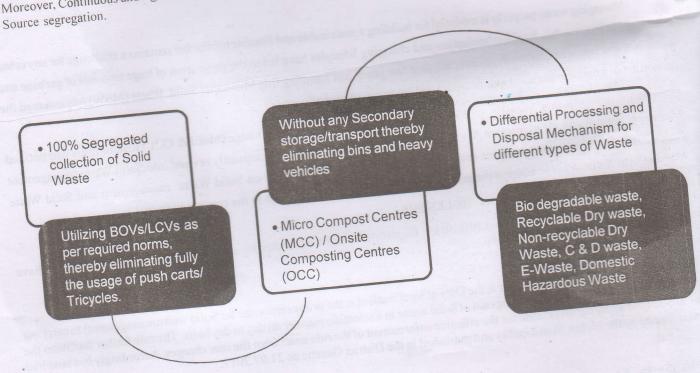


Figure 1: Approach of waste management-Government of Tamil Nadu

#### CHAPTER-II

## PRESENT STATUS OF SOLID WASTE MANAGEMENT IN METTUR MUNICIPALITY

#### 2.1 DOOR TO DOOR COLLECTION AND SEGREGATION

Mettur Municipality is a Selection Grade Municipality and Taluk Headquarters in Salem District. Mettur is situated at a distance of 52 Kilometers North-West of Salem. Mettur is known for its huge dam built in 1934 which is still one of the best dams in the country and attracts tourists from all over India. It is one of the major sources of Power generation using the Hydro-resources. It is located at 11°45' of the Northern Latitude and 77°45' of Eastern Longitude. The population as per 1971 census is 38,380 and the area spreads over to an extent of 14.55 Sq. Kilometers.

The town is divided into 30 wards and population is 52813 as per 2011 Census. The ULB has one Bus stand, and Lord Murugan Temple is also an additional important place in the Town. No. of households are 12501 with 813 commercial establishments.

- ✓ The wet waste are collected on Door steps every day
- The dry waste is being collected once in a week i.e. Wednesday
- The Domestic Hazardous waste such as Napkin, Diaper collected along with wet waste.
- ✓ E Waste, other domestic hazardous waste and C&D waste collection to be practiced.
- ✓ Animators are involved in imparting the practice of Source segregation through Behavioral change.

## Table 1: % of D2D collection & source segregation

Waste Generation	15 TPD
Door to Door Collection%	100%
Source Segregation %	60%

#### 2.2 QUANTITY OF WASTE GENERATION

Mettur Municipality generates in a total of 15.00 MT/Day with per capita generation of 230 gms./day/person. In the whole town, all SWM activities is covered under Three MCCs in Three different locations. Out of 30 wards about 5 wards are situated scatterly. The residents in these areas render their co-operation to ULB by practicing home composting at their backyards. However considering the total population of the Town processing facilities are planned.

2000	No. of HH/ Assessment	Per Capita Waste generation (in grams)	Waste Generation in TPD		Total Waste Generated in TPD	Innert & Silt	Total waste Generation TPT
c best dams			Wet Waste	Dry Wast	e vezo la mo		
Domestic	12501	230	7.39	3.51	10.90	ried at 10 345; at a	Vand the great
Commercia			1.26	0.54	1.80	1.20	15.00
BWG	9	reus, The Car Tells	ns por 2011 2 m	0.30	0.30	vided into 30 war	Barnabiati En establishen
Industrial	238	gaw 1004 Lais a	0.35	0.45	0.80	mi lenorithbe (in	
Total	14106	Nedo No Gill 1	9.00	4.80	13.80		

Note: 1) BWGs are handling their waste themselves as discussed in section 2.3.

2) C&D Waste not to consider as solid waste

## 2.3 COLLECTION AND TRANSPORTATION

- BOV Vehicles are used at 400 HH/vehicle /day (covering 3 Trips)
- LCV vehicles are used at 1200 HH/Vehicle/day (covering 3 Trips)
- Primary collection at Door steps is being done and wastes collected are directly transported to processing co This is being done by using
- 16 BOV and 5 LCV for 12501 HHs
- I no. Tipper and I No. LCV for 1358 Commercial establishments
- 1 Tipper Lorry for C&D Waste
- Secondary collection and Transportation partially achieved.
- 1 Tipper lorry for Market waste
- 9 BWGs have been identified in Mettur Municipality comprising 1 chemplast Quarter, 1 school ,6 TNEB Quarter I PWD park.

Register related to the BWG are being maintained as per the guidelines provided in the SWM Rule 2016.

Total waste generated to the tune of 0.787 TPD is being handled by the BWGs themselves with the establishment of facilities. In this way about 10% of waste is reduced by the Municipality at the collection stage itself as per the provisions of Rule 2016.

## PROCESSING STATUS ON DISPOSAL OF SOLID WASTE

- Partially handled, processed and converted as compost
- Micro level compost centre are being established on Decentralized basis by dividing the town into 3 segm (covering 1 to 30 wards) in 3 Locations
- Saleable Dry wastes such as Recordable plastic waste are sold to recyclers and the workers are permitted to share the monetary benefits.

#### CHAPTER-III

#### ISSUES AND SHORTFALL

The Major issues such as (i) Inadequate planning (ii) In house capabilities (iii) Lack of Public awareness and Community Participation in segregation of Waste and handling of Waste (iv) Inadequate processing facilities (v) Improper implementation strategy have been considered and accordingly the gap analysis in each activity of Solid Waste Management is done for Mettur Municipality

#### 3.1 ISSUES IN COLLECTION AND TRANSPORTATION

- Requirements of primary collection vehicle are arrived based on the type of vehicles, capacity of the vehicle and number of trips per vehicle based on the types of source from where the waste has to be collected. Finally the "Gap" is analyzed to take action to procure adequately.
  - Route chart and Trip chart for each vehicle with designated sanitary workers are to be planned and followed.
  - ✓ Adequate awareness among the citizen has to be done sustainably

#### 3.2 ISSUES IN SCIENTIFIC PROCESSING AND DISPOSAL

- ✓ Insufficient manpower with adequate knowledge in processing at compost yard
- Wet waste disposal technology has to be finalized based on the quantity, quality and characteristic of solid waste in Mettur Municipality.
- Dry waste disposal mechanism has to be derived.

