R.Dinesh S/O M.S.Ramasamy vs The Gopichettipalayam Municipality, ... on 31 August, 2021

Bench: K Ramakrishnan, K. Satyagopal

Item No.9:

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 99 of 2017 (SZ) (Through Vide Conference)

IN THE MATTER OF:

R. Dinesh S/o. M.S. Ramasamy, Gobichettipalayam, Erode District.

... Applicant(s)

Versus

Gobichettipalayam Municipality Rep. by its Commissioner, Gobichettipalayam, Erode District & Ors.

...Respondent(s)

Date of hearing: 31.08.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE Dr. K. SATYAGOPAL, EXPERT MEMBER

For Applicant(s): Mr. A. Yogeshwaran.

For Respondent(s): Mr. S. Kamalesh Kannan represented

Mr. S. Sai Sathya Jith for R1.

Dr. D. Shanmuganathan for R2.

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- 1. As per order dated 14.06.2021, this Tribunal had directed the Gobichettipalayam Municipality to submit a further compliance report, apart from directing the committee to submit the report and posted the case to today for that purpose.
- 2. We have received the report of the Joint Committee dated Nil e-filed on 28.08.2021 and received today (i.e. 31.08.2021) which reads as follows:-

"Report of the Joint Committee Constituted by the Hon'ble NGT (SZ) in o.A. No. 99 of 2017 filed by Mr. R. Dinesh regarding the dumping of Municipal Solid Waste by the Gobichettipalaym Municipality, Erode District, Tamil Nadu.

1) Brief introduction about the Gobichettipalavam Municipality MSW Disposal and O.A No. 99/2017 filed in Hon'ble NGT (SZ):

Gobichettipalayam Municipality is a Selection Grade Municipality in Erode District, Tamilnadu with an extent of 7.51 sq. km and has total population of 59523 as per census 2011. The current population of 63472 is distributed in 30 Wards. At present, total quantity of solid waste generated from the Municipality is 22 T/day.

In the past, the Gobichettipalayam Municipality has dumped the solid waste collected from the municipal area in Karattur Compost Yard located at T. S. No. 2 & 7, Ward D, Block 4 & 5 Gobichettipalayam in an extent of 1.94 Acres. Later, the Gobichettipalayam Municipality has engaged M/s. Aicon Surveys Private Limited, Puducherry in March 2015 to find the quantity of legacy waste dumped at the Karattur compost yard. The volume of legacy waste at the dump yard was found to be 40,000 m3. In the Karattur Compost Yard apart from the dumped legacy waste, one Micro Composting Centre (MCC) - 3 T Capacity and one Biomethanation Plant - 3 T/Day Capacity is located within the premises.

Subsequently, the Gobichettipalayam Municipality has entrusted the work of Reclamation of existing dump site located at Karattur Compost Yard to M/s. Sri Sivaraman & Co, Gobichettipalayam vide letter ROC No. 3395/2015/E1 Dated:

30.10.2018 for the removal of the legacy waste of 40000 mo through bio-mining process on Design, Build, Own and Operate (DBOO) basis at the cost of Rs. 2,63,00,000/- (at the rate of Rs. 639 per m3).

M/s. Sri Sivaram & Co., Gobichettipalayam has made MoU with M/s. Ultra Tech Cement Limited, Ariyalur to utilize plastic waste recovered from bio-mining process for Co-incineration purposes and has made MoU with M/s. Iniya Traders, Erode for disposal of Glass fraction for recycling purposes.

The Gobichettipalayam Municipality has also engaged the Centre for Environmental Studies (CES), Anna University, Chennai as Project Management Consultant to assess the work by periodic site visits, volume measurements, observations at the site and review of records. A team from Centre for Environmental Studies (CES), Anna University visited the site to assess the progress of Biomining operations on 26 July 2019, 24 August 2019 and 30 October 2019. As per the Progress Report furnished by the team, the cumulative volume of legacy waste processed through Biomining is around 1337 m3 as on November 2019.

In the mean time, an Application was filed by the Applicant, Mr. R. Dinesh, Slo. M. S. Ramasamy, residing at No. 6, Parvathy Nagar, Pudupalayam, Gobichettipalayam Taluk, Erode District, Tamil Nadu before the Hon'ble NGT (SZ) vide O.A. No. 99 of 2017 stating that the dumping of Municipal Solid Waste by the Gobichettipalayam Municipality of Erode District was carried out at the adjacent site of T. S. No. 2, Block 5, Ward D of Gobichettipalayam Municipality, Erode District without obtaining mandatory Environmental Clearance under the EIA Notification, 2006, Authorization under the Municipal Solid Waste (Management and Handling) Rules, 2000 and without Consent to establish under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 from the Tamil Nadu Pollution Control Board.

