

**UT OF PUDUCHERRY:****SUMMARY OF STATUS**

<b>A): Solid Waste Management</b>					
Quantity of waste generation in the State (in TPD)	Waste Processed (in TPD)	Gap in generation and Processing (in TPD)	Quantity of waste being disposed in landfills (in TPD)	No. of Legacy waste dump sites	Status of Bio-mining
Puducherry: 382.50	58.02	318	325	03	01 commenced
Karaikal: -	-	-	-	-	-
Yanam: -	-	-	-	-	-
Mahi: -	-	-	-	-	-
<b>Total: 382.50</b>	58.02	318	325	03	01 commenced

**Timelines for bridging the gap:** a) Disposal of legacy waste – Apr 2023  
b) Commencement of Processing - Dec 2022

**Moving towards Model Rural areas:**

Integrated Solid Waste Management Project (ISWMP) for entire Rural areas of Puducherry U.T. has been finalized and letter of award will be issued in August. ISWMP includes collection, segregation at source, transportation, processing, along with the monitoring the dashboard with unique QR code system till the disposal. This is zero waste model using rapid composting and de-polymerization and incineration.

<b>B): Sewage Management</b>					
Quantity of sewage generation in the State (in MLD)	Treatment capacity in MLD	Current Gap in treatment (MLD)	Utilization of treated sewage in		
			Agriculture/ Horticulture purpose	Industrial purpose	Any other purpose
Puducherry: 71	56	15	6.0 + 0.3 = 6.3 MLD	1 MLD	9.0 MLD
Karaikal: 10.6	--	--			
Yanam: 4.5	--	--			
Mahi: 6.0	--	--			
<b>Total 92.1</b>	56	36.1			

Good Models for replication:

- 1) Urban: Utilization of Treated sewage for industrial purpose and Park
- 2) Rural: Restoration of 198 surface water bodies.

COMPLIANCE STATUS OF HON'BLE  
NATIONAL GREEN TRIBUNAL  
DIRECTIONS IN O.A. No. 606 of 2018

**28.07.2022**

**Presentation By:**

**Chief Secretary**

**Government of Puducherry**

# Section – I: SOLID WASTE MANAGEMENT

# SOLID WASTE MANAGEMENT

- The Union Territory of Puducherry has 5 Urban Local Bodies.

Sl.No.	Name of the Municipality	Solid Waste generated (TPD)	Processed (TPD)	Gap in Processing (TPD)	To disposal site (TPD)
1	Pondicherry Municipality	155	7.05	147.95	147.95
2	Oulgaret Municipality	155	3.97	151.03	151.03
3	Karaikal Municipality	40	33.5	0	6.5
4	Mahe Municipality	12.5	12.5	0	0
5	Yanam Municipality	20	1	19	19
<b>TOTAL</b>		<b>382.5</b>	<b>58.02</b>	<b>317.98</b>	<b>324.48</b>

S. No.	Name of the Municipality	Gap in waste processing (TPD)	Action plan	Technology	Sources of Fund	Time taken	SWM Compliance after completion
1	Pondicherry Municipality	147.95	DPR is being prepared for the proposed "Integrated solid waste management through collection, segregation, transportation and setting up of centralized processing in Kurumbampet at Oulgaret municipality for Puducherry urban agglomeration area"	Multi – Model / Open Technology	Swatch Bharat Mission fund , State Share and loan if required	Dec 2022 Tentative time for awarding	100%
2	Oulgaret Municipality	151.03					
3	Karaikal Municipality	0	SWM complied	Windrow composting, Plastic Recycling, Bio Methanation and RDF			-
4	Mahe Municipality	0	SWM complied	In house Composting and arrangement with Piggery. Plastic waste recycling and RDF through concessionaire  Established Domestic Hazardous waste Deposition Centre			-
5	Yanam Municipality	19	The tender awarded for the Integrated solid waste management through Collection (C), Segregation (S) , transportation (T). Setting up of Processing of solid waste with engineered sanitary land fill site in Yanam Municipality for 15 years period. C, S and T is already been commenced. Setting up of processing unit is under progress.	Vermi Composting and RDF Established Domestic Hazardous waste Deposition Centre	Swatch Bharat Mission fund, State Share and loan if required	October 22	100%

# Challenges faced in commencing processing

- For Urban areas of Puducherry and Oulgaret, the present concessionaire is carrying out only Collection, Segregation and Transportation from 2015 onwards i.e. before notification of SWM Rules, 2016 and the concession period is till 2025. Processing was not part of the contract
- For processing of the segregated waste, land availability was also a deterrent due to local public opposition. So it was decided that, the Kurumbapet land reclaimed after bio mining at the disposal site of Legacy Waste will be used for setting up of processing unit after sufficient land is cleared. Accordingly, the DPR is in final stage of preparation.