#### 3.3 ISSUES IN IN-HOUSE CAPABILITIES

- All the staff involved in SWM has to be periodically provided with training on methodology and technology to keep them with updated skill knowledge.
- Mettur municipality is entitled to engage 205 no. of sanitary workers as per GO Ms. No. 101. Dated 30.04.97.
- ✓ Permission has been accorded for engage 47 sanitary workers through outsourcing.
- At present, only 129 nos. of sanitary workers (82 permanent and 47 outsourced) are engaged in the collection process.
- Action has to be taken to have adequate sanitary workers and supervising staff.

### CHAPTER-IV

### VISION, GOALS, OBJECTIVES ON SWM. FOR METTUR MUNICIPALITY

#### 4.1 VISION

To provide better quality of life to the people of Mettur Municipality and to make the town livable through sustainable Solid Waste Management strategy.

#### 4.2 GOAL

- (i) To have high standard of cleanliness in Mettur Municipality
- (ii) To ensure 100% Door to Door collection of the waste and prohibition of Unhygienic system of disposal by the households
- (iii) To ensure 100% waste segregation at source .
- (iv) To promote the practice of Reduce, Reuse, Recycle and Recover
- (v) To have "No Landfill Concept"
- (vi) To achieve "Zero Waste Concept"

#### 4.3 POLICY OBJECTIVE

#### Objectives shall endeavor to

- (i) Protect public health and environment
- (ii) Make the citizen to realize the responsibility and accountability on SWM
- (iii) Minimizing the generation of Solid Waste through sustainable IEC on 4R Concept
- (iv) Involving the community groups RWA, CBOs, SHGs to ensure community participation in managing and minimizing the municipal solid waste locally.
- (v) Conduct periodical meeting and discussion to dispose the wet waste through composting process and to promote bio Manure
- (vi) Provide integrated solution to dispose the solid waste (both wet and dry waste) with cost effective and efficient delivery of service
- (vii) Dispose the dry waste through the vendors
- (viii) Build in capacity of Municipal staffs through periodical training.
- (ix) Promote "green cross" society at educational institution to impart the necessity of SWM to keep the town with livable condition.
- (x) Promote the town to have better star rating in SWM
- (xi) Make the SWM services self-sustaining by collecting user charges to cover Operation & Maintenance cost of the services and levy taxes to meet out the cost of capital investment.
- (xii) Follow the polluter pay principle to bear the cost associated for damaging the environment to realize the responsibility of concern to keep the pollution free environment
- (xiii) Culminate the practice of throwing the waste in to the water bodies and culminate the practice of burning the garbage on road sides

#### CHAPTER- V

#### IMPLEMENTATION STRATEGY

#### 5.1 IMPLEMENTATIONSTRATEGY:

Door to Door Collection

- Wet waste collection on daily basis
- Dry waste collection on weekly basis (every Wednesday)
- Domestic Hazardous waste like that napkin, diapers will be collected separately during wet waste collection on a daily basis.
- Domestic Hazardous waste like that tube light, paint container and other waste will be collected weekly basis.
- E waste collection on monthly basis
- C & D waste on need basis
- Waste will not be collected from the Bulk waste generators

Source Segregation

 100 % at Source Segregation ensured through sustainable IEC activities engaging Animators (Green Ambassadors)

Transportation

- Primary collection at door step using Battery Operated vehicles and Light commercial vehicles with proper route chart and trip chart
- Eliminating Secondary storage Bins on roadside
- Minimizing secondary transportation

Scientific Disposal of Waste

- Disposal of wet waste through composing and Establishing Micro level Compost Centers, On Site Composting Centers on Decentralized approach for processing and disposal of wet waste and green waste
- Bio gas technology for food waste and slaughterhouse waste
- Disposing the dry waste to the identified vendors for recycling
- Plastic waste and other recyclable waste to dispose to the recyclers
- Other non recyclable but combustible to dispose to the vendors who need it use as furnace fuel or to dispose through Pyrolysis plant through PPP mode.
- Other non recyclable and non combustible waste and silt are disposed along
- Dead'animals disposed scientifically through burial method in the earmarked
- Hazardous waste and E waste to collect and store at Resource Recovery Center by Municipality and periodically dispose the same to PCB for further
- C & D waste to collect and store in the earmarked location and to use on

IEC activities, Capacity buildings and motivation

- Periodical meeting with RWAs, NGOs, elected body members Bulk Waste Generators and periodical training to sanitary workers
- Updating the knowledge of the personnel involved in SWM

## 5.2 SWM MONITORING CELL

The Municipality will constitute a SWM Monitoring Committee under the Chairmanship of Municipal Chairman comprising the Commissioner as Member secretary and five other members including Health officer/ sanitary officer, Engineer, Town planner, and two elected representatives.

This committee will meet once in a month and discuss the implementation strategy and facilitate the ULB for implementation of SWM. 5.3 HOME COMPOSTING

Municipality will take all effort to promote the Home Composting practice among the citizen through intenseive campaigning. (R.O.C.No.35/H1/2017)

Mettur, 17-07-2019.

A. Martin Nixon., Commissioner(i/c), Mettur Municipality