The applicant has also stated that this illegal dumping of waste resulted in complete contamination of Ground water in the said area and also prayed before the Hon'ble NGT (SZ)

- a) To cease the dumping of waste at the site, T.S.No. 2, Block 5, Ward D of Gobichettipalayam Municipality, Erode District
- b) To remediate the said site, restore it to its previous pristine state including remediation of ground water and soil.
- c) To Direct the 3rd Respondent, District Environmental Engineer, TNPCB, Perundurai to initiate prosecution under the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution)Act, 1974 and the Air (Prevention and Control of Pollution)Act, 1981 for violations committed by them.
- 2) Directions of the Hon'ble NGT (SZ) on 19.12.2019 and its compliance
- a) Directions issued to the TNPCB:

The Hon'ble NGT (SZ), Chennai in its order Dated:

19.12.2019 in O. A. No. 99 of 2017 has directed the Tamil Nadu State Pollution Control Board to inspect the area in question to ascertain the extent of legacy waste still present in that area untreated and damage if any caused to environment on account of dumping of waste in that area due to leachate generated and percolation of the same to the soil and also assess the environmental compensation if any to be recovered and submit a report.

b) Directions issued to the Gobichettipalayam Municipality:

The Hon'ble NGT (SZ), Chennai in its order Dated:

19.12.2019 in O. A. No. 99 of 2017 has also directed the Gobichettipalayam Municipality to submit a detailed statement regarding the action taken by them for disposal of the legacy waste and also the manner in which the waste generated in their municipality is being collected and disposed off and any steps or action plan prepared by them for complying the direction of the Hon'ble NGT in O.A. No. 606/2018 for implementation of the Solid waste Management Rules, 2016 within a period of one month. c) Compliance of the Directions by the TNPCB:

Accordingly, the site was inspected by the District Environmental Engineer, Tamil Nadu Pollution Control Board, Perundurai on 10.01.2020 and the inspection report was submitted to the Board vide Letter No. DEE/TNPCB/PND/NGT Application No. 99 of 2017/MSW/2019 Dated: 20.01.2020.

d) Compliance of the Directions by the Gobichettipalayam Municipality:

The Gobichettipalayam Municipality has also submitted to the Hon'ble NGT, stating that no fresh waste is dumped in the said dump site and they were taking steps to dispose the same through Micro Compost yard and Bio-Methanation plant in the same place. Further, it was stated that they have already taken steps to dispose the legacy waste and have engaged an agency for that purpose by doing Biomining and as per the report of that agency, the work will be completed by 31.08.2020.

3) Directions of the Hon'ble NGT (SZ) on 27.01.2020 and its compliance Later, the Hon'ble NGT (SZ) in its Order Dated:

27.01.2020 in O. A No. 99 of 2017 has directed the first respondent Municipality to submit a progress report of the disposal of the legacy waste periodically and to file such report on 04.05.2020. The Hon'ble NGT (SZ) has also directed the Central Pollution Control Board (CPCB), Regional Office, Ministry of Environment, Forest and Climate Change (MoEF& CC), Chennai and Tamil Nadu State Pollution Control Board (TNSPCB) to jointly take the responsibility of assessing environmental compensation, remedial measures required for improving the water quality in that area and also to take the assistance of any expert agency for this purpose, if desired.

Further, the Hon'ble NGT (SZ) has nominated the TNPCB as the nodal agency for this purpose for coordination and providing necessary logistic support and directed the committee to submit the report before the next hearing scheduled earlier on 04.05.2020.

a) Compliance of the Directions by the TNPCB:

In accordance with the Directions of the Hon'ble NGT (SZ), the Board has constituted the Joint committee, comprising of the following members.

i) Dr. C. Kaliyaperumal, Director, Ministry of Environment, Forest and Climate Change (MoEF& CC), Regional Office (Chennai). ii) Thiru. R. Rajkumar, Scientist, Central Pollution Control Board iii) Thiru. R. Mathivanan, Joint Chief Environmental Engineer (M), TNPCB, Salem as Nodal Officer for the Joint Committee.

The terms of reference for the joint committee are as follows

- i) To assess environmental compensation and the remedial measures for improving the water quality in the area which is seen contaminated due to the operation of the dumping ground.
- ii) TNPCB to act as nodal agency for coordination and providing necessary logistic support.
- iii) To submit report within a stipulated period of time as per Hon'ble NGT Orders.
- b) Compliance of the Directions by the Gopichettipalayam Municipality:

As directed by the Hon'ble NGT (SZ), the Gopichettipalayam Municipality has submitted report to the Hon'ble NGT (SZ) on 02.06.2020, stating that around 3,600 m3 of Waste has been processed and the remaining work will be completed before November 2020. Further, it was stated by the Municipality that the delay has been caused due to lock down declared on account of COVID-19 Pandemic in the state.

4) Directions of the Hon'ble NGT (SZ) on 03.06.2020:

In the subsequent hearing on 03.06.2020, the Hon'ble NGT in O. A. No. 99 of 2017 has directed the committee to submit the report regarding the progress of the work that is going on and also the compliance as per order dated 27.01.2020 and submit the report within a period of 3 months. The next hearing was scheduled on 04.09.2020.

