

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

PRINCIPAL BENCH, NEW DELHI

Original Application No. 147/2020

K.M. Sanjeev Vijayan

Applicant (s)

Versus

State of Kerala

Respondent(s)

REPORT FILED BY THE ENVIRONMENTAL ENGINEER,
KERALA STATE POLLUTION CONTROL BOARD, DISTRICT OFFICE,
PALAKKAD FOR AND ON BEHALF OF THE
KERALA STATE POLLUTION CONTROL BOARD AS PER
THE ORDER DATED 27.11.2020

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,

PRINCIPAL BENCH, NEW DELHI

Original Application No. 147/2020

K.M. Sanjeev Vijayan

Applicant (s)

Versus

State of Kerala

Respondent(s)

INDEX

SL NO.	Particulars	Page No.
1	Report	1-10
2	Annexure (A)- True Copy of show cause notice dated 22.09.2020 issued to Ottapalam Municipality.	11-12
3	Annexure (B)- True Copy of letter dated 24.12.2020 issued to Ottapalam Municipality	13-14

Dated this the 31st December 2020

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,**PRINCIPAL BENCH, NEW DELHI****Original Application No. 147/2020**

K.M. Sanjeev Vijayan

Applicant (s)

Versus

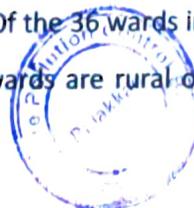
State of Kerala

Respondent(s)

REPORT FILED BY THE ENVIRONMENTAL ENGINEER,
KERALA STATE POLLUTION CONTROL BOARD, DISTRICT OFFICE,
PALAKKAD FOR AND ON BEHALF OF THE
KERALA STATE POLLUTION CONTROL BOARD AS PER THE
ORDER DATED 27.11.2020

I, Krishnan M N, S/o M S Narayanan, am the Environmental Engineer, Kerala State Pollution Control Board, District Office, Palakkad. I am duly authorized by Member Secretary of Kerala State Pollution Control Board to represent the Board in the O.A. I do hereby solemnly affirm and state as follows.

1. Ottapalam Municipality is an urban local body in the district of Palakkad in Kerala with a population of 53792. Of the 36 wards in the Municipality, only 2 wards are urban. All the other wards are rural or peri-urban in nature.




KRISHNAN M N
ENVIRONMENTAL ENGINEER

Bharathapuzha River, a major river of the state, is flowing along the border of this Municipality for about 1 km length including the down-town portion.

2. The grievance in the application can be summarized as follows.

- The dumping yard of the Municipality located in Panamanna ward is not complying with environmental laws and is a source of pollution.
- Solid waste is not properly collected from the Panamanna ward and some other wards leading to burning or dumping of the waste by waste generators who are left with no other option.
- The records of solid waste management submitted by the Municipality before statutory bodies are not reflecting the actual situation which is very unsatisfactory as far as environmental laws are concerned.

These grievances are addressed in the report. Other grievances in the application are not directly related to the statutory functions of the Pollution Control Board and hence the Board has not delved into them in the report.

3. The Board officials conducted inspection on 18.12.2020 after issuing notice to the Municipality. The applicant Sri. Sanjeev Vijayan was also heard during the inspection. The applicant pointed out several litter-spots on the side of the main road passing through the Municipality. Plastic carry bags containing solid waste, un-segregated with wet and dry waste materials were found dumped in and around these litter spots. The list of the litter spots visited is given below in Table 1.

Table 1. Litter Spots Identified

SI.NO	PLACE
1	Ward 14 Near Mary Queen High Tech Laboratory
2	Kayarampara (Ward 22) Opp. Bharatha Store
3	Palappuram (Ward 23) Opp. Kerala State Housing Board Colony



[Signature]
KRISHNAN M. N.
ENVIRONMENTAL ENGINEER

4	Ward 7 Opp. Kottaram hotel
5	Ward 27 Opp. Nasha TVS
6	Near Valluvanad Food Centre, Kanniampuram

The officials of the Municipality claimed that daily 3.5 km of road is swept and litter spots are cleared every day, but one of the litter spots was off the main road where there is no regular sweeping and lifting of waste. At such spots, un-segregated solid waste will remain for more than one day.

