

**JOINT INSPECTION REPORT IN CONNECTION WITH HONB'LE NATIONAL GREEN TRIBUNAL (SZ), CHENNAI ORDER DATED 01.06.2021 IN O.A. NO. 131 OF 2017 FILED BY THIRU. SYED MOHAMMED KALIFA SAHIB, NAGAPATTINAM VERSUS DISTRICT COLLECTOR, NAGAPATTINAM AND COMMISSIONER, NAGAPATTINAM MUNICIPALITY.**

**I. BRIEF OF THE CASE**

It is submitted that Thiru. Syed Mohammed Kalifa Sahib, Nagapattinam has filed an Application in O.A. No. 131 of 2017 before the Hon'ble NGT (SZ), Chennai against the following two respondents regarding non-compliance of Solid Waste Management Rules, 2016 by Nagapattinam Municipality.

- 1) District Collector, Nagapattinam, and
- 2) Municipal Commissioner, Nagapattinam.

Further, it is submitted that the Hon'ble NGT (SZ), Chennai in its earlier order dated 21.01.2021 has directed as follows.

- ❖ ***The Nagapattinam Municipality has to produce the performance guarantee amount of Rs.15 Lakhs to Tamilnadu Pollution Control Board within a period of one month, failing which the Pollution Control Board is directed to take appropriate action against the Municipality for non-compliance of this direction for realization of amount as the amount will have to be forfeited if the work is not completed as undertaken by them.***
- ❖ ***Any extension of time sought for by them will be subject to further compensation payable as directed by the principle bench in O.A.No. 606 of 2018.***
- ❖ ***The Committee as well as the Pollution Control Board are directed to submit the report to this Tribunal regarding the progress of the implementation of Solid Waste Management Rules, 2016 in Nagapattinam Municipality as directed by this Tribunal in the earlier orders on or before 19.04.2021 by e-filing in the form of searchable PDF/OCR Supportable PDF and not in the form of image PDF along with necessary hardcopies to be produced as per Rules.***
- ❖ ***The Nagapattinam Municipality also directed to file their further progress report regarding the implementation of Solid Waste Management Rules, 2016 and disposal of the legacy waste before the hearing date.***

  
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Nagapattinam Municipality.**

Based on the order of the Hon'ble NGT, Chennai dated 21.01.2021, the Joint Committee has inspected the MSW Processing Facility, legacy waste processing facility, MCCs, STPs and Bio Methanization Plant on 16.04.2021 located at Nagapattinam Town and Nagore Town and submitted the Joint Committee Report to the Hon'ble NGT(SZ), Chennai.

Further, it is submitted that the Hon'ble NGT (SZ), Chennai in its latest order dated 01.06.2021 has directed the TNPC Board, the Joint Committee and Nagapattinam Municipality to submit the further progress report, status report and action taken report on or before 30.06.2021 by e-filing in the form of searchable PDF/OCR Supportable PDF and not in the form of image PDF along with necessary hardcopies to be produced as per Rules.

Based on the above order of the Hon'ble NGT, Chennai, the Joint Committee comprising of District Collector, Nagapattinam; Municipal Commissioner, Nagapattinam and District Environmental Engineer, TNPC Board, Nagapattinam has inspected the MSW Processing Facility, Legacy Waste Processing Facility, MCCs, STPs and Bio Methanization Plant on 25.06.2021 located at Nagapattinam Town and Nagore Town and the report is submitted as follows.

## II. SOLID WASTE MANAGEMENT BY NAGAPATTINAM MUNICIPALITY

Nagapattinam Municipality is District head quarters of Nagapattinam. It is a selection grade municipality having population of 102905 as per 2011 census. It consists of 36 wards. Municipality generates solid wastes of 32 Ton per day. Municipality has two solid wastes processing facility, one at Nagapattinam town and another one at Nagore town. The breakup details of solid wastes generation are tabulated as below.