5) Meetings of the Joint Committee:

A Preliminary meeting was conducted by the Joint Committee on 18.06.2020. Due to the COVID-19 pandemic situation, the meeting was conducted through video conference in Zoom App facility. After a detailed discussion, it was requested by the Committee Members to have a detailed power point presentation by Gobichettipalayam Municipality about bio mining method, status of work carried out in the site and progress made so far during the next meeting.

Accordingly, in the next meeting conducted on 05.08.2020 through video conference in Zoom App facility, Thiru. R. Thanumoorthy, Commissioner, Gobichettipalayam Municipality has given power point presentation regarding present status of Biomining activity carried out for legacy waste at Karattur compost yard Gobichettipalayam Municipality for all the Committee members. The committee has discussed in detail about the methods and facilities provided by the Gobichettipalayam Municipality for the collection and management of Municipal Solid Wastes and about the present status of biomining of legacy waste. Further, the committee members have requested the TNPCB officials to identify additional Sample locations around the dumpsite in all the directions and also to analyze the same through the Board's laboratory as well as a NABL accredited laboratory to assess additional parameters such as Phenolic compounds, heavy metals as per Municipal Solid Waste Management Rules, 2016.

a) Action taken by the TNPCB:

Based on the above, 10 additional sample locations were identified by the TNPCB officials around the Karattur Compost Yard, Gobichettipalayam in all the directions and well water samples were collected on 10.08.2020.

The collected samples were handed over to the Advanced Environmental Laboratory, Tamilnadu Pollution Control Board, Salem and to NABL Accredited Lab M/s. GLENS Innovation Labs Pvt. Ltd., Chennai for the detailed analysis of open well and bore well samples for the following parameters as per Solid Waste Management Rules, 2016: pH, TSS, TDS, BOD, COD, Colour, Conductivity, Turbidity, Total Alkalinity, Oil & Grease, Arsenic, Cadmium, Chromium (as Cr6+), Copper, Cyanide, Lead, Mercury, Nickel, Nitrate as NO3, Iron, Total Hardness (as CaCO3), Phenolic Compounds (as C6H5OH), Zinc, Ammonical Nitrogen (as N), Total Kjeldahl Nitrogen (as N) and Sulphate (as SO4).

6) Consolidated Report of Analysis of Ground Water samples:

Ground Water Samples were collected by the TNPCB officials during July 2019, October 2019, January 2020, May 2020 and June 2020 from the Bore wells located in and around the Karattur Compost Yard, Gobichettipalayam.

Further, the Joint Committee in its meeting conducted through video conference on 05.08.2020 has decided to collect more Ground Water Samples around the said dump site of Gobichettipalayam Municipality in all the directions and to analyze the same through a NABL Accredited third party laboratory. Accordingly, additional Ground water samples were collected by the TNPCB officials on 10.08.2020 and analyzed through the NABL Accredited third party Laboratory, M/s. Glens Innovation Labs Pvt Ltd, Arumbakkam, Chennai.

The inference of the analysis report is already submitted to the Hon'ble National Green Tribunal (SZ), Chennai along with the Interim Report.

The consolidated Report of Analysis of the Ground water samples from the NABL Accredited Laboratory, M/s. Glens Innovation Labs Pvt Ltd, Arumbakkam, Chennai reveals that the Ground water samples at locations surrounding the dump site of Gobichettipalayam Municipality is not affected by the contamination of Heavy metals such as Arsenic, Cadmium, Chromium (as Cr6+), Copper, Cyanide, Lead, Mercury, Nickel, Nitrate, Iron as Fe, Phenolic Compound, Zinc and it was observed that there is no impact on the surrounding groundwater quality due to the legacy waste dump site.

7) Ambient Air Quality Analysis:

The Ambient Air Quality survey was carried out on 20.07.2020 at four locations around the legacy waste dump site. The Report of Analysis of the Survey conducted at the legacy waste site by the District Environmental Laboratory, TNPCB, Perundurai reveals that the parameters SO2, NO2, PM10, PM2.5 are within the standards.

8) Order of the Hon'ble NGT (SZ), Chennai dated:

30.09.2020:

- 1. The Hon'ble National Green Tribunal (SZ), Chennai has granted some more time to the Committee as well as to the 1st Respondent to submit the final report and also the progress report regarding the Recommendations made by them.
- 2. The TNPCB shall file independent report regarding the action taken for non-compliance of the directions given by the Principal Bench of National Green Tribunal on O.A No. 606 of 2018 by the 1st Respondent Municipality.
- 9) Order of the Hon'ble NGT (SZ), Chennai dated:

07.01.2021:

The Hon'ble National Green Tribunal (SZ), Chennai vide order dated: 07.01.2021 has ordered as below.

"It may be mentioned here that it is against the directions issued by the 20 Principal Bench of National Green Tribunal, New Delhi in O.A. No.606/2018 and if any of the local bodies were not able to comply with the direction within the time line provided in that order, then their remedy is to approach the Principal Bench for extension of time and this Bench cannot grant extension, contrary to the orders passed by the Principal Bench in this regard which is being considered in a PAN India basis

regarding the implementation of the Solid Waste Management Rules and periodical directions are being given including direction to the Pollution Control Board to take steps against the violating local bodies as such.