# Disposal of Legacy waste

Dumping Site	Technology Used	Legacy Waste (Tons)	Quantity Removed (Tons)	Total area of the dump site	Area Reclaimed	Timeline for completion
Kurumbapet, Oulgaret Municipality	Bio Mining & Bio Remediation	5.53 Lakh	2.45 Lakh	23 Acres	6 Acres	Mar 2023
Paravaipet, Karaikal Municipality	Bio Mining & Bio Remediation	0.76 Lakh	0	9.5 Acres	0	Floating of Tender – August,2022
						Issue of LoA – October , 2022
						Completion of Project – Apr 2023
UKV Nagar, Yanam Municipality	Bio Mining & Bio Remediation	0.15 Lakh	0	1.5 Acres	0	As quantity is small, the work of processing of legacy waste will be entrusted to the existing concessionaire after setting up of processing plant

# BEST PRACTICES

- 100 % Door to Door collection.
- Material Recovery Facility (MRF) – 4 TPD has been set up at Dubraypet, Pondicherry Municipality under CSR funds.
- It is being replicated in Oulgaret municipality for capacity 20 TPD and Pondicherry Municipality for another 10 TPD and existing facility will be upgraded to 5 TPD
- In Pondicherry Municipality, as pilot project through Recity Pvt.Ltd. Each HH of 19 wards has been pasted with a unique QR code to digitally capture and monitor the collection and segregation at source . 18498 HHs are covered and geo-tagged with QR code to ensure 100% segregation at source, collection, processing and to reach final disposal site.
- The same QR code system has already been replicated in Yanam Municipality and proposed to be replicated in Karaikal region by September, 2022
- Further an APP is being launched in Yanam whereby user can place request for disposal of domestic hazardous waste directly , same will be implemented in Karaikal Region and Pondicherry Rural area



# Monitoring Mechanism:

- Environment Monitoring Committee was constituted vide G.O. No. 44773/Envvt/2020 dt. 12.08.2020.
- State Level Advisory Body to Review implementation of Solid Waste Management has been constituted on 18.11.2016.
- State Level Advisory Committee constituted on 15.05.2017 under Bio-medical Waste Management Rules, 2016.
- State Level Committee constituted on 12.02.2019 on Solid Waste Management.
- Special Task Force constituted on 08.07.2021 Plastic Waste Management.

# Section – II: SEWAGE MANAGEMENT

# Sewage Generation:

Name of the Municipality	Sewage generated MLD	Available Sewage Treatment Plant MLD	Gap in Treatment (MLD)
Puducherry	71	56	15
Karaikal	10.6	0	10.6
Mahe	4.5	0	4.5
Yanam	6.0	0	6.0
<b>Total</b>	<b>92.1</b>	<b>56</b>	<b>36.1</b>

# Strategy to bridge the Gap in Sewage Treatment

Name of the Municipality	Gap in Treatment (MLD)	Action Plan to bridge the Gap	Timeline
Puducherry	15	15 MLD STP will be set up by availing negotiated loan	DPR TIMELINE- SEPT 2022  TENDERING: OCTOBER 2022  AWARD OF WORK: NOVEMBER 2022.  COMPLETION TIMELINE MAHE & YANAM: APRIL 2023. PUDUCHERRY & KARAIKAL: JULY 2023
Karaikal	10.6	12 MLD STP will be set up by availing negotiated loan	
Mahe	4.5	5 MLD STP will be set up by availing negotiated loan	
Yanam	6.0	6 MLD STP will be set up by availing negotiated loan	
<b>Total</b>	<b>46.1</b>		

# Meeting the gap in Household connectivity

Sectors	Households Status			Action plan to connect	Time line		
	Total (Households)	Connected (Households)	Gap /Not connected (Households)	<ul style="list-style-type: none"> <li>i. Door to Door Survey</li> <li>ii. Portal and geo-tagging of the households.</li> <li>iii. Launching of Suthame Sugatharam</li> </ul>	Portal launch Aug 2022.  Scheme to be completed before September, 2023		
Domestic	97,900 (Approx.)	62,000 (63%)	35,900 (37%)				
Commercial Establishment	9,000 (approx.)	6,000 (66%)	3,000 (34%)				

# Connectivity of Sewers line to Households:

## Activities:

- ▶ Door to door survey by engaging NGOs with dedicated software / App. Developed by Department of Information Technology, Puducherry Technological University is planned to be commenced immediately. (August 2022).
- ▶ This will provide dashboard with real time status of household services availed by the individual house owners.
- ▶ The uncovered households mostly comprises of BPL Families.
- ▶ Based on the above survey it is proposed to provide incentive to the BPL families to meet the expenses involved in connecting their household waste water. This scheme to be launched as **SUTHAME SUGATHARAM**.
- ▶ Joint efforts are also taken in co-ordination with local administration department to identify the unconnected commercial establishments and enforcement of legal actions.
- ▶ Time to achieve the target Sept. 2023