### 1) Solid waste generation details in Nagapattinam Municipality

Sl.No	Type of Waste	Waste generation in Nagapattinam Municipality (Ton/Day)		Total Quantity in (Ton/Day)
		Nagapattinam Town	Nagore Town	
1	Compostable Waste	14.00	5.00	19.00
2	Dry Waste (including Plastic, )	3.50	1.10	4.60
3	Inerts	3.70	1.50	5.20
4	Others (Silt)	2.25	0.95	3.20
<b>Total</b>		<b>23.45</b>	<b>8.55</b>	<b>32.00</b>

**2) Details of vehicles used for collection of solid waste**

Sl.No	Name of Vehicles	Purpose	Vehicles available in Nagapattinam Municipality		Total Vehicle available
			Nagapattinam Town	Nagore Town	
1	Light Commercial Vehicle (LCV)	Door to Door Collection	6	2	8
2	Battery Operated Vehicle (BOV)	Door to Door Collection	5	4	9
3	Tipper Lorry	Other than Door to Door Collection	3	1	4
4	Compactor	For Bins Collection	1	1	2

**3) Manpower available for solid waste management**

Sl.No	Description	Total Man Power available
1	Municipal Health Officer (MHO)	1
2	Sanitary Inspector	2
3	Sanitary Supervisor	13
4	Animated Supervisor (on Contract)	2
5	Animators (on Contract)	9
6	a. Sanitary Workers (Permanent – 92) b. Sanitary Workers (Outsourcing – 145)	237
7	Drivers	14

**III.SOLID WASTE PROCESSING FACILITIES**

Out of 32 Ton of solid waste generation daily, 19 Ton is the compostable waste which is processed in the Micro Compost Centres (MCCs) and also Onsite Compost Centres (OCCs). The municipality has two MCCs in Nagapattinam Town and one MCC at Nagore Town to process bio degradable waste generated from the nearby wards.

## **A) MICRO COMPOST CENTRES (MCCs).**

### **1) Micro Compost Centre (MCC-1):**

The above MCC is located at existing MSW Processing facility at Nagapattinam with a capacity of 5 MT/Day. It covers 13 wards with household of 7581 Nos and population of 30733. During inspection, the MCC was under operation. It was reported by the Municipal Commissioner that the MCC has started its operation since last week only due to damage of MCC Shed and other facilities by Nivar and Puravi Cyclones. Also, the Commissioner has assured that the solid will be processed through this MCC regularly. The municipality has already obtained Authorisation under Solid Waste Management Rules, 2016 with validity upto 31.03.2020.

### **2) Micro Compost Centre (MCC-2):**

The above MCC is located at back side of Government Hospital, Nagapattinam with a capacity of 5 MT/Day which was under operation during inspection. It covers 12 wards with household of 9125 Nos and population of 36381.

### **3) Micro Compost Centre (MCC-3):**

The above MCC is located at Nagore Town with a capacity of 5 MT/Day which was under operation during inspection. It covers 11 wards with household of 8075 Nos and population of 35791.

### **● Onsite Compost Centre (OCCs):**

The Municipality has also provided Onsite Compost Centre (OCCs) at 6 locations in Nagapattinam Town and 2 locations in Nagore town to process about 2 MT/Day of segregated bio degradable solid waste generated from the nearby houses.

Now, the Municipality has applied for authorisation under Solid Waste Management Rules, 2016 for all three MCCs and the application has been forwarded to the Joint Chief Environmental Engineer (M), TNPC Board, Trichy with recommendation to issue authorisation.

### **● Utilization of manure and other wastes generated from MCCs:**

Manure generated from the MCCs are being sold to the local farmers/public for agriculture purposes. Plastic wastes segregated from the above MCCs are being sold to M/s. Ultra Tech Cements Pvt Ltd., Ariyalur for Co – processing in Cement kiln for which Municipality has executed an agreement with them. Copy of agreement made with cement industry is attached. The local body is maintaining the records for handling of solid waste.

## **B) BIO - METHANATION PLANT:**

Nagapattinam Municipality has provided Bio-Methanation Plant with a capacity of 5 MT/Day near to existing MSW Processing facility located at Nagapattinam Town. This

plant was established in the year 2018 for the generation of electric power 300-350 KW/hr which will be used for their one purposes. During inspection the Bio-Methanation Plant was not in operation due to some technical issues, it will be rectified put into use in 7 days.

### **C) BIO MINING PROCESSING FACILITY:**

The Municipality has two bio mining processing facility to process the existing accumulated legacy waste. One is located at existing MSW Processing facility, Nagapattinam Town and another one is located at Nagore Town.

#### **1) Bio-Mining facility at Nagapattinam Town:**

The Bio Mining process is carried out to process the existing accumulated Legacy waste. The estimated total legacy waste accumulated is 10852.77 Cum over an area of 8.20 acres. The Municipality has provided the Bio Mining facility such as Feeding System, Trommel Screen, belt Conveyors with a capacity to process 90 Tons/Day (two batches). Out of 10852.77 Cum, 6894 Cum of legacy waste accumulated over an area of 3.80 acres has been processed as on 25.06.2021 by the Municipality. During inspection the Bio mining of legacy waste is under process. The local body has assured to process the remaining legacy waste on or before 31.12.2021. However, the Chairman of the Joint Committee has instructed the local body to install one more trommel screen with capacity of 90 Tons/Day so as to speed up the process and to complete the processing of remaining legacy waste within three months.