So under such circumstances, the Pollution Control Board as well as the Joint Committee are directed to file a further report in compliance with the directions issued by the Principal Bench of National Green Tribunal in o.A. No.606/2018 regarding the imposition of environmental compensation for non-compliance of the directions issued by the Tribunal within the time frame fixed by the Principal Bench before the next hearing date"

Subsequent to the above said orders of Hon'ble NGT (SZ), Chennai, the Gobichettipalayam Municipality legacy waste processing site was inspected on 20.02.2021. The Commissioner, Gobichettipalayam Municipality hasinformed that around 29000 m3 of legacy waste has been processed so far out of 40000 m3. The Commissioner, Gobichettipalayam Municipality has assured to process the balance quantity of 11000 m3 of legacy waste before 31.03.2021.

Based on the order dated: 07.01.2021 of Hon'ble NGT (SZ), the interim environmental compensation for Gobichettipalayam Municipality was arrived as Rs. 12,00,000/- (Rupees Twelve Lakhs) and submitted to the Member Secretary, TNPCB, Chennai for approval.

10) Directions of the Hon'ble NGT (SZ) on 14.06.2021:

The Hon'ble NGT in its order dated 14.06.2021 O. A. No. 99 of 2017 has given the following Directions among others.

- i) The Joint Committee was directed to file a further report regarding compliance of recommendations made by the committee in the earlier reports by the Gobichettipalayam Municipality and also to submit a status report regarding the place where now they are disposing the biodegradable and non-biodegradable waste and whether it is in compliance with Solid Waste Management Rules, 2016 and if there is any violation, what is the nature of action taken.
- ii) Tamil Nadu Pollution Control Board was directed to file the independent report regarding those aspects.
- iii) The Gobichettipalayam Municipality was directed to conduct soil test as directed by the Joint Committee at their own expenses and on the basis of the report, if any remediation process is required, then the Joint Committee is directed to submit a report regarding the remedial measures to be taken to rectify the damage caused to the soil. The committee can conduct soil test from the area where the bio-mining was completed taking that as a representative sample for the entire area, so that the report can be prepared without delay.

- iv) The Expert from Tamil Nadu Agricultural University, Coimbatore was directed to submit a report to the Joint Committee, so that the Joint Committee can consider that report also regarding the remediation process and further compensation, if any, assessed on account of the damage caused to the soil.
- v) The Expert was also directed to ascertain the nature of damage, if any, caused to the soil on account of the deposit of legacy waste for a long time and whether it has got any impact on the soil as well as ground water in the neighbouring areas and if so, what are the remedial measures to be taken for rectifying the same and assess the environmental damage caused on account of the same and fix the environmental compensation which also will have to be incorporated as part of environmental compensation, apart from the compensation fixed by the Principal Bench of National Green Tribunal, New Delhi in O.A. No.606 of 2018. The Hon'ble NGT (SZ) has directed to complete these things within a period of two months.
- 11) Report of the Joint Committee as directed by the Hon'ble NGT (SZ) in its order dated 14.06.2021:

The Report of the joint Committee in compliance of the orders passed by the Hon'ble NGT (SZ) in its order dated 14.06.2021 is submitted as below.

a) Present Status of biomining:

The Centre of Environmental Studies, Anna University has estimated the volume of legacy waste dumped in the Karattur Compost Yard as 40,000 m3, based on the areal extent and the contour profile of the dumpsite and prepared the Detailed Project Report accordingly. The CES team has assessed the progress of work by periodic site visits, volume measurements, observations at the site and review of records. As per the CES Report, the Progress of the work as of 07 April 2021 was about 31,240 m3 (9316 m3 of coarse soil + 20741 m3 of fine soil + 1183 m3 of RDF and other fractions) of the legacy waste is screened and the recovered materials were used or disposed. RDF is being disposed to M/s. Ultra Tech Cement Limited, Ariyalur, M/s. Dalmia Cements, Ariyalur and M/s Associated Cement Company, Madhukarai, Coimbatore to utilize it for Co-incineration. Other fractions such as Glass, Hard plastics, Chappals and Tyre fraction is disposed to local vendors viz. M/s. Shakthi Plastics, M/s. Iniya traders, Erode to utilize it for recycling purpose.

The details of progress of work at Gobichettipalayam Municipality was assessed by the CES, Anna University as below.

Progress Period		Cumulative Volume
Report		certified in M3
I	July 2019 - November 2019	1,337
II	July 2019 - March 2020	2,489
III	July 2019 - June 2020	6,556

IV	July 2019 - September 2020	11,085
V	July 2019 - 10th December 2020	17,438
VI	July 2019 - 7th April 2021	31,240

During inspection of the site on 10.08.2021, it was reported that around 36,000 m₃ of the legacy waste is screened and the recovered materials were used or disposed. Further, it was reported that the biomining work was delayed due to second wave of COVID-19 and intermittent rains.