4. The processing plant of the Municipality at Panamanna was also inspected during the inspection. The observations are as follows:
- There is no functional wet waste processing facility. The machinery for composting, segregation, etc. are not functional. The officials of the Municipality claim that wet waste is not collected and brought to the processing plant and that all generators have been provided source-level disposal facilities. But, wet waste mixed with dry waste reaches the processing plant from the road-sweepings of litter-spots. The Municipality officials also submitted that there is a proposal to erect and operate decentralized composting plants (*Thumboormoozhi* model widely used successfully in the state of Kerala) which will take care of the wet solid waste.
 - Dry waste collected is segregated into recyclable and non-recyclable fractions manually. The plastic which can be shredded is shredded and the rest is bailed. The non-recyclable waste is also bailed. Both the recyclable and non-recyclable wastes are handed over to Clean Kerala Company, agency authorized by State Government to collect such waste from local bodies.

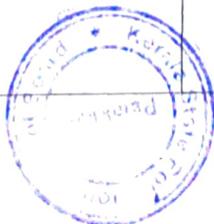



KRISHNAN M N
ENVIRONMENTAL ENGINEER

- There is a legacy-waste dump adjacent to the processing plant. The Municipality has not done scientific quantification of the legacy waste yet. It is spread over an approximate area of 2 acres.
 - There is a seasonal drain flowing near the processing plant and legacy waste-site.
5. The Municipality submitted details of solid waste collection and management at the time of visit. The status of Solid Waste Management with quantities of waste generated, processed etc. from the records submitted by the Municipality as on Oct 2020 is also referred. Based on these the consolidated data on solid waste management is prepared and given in Table 2. The remarks of the Pollution Control Board against each item are also included in the table.

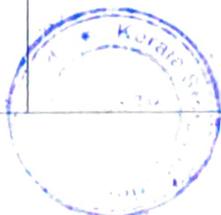
Table-2. Present status of Solid Waste Management

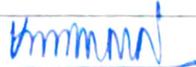
SI No	Details	Quantities/Status as reported by the Municipality	Remarks based on site inspection
1.	Population (2011)	53792	-
2.	No of Wards	36	-
3.	No of Households	12484	-
4.	No of Households having segregation at source	Dry- 7200 Wet - 0	-
5.	No of Establishments having segregation at source	Dry- 1020 Wet - 0	-
6.	No of vehicles used	2	-
7.	No. having source level treatment of wet waste in operation	Households -5400 Establishments - 400	-



Krishnan M. N.
KRISHNAN M. N.
ENVIRONMENTAL ENGINEER

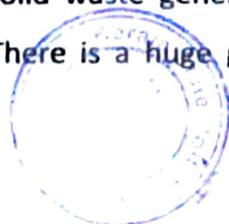
8.	No. of existing Material Collection Facility	1	-
9.	Total solid waste generation in the Municipality per day	1.4 tons	Actual generation may be on the higher side. Given quantity is based on collection records of the Municipality.
10.	Total solid waste collected by the Municipality per day	1.2 tons	Two truck loads approximately 1.2 tons received per day. Collection procedures have to be improved
11.	Quantity of wet & dry waste collected by the Municipality per day	Wet – 0.5 ton Dry – 0.7 ton	Wet waste is collected from street littering without segregation, quantity of wet waste approximately 0.2 tons only. Segregated dry waste collected via door to door collection. Action shall be initiated by the Municipality to eliminate littering of waste completely. Surveillance camera/squad may be engaged/employed.
12.	No. of wards in which door to door collection is implemented	36/36	Acceptable
13.	Percentage of households and establishments covered in the door to door collection	Households - 55% Establishments – 40%	Has to be improved to 100%
14.	Average quantity of wet waste composted in the processing plant per day	1 ton	The Quantity reported is not acceptable. Presently wet waste processing is not functional. Inadequate dumping of approximately 0.2 tons occurs as found in inspection. The Municipality officials also submitted that there is a proposal to erect and operate two decentralized composting plants