During inspection, Commissioner, Nagapattinam Municipality has informed to the joint committee that as per the instruction of Commissioner of Municipal Administration, Chennai revised survey on legacy waste accumulated in Nagapattinam was carried out by M/s. Step Land Survey Consultants, Pondicherry which was reviewed by Anna University, Chennai and the estimated quantity of legacy waste is 20735 Cum. DPR for the project was submitted to the CMA on 05.02.2021. The Municipal Commissioner also informed that the bio mining of 20735 Cum of legacy waste will be carried out immediately after getting approval from Commissioner of Municipal Administration, Chennai.

#### **2) Bio Mining facility at Nagore Town:**

The Bio Mining process is carried out to process the existing accumulated legacy waste. The estimated total legacy waste accumulated is 12360 Cum over an area of 2.86 acres. The Municipality has provided the Bio Mining facility such as Feeding System, Trommel Screen, belt Conveyors with a capacity to process 60 Tons/Day (two batches). Out of 12360 Cum, 3223 Cum of legacy waste accumulated over an area of 1.60 acres has been processed by the Municipality as on 25.06.2021. During inspection the Bio mining of legacy waste is under process. The local body has assured to process the remaining legacy waste on or before 31.12.2021. However, the Chairman of the Joint Committee has instructed the local body to install one more trommel screen with capacity of 60 Tons/Day

  
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so as to speed up the process and to complete the processing of remaining legacy waste within three months.

The Municipal Commissioner also informed that revised survey on legacy waste was also carried out in this site and survey report reveals that there is no change in the quantity of legacy waste.

● **Utilization of materials recovered from bio mining process**

Bio earth generated from the bio mining process is used for land filling. The plastic and rubber waste recovered from the bio mining are disposed to M/s. Dalmia Cements Ltd, Ariyalur for Co – processing in Cement kiln for which Municipality has executed an agreement with them. Copy of agreement made with cement industry is attached.

● **Progress on completion of bio mining process at Nagapattinam and Nagore**

Out of total legacy waste of 23213 Cum, 10117 Cum of waste has been processed as on 25.06.2021 thereby the Municipality has processed only 43.60% of total legacy waste. The municipality has been already addressed to furnish the fortnightly report on bio mining process vide TNPC Board Letter dated 04.03.2021. But, the Municipality has not furnished fortnightly report.

**IV. SEWAGE TREATMENT PLANT (STP):**

The municipality has installed two Sewage Treatment Plant (STP) at Nagapattinam and Nagore Town. The Municipality has completed the underground sewerage system for 32 wards out of 32 wards and partially completed for remaining 4 wards.

**1) STP at Nagapattinam Town:**

The municipality has already installed STP to treat the 9.63 MLD of sewage generated from Nagapattinam Town. Daily generation of sewage is about 3.90 – 4.20 MLD. The Municipality has obtained consent to operate under Water & Air Acts and the same is renewed upto 31.03.2020. The local body was instructed to apply for renewal of consent immediately after remitting the consent fee for the period upto 2021-2022w. During inspection the STP was under operation.

**2) STP at Nagore Town:**

The Municipality has obtained Consent to Establish (CTE) under Water & Air Acts valid upto 31.03.2022 for the STP to treat 2.96 MLD of sewage generated from Nagore Town. The municipality has installed the STP and commissioned since April 2021. During inspection the STP was under operation.

The STP was previously inspected on 25.02.2021 and issued show cause notice under Water and Air Acts for operating the STP without obtaining CTO. The Municipality has now filed application for Consent to Operate on 25.06.2021 through OCMMS without

remitting Consent Fee. Hence, the application was returned with a request to resubmit the application along with Consent Fee.

#### V. PERFORMANCE GUARANTEE BY NAGAPATTINAM MUNICIPALITY

The Hon'ble NGT in its order dated 21.01.2021 has directed the Municipality to produce the performance guarantee of Rs.15 Lakhs (Fifteen Lakhs Only) (i.e. on or before 20.02.2021) to TNPC Board within a period of one month, failing which the Pollution Control Board is directed to take appropriate action against the Municipality for non-compliance of this direction for realization of amount as the amount will have to be forfeited if the work is not completed as undertaken by them (ie., 31.03.2021).