Now, the Gobichettipalayam Municipality has reported that they have completely processed the estimated 40,000 m₃ of legacy waste as on 25.08.2021. However, the same is to be certified by the Centre of Environmental Studies, Anna University.

During inspection, it was also stated by the Commissioner, Gobichettipalayam Municipality that there may be around 2800 - 3000 m3 of legacy waste in the said biomining site in addition to the already estimated 40,000 m3 of legacy waste. In this connection, it was reported that earlier estimation of 40,000 m3 of legacy waste was based on the areal extent and the contour profile of the dumpsite by the Centre for Environmental Studies, Anna University and in the actual condition, there may be more legacy waste of around 2800

- 3000 m3 than the estimated quantity of 40,000 m3.

In this connection, the Commissioner, Gobichettipalayam Municipality has stated that fresh tenders are to floated for the disposal of this additional 2800 - 3000 m3 of legacy waste and hence requested three months time extension for completely processing this additional legacy waste.

Further, the Centre of Environmental Studies, Department of Civil Engineering, Anna University, Chennai in its Progress Report prepared in May 2021 has stated the following.

- i) During the previous progress claim, the processed and dispatched quantity was found to be more than the measured quantity of legacy waste at site for processing.
- ii) In order to verify the same, CES team inspected the site on 21 December 2020 and 22 December 2020 and 200 m3 of legacy waste was measured for processing.
- iii) The processed and segregated quantity was found to be about 10% more than the measured quantity of legacy.
- iv) This increase in volume may be due to bulking of waste during processing. The bulking of waste will be verified by the CES team by a few more trials in subsequent

inspections.

The Centre for Environmental Studies, anna University has also recommended to implement the following in future operations.

- (i) The receipt of the acceptance and delivery challan for RDF from the end user should include the Name of the supplier and Name of the site from where the RDF is received.
- (ii) Ambient Air Quality Survey should be conducted at site during the operations and the results of the same should be submitted at the earliest as in the given format.
- b) Compliance of recommendations made by the committee in the earlier reports:

The compliance of recommendations made by the Committee in the earlier reports by the Gobichettipalayam is submitted as below.

Sl. Recommendations made by the Compliance status by the No. committee in the earlier Gobichettipalayam Municipality reports 1 The Gobichettipalayam The Municipality has not installed Municipality shall stop additional trammel for the removal of manual segregation of waste waste fractions. However, the coming out from 40 mm Municipality has processed already trammel and to install estimated 40,0000 m3 of legacy waste additional mechanical on 25.08.2021. However, the same is trammels for the removal of to be certified by the Centre of waste fractions as per Central Environmental Studies, Anna Pollution Control Board University.

guidelines. It was also stated by 2. The Municipality has informed Commissioner, Gobichettipalayam

that additional trammel of 200 Municipality that there may be around m3/day will be installed and 2800 - 3000 m3 of legacy waste in the commissioned from 01.02.2021 said bio mining site in addition to the to complete the bio mining of already estimated 40,000 m3 of legacy legacy waste without further waste. In this connection, it was delay, reported that earlier estimation of

3. The Gobichettipalayam 40,000 m3 of legacy waste was based Municipality was having on the areal extent and the counter 40000 m3 of legacy waste profile of the dumpsite by the Centre accumulated over the period of for Environmental Studies, Anna 60 years. At present, the University and in the actual condition, Commissioner of the there may be more legacy waste than Municipality has informed the estimated quantity of 40,000 m3.

that the total quantity of the The Commissioner, Gobichettipalayam legacy waste processed was Municipality has stated that fresh 29000 m3 of legacy waste as on tenders are to floated for the disposal of 16.02.2021. The Municipality this additional 2800 - 3000 m3 of has to process 11000 m3 of legacy waste and hence requested three balance legacy waste. months time extension for

completely process this additional legacy waste.

The Commissioner, Gobichettipalayam Municipality has stated that fresh tenders are to floated for the disposal of this additional 2800 - 3000 m3 of legacy waste and hence requested three months time extension for completely processing this additional legacy waste.

c) Management of fresh Municipal Solid Wastes:

The Commissioner, Gobichettipalayam Municipality has obtained Authorization vide Proc. No. JCEE/SLM/TNPCB/SWM/F.07/PND/2019 Dated: 12/04/2019 for processing, recycling, treatment and disposal of municipal solid wastes of 22 MT/day under the Solid Waste Management Rules, 2016 for the period upto 31.03.2020 for carrying out processing/recycling/treatment/disposal facility for the municipal solid waste generated at the following locations:

- i) Micro Composting Centre at Ramar Extension, T. S. No. 1, 4, Ward B, Block 15 (Old S.F. No. 15 B, 16 A pt, 16 B pt), Gobichettipalayam 4 MT
- ii) Micro Composting Centre at Nayakankadu, T. S. No. 7, Ward D, Block 4 (Old S. F. No. 185 pt), Gobichettipalayam 3 MT
- iii) Bio Methanation Plant at Nayakankadu, T. S. No. 2, Ward D Block 5 (Old S. F. No. 180 pt), Gobichettipalayam 3 T/day At Present, the Municipality generates around 20 t/day of Solid Wastes and 2 T/day of Bulk Wastes. All the fresh solid wastes are processed in compliance of the solid Waste Management Rules, 2016 and no fresh solid waste is dumped at any site.