## FSTP (Fecal Sludge Treatment Plant):

- ▶ The digested sludge from the septic tanks are periodically cleaned.
- ▶ To safely treat and dispose fecal sludge from the septic tanks, common Fecal Sludge Treatment Plant (FSTP) is proposed to be installed at laswpet, Puducherry STP Campus for capacity of 75 Cum/day (Approx. 25 tankers) at the cost of Rs. 3.90 Crores under Swachh Bharath Mission.

## Meeting the discharge standards by existing STPs:

Sl. No.	Parameters	Lawspet	Dubrayapet	Kanagan Eri	Standards as per NGT Class 1 Cities (10 > P > 1L)
1	pH	7.54	7.62	7.63	5.5 - 9.0
2	BOD	7.0	8.0	8.0	20
3	TSS	18	25	15	30
4	COD	44	64	44	100
5	Total Phosphorus	0.46	0.95	0.43	1.0
6	Faecal Coliform	84	94	84	230 MPN/ 100 ml

# PLASTIC WASTE MANAGEMENT

Plastic Waste Generators	Disposal	Quantity
Industrial 35 TPD	Plastic waste Reprocessing units	32 TPD
	Coprocessing	3 TPD
Municipal 34 TPD	Recovery and Recycling	14 TPD
	Land Fill	20 TPD
	<b>TOTAL</b>	<b>69 TPD</b>

Ban on Single Use Plastic of 8 items implemented from 02.08.2019.

Action Plan brought out for phasing Single Use Plastic.

- Enforcement 2021 - 2022
- Consent Revoked : 85
- Closed : 13
- Godowns Sealed : 02
- 3 MT banned Plastic items were seized.

# IEC ACTIVITIES FOR SINGLE USE PLASTIC BAN

- Documentary Movie Released.
- 2 outlets selling alternative to banned single use plastic items at subsidised rates.
- Puppet Show through YouTube videos on the Ban.
- Hoardings, Standees, Pamphlets in Public places.
- LED Van spreading awareness on single use plastic ban.
- Road Making using waste plastic.



# Bio Medical Waste - One Common Bio Medical Waste Treatment Facility of 5 TPD is available.

No. of Health Care Facilities	No. of Beds	Quantity of Bio Medical Waste generated	Capacity of CBMWTF	Gap
387	12,000	4 TPD	5 TPD	No gap

- All the 6 vehicles involving in collection of biomedical waste are installed with GPS. Bar coding system is placed in 48 major hospitals.
- Emissions levels are being monitored through Online Consent Emission Monitoring System (OCEMS).

# E - Waste

Total E – Waste generated	No. of Authorized Collection Centre	Disposal	Gap
32 TPA	2	Collected E – Waste are sent to 6 E-Waste Recycling Centres located in neighboring states for processing.	0

# Hazardous Waste (HW)

Total Number of HW generating industries	Total HW generation	Quantity of Land fillable waste	Quantity of Incinerable waste	Quantity of Recyclable waste	Quantity of Utilisable waste	Gap
139	33483 TPA	1168 TPA (3.5 %)	141 TPA (0.42 %)	1980 TPA (5.91 %)	30194 TPA ( 90.17 %)	0

<b>Air Quality Management</b>	No city in the U.T. of Puducherry is listed in Non-attainment cities
<b>Industrial Clusters</b>	No Polluted Industrial Area has been identified by CPCB in the U.T. of Puducherry
<b>Regulating Sand mining</b>	Special Task Team has been constituted under the chairmanship of Deputy Collector in each District for curtailing illegal sand mining and its transportation. 44 Cases have been booked against illegal sand miners and Rs. 9.1.lakhs were collected as fine during 2021-2022 144 has been imposed in illegal sand mining prone area.

## Industrial Pollution Control

<b>ETPs</b>	
No. of industries which require ETP	98
No. of industries having functional ETP	98
No. of industries complying with discharge standards	93
No. of industries non-complying 3 units have requested extension of time for up gradation of treatment system	05
<b>STPs</b>	
No. of STPs	82
No. of STPs complying discharge standards	79
No. of STPs non-complying 1 units have requested extension of time for up gradation of STP. Show cause notice for closure of the unit was issued on 25.07.2022 Other unit, Resampling need to be carried out for compliance of discharge standards	3
<b>CETPs</b>	
No CETP in the Union Territory	