The municipality has now furnished the performance guarantee dated 21-04-2021 to the TNPC Board of Rs.15 Lakhs (Fifteen Lakhs Only) with the assurance to complete the bio mining process remaining legacy waste on or before 31.12.2021 (Copy of performance guarantee is attached).

#### VI. PROBLEMS FACED BY THE NAGAPATTINAM MUNICIPALITY

During inspection, the Commissioner informed to Chairman, Joint Committee that the Municipality has faced the following problems to manage the solid wastes.

Nearly 40% of the population is in slums, hence, the revenue collection is also very low (ie) 59% Property tax collection in the year last year. Due to financial deficit of the municipality, it is not able to meet out even small maintenance and repair expenses.

Almost every year the Nagapattinam is affected by the cyclone, natural disaster, flood, etc. due to its unique geographical location. Even last year Nagapattinam Municipality was affected by Nivar, and Burevi cyclone and huge damages to the infrastructure has been caused.

##### 1) Details of vehicles

S.No	Details of Vehicles	Required	Sanctioned	Available	Shortage
1	Light Commercial Vehicle (LCV)	18	8	8	10
2	Battery Operated Vehicle (BOV)	37	37	9	28 (Repair)
3	Tipper Lorry	4	4	4	-
4	Compactor	2	2	2	-

##### 2) Details of man power

S.No	Details of Man Power	Sanctioned	Available	Shortage
1	Municipal Health Officer (MHO)	1	1	-
2	Sanitary Inspector	4	2	2
3	Sanitary Supervisor	14	13	1
4	Sanitary Workers	389	237	152

  
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	(Permanent +Outsourcing )			
5	Drivers	14	8	6

### 3) Financial Status

The financial status of the Municipality is extracted in brief from the annual balance statements for the year 2016-17 onwards.

Year	Income	Expenditure	Deficit
2016-17	Rs.12,47,17,011/-	Rs.15,66,31,726/-	Rs.3,19,14,715/-
2017-18	Rs.19,17,61,490/-	Rs.28,80,27,353/-	Rs.9,62,65,863/-
2018-19	Rs.21,87,50,180/-	Rs.27,19,38,991/-	Rs.5,31,88,805/-
2019-20	Rs.21,98,32,074/-	Rs.38,21,31,515/-	Rs.16,22,99,441/-

### VII. CONCLUSION OF THE COMMITTEE:

- 1) As per the Hon'ble NGT order, the Municipality has to complete the bio mining process on or before 31.03.2021. But it was observed that the out of existing legacy waste of 23213 Cum, only 10117 Cum (43.60%) has been processed as on 25.06.2021 and remaining 13096 Cum of waste has to be processed.
- 2) Municipality has to install additional machinery at Nagapattinam and Nagore to speed up and to complete the bio mining process of legacy waste.
- 3) As per the revised survey of legacy waste by the Municipality after Gaja Cyclone, 20735 Cum waste is available at Nagapattinam site which has to be processed immediately.
- 4) Municipality has to operate the Bio Methanation Plant to process the bio degradable waste immediately.
- 5) Municipality has to operate Sewage Treatment Plant installed at Nagore Town with consent to operate of TNPC Board.
- 6) From the report furnished by the Municipality, it is observed that there is a shortage of Battery Operated Vehicles to transport the solid waste (28 Nos in major repair), Sanitary Inspector (2 Nos), Sanitary Supervisor (1 No) and Sanitary Workers (152 Nos).
- 7) From the financial status furnished by the Municipality, it is observed that financial deficit of Rs.16,22,99,441/- in the year 2019-20.

### VIII. RECOMMENDATION OF THE JOINT COMMITTEE

- 1) Municipality has to install additional machinery at Nagapattinam and Nagore to speed up and complete the bio mining process of balance legacy waste of 13096 Cum.
- 2) Administrative sanction shall be given early to the Municipality to carry out the bio mining process of additional legacy waste of 20735 Cum available at Nagapattinam site.

  
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- 3) Municipality has to operate the Bio Methanation Plant to process the bio degradable waste immediately.
- 4) Segregation of solid wastes at source shall be improved by providing 8 nos. of LCV
- 5) Municipality has to operate Sewage Treatment Plant installed at Nagore Town with consent to operate of TNPC Board.

Submitted status report to the Hon'ble NGT (SZ), Chennai.

  
**Commissioner,  
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