The segregated organic Municipal Solid Wastes are transported to Micro Composting Centres (4 MT and 3 MT) and Windrow composting (0.7 MT). The organic materials are processed and converted as compost and sold out as manure for the nearby farmers. The food waste and vegetable waste are shredded and used to produce bio gas in the bio methanisation plant. The biogas is used to produce Electricity though Gas based DG Set, which partly meets out the power requirement of the machinery at the composting site.

The plastics waste was found separated and stored within the premises for further disposal to the recyclers. The saleable plastic wastes (700 Kg/day) are solid out to Recyclers and other plastic wastes are disposed to Cement industries for Co-incineration. In this regard, the local body has made MOU agreement with M/s. Ultratech Cements Limited, Ariyalur for Co-incineration of plastic waste generated in the Municipal limit.

All the fresh solid wastes are processed in compliance of the solid Waste Management Rules, 2016 and no fresh solid waste is dumped at any site.

d) Status of Soil Test:

As directed by the Hon'ble NGT (SZ) in its order dated 14.06.2021, the Gobichettipalayam Municipality has conducted the soil test through the Tamil Nadu Agricultural University, Coimbatore on 16.08.2021. The representative samples (3 Nos) was collected by the TNAU, Coimbatore from the biomining completed site as directed by the Hon'ble NGT.

The Report of Analysis has revealed the following.

Parameters	Sample - 1	Sample - 2	Sample - 3
рН	9.23	9.01	9.02
EC (dS/m)	0.95	0.90	0.89
Total Cadmium (mg/Kg)	BDL	BDL	BDL
Total Chromium (mg/Kg)	14.0	13.5	13.0
Total Lead (mg/Kg)	6.0	1.0	2.5
Total Mercury (mg/Kg)	BDL	BDL	BDL
Total Nickel (mg/Kg)	BDL	BDL	BDL
Total Copper (mg/Kg)	BDL	BDL	BDL
Total Zinc (mg/Kg)	6.0	19.5	17.5

BLD - Below Detectable Limit

The Report of Analysis has concluded that all the heavy metals except Arsenic are within the permissible limit. Further, it was stated that Maximum Permissible Limit for Arsenic in Soil is 20 mg/kg.

Conclusion & Recommendations:

- 1. The fresh waste generated in the Municipality area is segregated, collected, organic waste is transported to MCC and converted into bio compost and biogas. The other non-compostable waste is disposed as per Solid Waste Management Rules, 2016.
- 2. The Gobichettipalayam Municipality has completely processed the earlier estimated 40000 m₃ of legacy waste on 25.08.2021. However, the same is to be certified by the Anna University, Chennai.
- 3. Further, there is around 2800 3000 m3 of legacy waste in the said biomining site in addition to the already estimated 40,000 m3 of legacy waste. The Gobichettipalayam Municipality has to float fresh tenders for the processing of the same immediately and to completely process the additional legacy waste as soon as possible.
- 4. After completion of bio mining of entire legacy waste, the extent of Arsenic contamination of the soil at the site may be further studied through the Tamil Nadu Agricultural University / any other reputed Research Institution. After the study, the estimated quantity of contaminated soil may be disposed for secured land fill at

Common TSDF, M/s. Tamil Nadu Waste Management Ltd, Gummidipoondi / Virudhunagar."

3. The 1st respondent also filed a compliance report dated 26.08.2021, e-

filed on 29.08.2021 and received today (i.e. 31.08.2021) which reads as follows:-

"Compliance report filed by the 1st Respondent I, J. PREM ANAND, S/o. K.A. Jayaraj, Hindu, aged about 38 years, working as Municipal Commissioner, Gobichettipalayam Municipality, Erode District., do hereby solemnly affirm and sincerely state as follows;

- 1. I am the 1st Respondent here in and as such, I am well acquainted with the facts and circumstances of the case. I am swearing this compliance affidavit on the basis of the records available in the office of this Respondent.
- 2. I submit that R.Dhinesh have filed an Original Application before the Hon'ble National Green Tribunal (SZ) in
- o.A. No.99/2017 against (1) The Commissioner, Gobichettipalayam Municipality (2) The Commissioner of Municipal administration, Chennai. (3) The District Environmental Engineer, Tamil Nadu Pollution Control Board, Perundurai alleging that the petitioner has filed Case against Gobichettipalayam Municipality to Shift the compost yard to some other place, which has resulted in Environment pollution to the neighbouring Residential Area.
- 3. Gobichettipalayam is a Selection Grade Municipality located at Erode District in Tamil Nadu. It is located at a distance of 37 km from Erode with an extent of 7.51 sq. km and has a population of 59523 as per Census India 2011.
- 4. This Respondent submits that a land in Survey No.3, Block 5, Ward D to an extent of 1.89 acres at this Town was utilized as Gobichettipalayam Municipality's Compost Yard. The same was in use for more than 50 years. It is necessary to state that compound wall was constructed to prevent the pollution and trees were also planted to form a green circle around the said area.
- 5. It is submitted that this Respondent had taken earnest efforts to find other places for constructing new compost yards. Though permissions were obtained to set up, in different locations, the same had ended up in failures due to objections of the nearby villagers of every single location.
- 6. It is submitted that the above mentioned practice came to the existence after the implementation of Solid Waste Management Rules, 2016, in the Municipality. Till the implementation of the same the waste generated were segregated and kept

accumulated in the impugned site, as the same was far from habitations.

7. This Respondent submits that though maximum efforts were made and proper steps were followed to segregate and dispose the waste, the same lead to accumulation of waste in the impugned site. Hence this Respondent engaged M/s. Aicon Surveys Private Limited, Puducherry, In March 2015 to find the quantity of legacy waste dumped at the Karattur compost yard. The volume of legacy waste at the dump yard is found to be 40000 m3 and accordingly this Respondent Municipality received Administrative sanction and Technical sanction for the same.

8.It is submitted that based on the Administrative sanction accorded by the Commissioner of Municipal Administration, Government of Tamil Nadu, this Respondent Municipality had engaged M/s. Sri Sivaraman & Co., Gobichettipalayam as the Concessionaire as per the terms of the Work Order (ROC. No. 3395/2015/E1 dated 30.10.2018) for the removal of the accumulated legacy waste dumped in the compost yard at the rate of Rs. 639 per m3 through bio-mining process.

9.It is submitted that this Respondent Municipality has also engaged the Centre for Environmental Studies (CES), Anna University, Chennai as Project Management Consultant to assess the progress of work by periodic site visits, volume measurements, observations at the site and review of records. The findings the CES team, consisting of Dr. Kurian Joseph, Professor, Dr. S. Karthikeyan, Associate Professor and the Project Associates periodically visited the site and the work progress was assessed. The Progress of the work as of November 2019 revealed that around 40,000 m3 of legacy wastes dumped within the Compost Yard has been processed and about 1134 m3 of the recovered materials had been disposed.

10.It is necessary to state that when this respondent started the dumping of waste in the impugned site, there happened to be no residents or any developments around the place. The said place was used to convert the daily waste generated in the Municipality into manure. After start of plastic use, the actual problem arose and that lead to accumulation of about 40,000 Cu.m of waste.

11. In the meanwhile, due to an unforeseen Corona Virus Pandemic and state-wide lock down from 25.03.2020, the Municipality has been very much involved with the said pandemic. Further, the time has been taken consumption with regard to segregated wastes into bio-degradable and non bio-degradable wastes by bio-mining process. The segregated black soil and silt used for agricultural purposes and the remaining non bio- degradable wastes i.e non-recycle Plastic, Tyres, Stones, leather wastes, bottles, clothes etc., were transported to other recycling units. After completing of bio mining process, a Mass cleaning works were also carried out with the Cleanliness workers of this Municipality and all works were completed on 25.08.2021. Though it is pandemic situation and lock down period, this Municipality have in abeyance to the order of the Hon'ble National Green Tribunal (SZ) passed in

o.A.99/2017, have fully cleared off the legacy wastes from the dump site except buffered quantity of 2682Cum with very great difficulty and hardship at an estimate cost of Rs.2,63,00,000/- I 40,000 of Legacy waste (Rs. Two crores and sixty three lakhs only) in a war footing basis and remaining buffered quantity of 2682 Cum will be cleared within 3 Months at an Estimate cost of Rs.21,00,000 Tender Dated.15.09.2021.

12. It is further submitted that the staff and workers have dedicated their lives and had taken risk and removed the garbage in the above site and have obeyed the Order of the Hon'ble National Green Tribunal (SZ) and while carrying out the task of removal of garbage, either the public or the staff / workers of Gobichettipalayam Municipality have been free from corona virus infection.

13. It is furthermore submitted that this Municipality consists of 30 wards and generate 20 MT of wastes per day including Bulk waste of 2 MT i.e 11.70 tonnes of Bio-degradable and 6.30 of Non Bio-degradable wastes. The wastes are being collected by the Cleanliness workers from residences of this Municipality on day to day basis by door to door collection through using of Push cart, Battery Operated Vehicles (BOV) and Light Commercial Vehicles (LCV). Similarly the wastes from commercial and market area are also being collected through Lorries and other high capacity vehicles. There are two Micro Composting centers (MCC) 7 MT (One at Compost yard (3 MT), Karatoor, and another at Ramar Extension Burial Ground (4 MT)]and Bio Methanation Plant (3 MT) were established in this Municipality. In addition to the above MCCs, 7 Onsite Composting Centers (OCC) 0.90 MT and Windrows of Ramar Extension Burial Ground 0.70 MT processing were also established in the wards of this Municipality. The bio degradable (organic) wastes are brought to MCCs and OCCs wherein the wastes would be shredded using a machine and then dumped into cubical pits for decomposing using the aerobic method. While it decomposes, in around 40 days, a micro-organism solution will be added to control odour and also to hasten the process. The dried compost would then be sieved to produce manure. The manure are being distributed to the farmers for agricultural purposes. While blo-degradable wastes are processed in MCC and OCCs, non-biodegradable wastes are segregated and temporarily stored in Resource Recovery Centre (RRC) and the same transported to authorized plastic recycling industry (Ariyalur Cement Factory) in consultation with the TNPCB. An Incinerator of 1.50 tonnes is sponsered by Olirum Erode to Gobichettipalayam Municipality and awaiting for approval from TNPCB. Further, it is necessary to mention that this Municipality has formed a Special Squad to prevent disposal of garbage in the open places and is following the best methods for disposal of daily generated solid wastes as deemed under the Solid Waste Management Rules (SWM), 2016.

14. Status of Soil Test:

As directed by the Hon'ble NGT (SZ) in its order dated 14.06.2021, the Gobichettipalayam Municipality has conducted the soil test through the Tamil Nadu Agricultural University, Coimbatore on 16.08.2021. The representative samples (3 Nos) were collected by the TNAU, Coimbatore from the biomining completed site as directed by the Hon'ble NGT.

Parameters	Sample - 1	Sample - 2	Sample - 3
рН	9.23	9.01	9.02
EC (dS/m)	0.95	0.90	0.89
Total Cadmium (mg/Kg)	BDL	BDL	BDL
Total Chromium (mg/Kg)	14.0	13.5	13.0
Total Lead (mg/Kg)	6.0	1.0	2.5
Total Mercury (mg/Kg)	BDL	BDL	BDL
Total Nickel (mg/Kg)	BDL	BDL	BDL
Total Copper (mg/Kg)	BDL	BDL	BDL
Total Zinc (mg/Kg)	6.0	19.5	17.5

BLD - Below Detectable Limit

From the findings of the Report of Analysis, the THAU ras orcices that all the heavy metals except Arsenic are within the seriesbe imit Further, it was stated that Maximum Permissible Limit for Arsenic in Solis 20 mg/Kg.

- 15. Further, I submit and assure that we (Gobichecalayam Municipality) hereinafter not allowed storing the garbage in the above said site and would preventing accumulation of garbage in the open places and strictly following the disposal of daily generated solid wastes as per the Solid Waste Management Rules, 2016 in future and obliging.
- 16. It is therefore prayed that this Hon'ble Court may be pleased to accept this compliance report and considering the financial position of this Municipality, this Hon'ble Court may also be pleased to Disposal of this case."
- 4. The learned counsel appearing for the applicant submitted that he had not received the copy of the reports. Normally, reports will be uploaded in the National Green Tribunal portal and the applicant can get it by downloading the same. As regards the compliance report submitted by the 1st respondent is concerned, they are directed to serve the copy of the same to the counsel appearing for the applicant.
- 5. It is seen from the report of the joint committee as well as compliance report that there is arsenic content in the soil, but they have not mentioned anything about the effect of the same on the ground water in the nearby water sources.
- 6. So, the committee is directed to conduct further study in this regard and ascertain as to whether this has contaminated the ground water in the nearby area and any further remedial measures will

have to be taken by the Gobichettipalayam Municipality to remediate these aspects as well.

- 7. The committee is also directed to ascertain the damage caused to the soil and environmental compensation (if any) to be imposed on account of the same.
- 8. The Gobichettipalayam Municipality is also directed to render all assistance including the expenses for conducting the study to get the expert report from the Agriculture University who have been engaged for the purpose of conducting the soil study and submitting a report before this Tribunal in this regard.
- 9. The 1st respondent is also directed to file further report submitted by the Anna University to whom they have entrusted the responsibility of certifying the quality of bio-mining done, so that further steps (if any) to be taken can also be gone into by this Tribunal and further directions can be issued.
- 10. They are directed to submit their respective reports to this Tribunal on or before 29.09.2021 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.
- 11. The applicant is at liberty to file their objection (if any) to the compliance report as well as to the Joint Committee report at the earliest and also serve the copy of the same to members of the committee, so that they can consider those aspects as well while filing the further report as directed by this Tribunal.
- 12. The Registry is directed to communicate this order to the members of the committee and also to official respondents, including the Agriculture University as well as Anna University for their information and compliance of the direction.
- 13. For consideration of further report and objection (if any) to the report already filed, post on 29.09.2021.

Sd/-
J.M. (Justice K. Ramakrishnan) Sd/-
E.M. (Dr. K. Satyagopal) O.A. No.99/2017 (SZ), 31st August, 2021. Mn