 HARISHARAN M. N.
 ENVIRONMENTAL ENGINEER

			(<i>Thumboormoozhi</i> model widely used successfully in the state of Kerala) which will take care of the wet solid waste but it is yet to be commissioned.
15.	Average quantity of dry waste disposed from the MCF per month	15.6 ton	Has to be improved
16.	Methods of disposal of dry waste	Bailing and / or Shredding done. Recyclable, non recyclable and E-waste handed over to Clean Kerala Company	Acceptable.
17.	Estimated quantity of legacy waste	4000 cubic meters	No scientific estimation has been done by the Municipality. Quantity should be evaluated & shall be biominer as per guidelines by the Municipality

6. The Pollution Control Board had issued a show-cause-notice to the Municipality on 22.9.2020 for their failure to prepare a detailed action plan with adequate source of fund for bio-mining and to biomine the legacy waste. A copy of the notice dated 22.09.2020 is produced herewith and marked as **Annexure (A)**.
7. The Municipality had submitted a reply to the notice just stating that Rs.1 lakh has been ear-marked for biominer the legacy waste. The reply is unsatisfactory. No concrete action plan or scientific estimate of the legacy waste was submitted. Hence, incorporating the short comings found during the inspection also, a fresh notice was issued to the Municipality on 24.12.2020 stressing on the following points :
- Total solid waste collected by the Municipality is approximately 1.2 tons a day only. Estimated solid waste generation from Ottapalam municipality is much more. There is a huge gap between the solid




KRISHNAN M. N.
ENVIRONMENTAL ENGINEER

waste generation and solid waste collected. The Municipality may include the solid waste disposed by scrap-collectors and other informal sectors. Still a huge gap exists which must be filled.

- Wet waste is collected from street littering mixed with dry waste. It is dumped along with the legacy waste since wet-waste-processing is not functional in the processing plant. Wet waste must be processed in any scientific manner as per Rules.
- Door to Door collection of solid waste is not achieved 100%. As per the records submitted by the Municipality, the present status of Door to Door (D2D) collection of solid waste (Dry waste) is only 47.5% (including households & commercial establishments). Apart from this, wet waste is not collected from households & commercial establishments. D2D must be extended to 100% of waste generator units including collection of wet waste, for those who don't have source-level disposal facility.
- During site inspection several spots were found in the Municipality where littering of solid waste were there. By increasing the D2D collection efficiency to 100% and by enforcing punitive action against those who burn or dump or litter waste, littering should be curtailed.
- Rule 15 of Solid Waste Management Rules, 2016 is not complied.
- The timeline for achieving 100% D2D collection as per Rule 22 is already expired. The timeline for Bio-mining/Bio-remediation on legacy waste is about to expire in March 2021.

A copy of the notice dated 24.12.2020 is produced herewith and marked as Annexure (B).

8. It is respectfully submitted that Pollution Control Board had sampled and analysed the surface water and ground water sources near the legacy-waste site periodically. The latest sampling was conducted on 26.06.2020. The details of sampling are given in Table 3.




 KRISHNAN M. N.
 ENVIRONMENTAL ENGINEER

Table 3. Sampling Station Details:

Sl. No	Source of water	Sample ID	Address	Latitude N	Longitude E	Approximate Distance from dumping site	Remarks
1	Natural drain	PAS 2820	Vattanal Panamanna	10.785694	76.347165	adjacent	Used for Public use (Bathing)
2	Open well	PAS 2821	Jayaprakash, Pulikkal HO), Aarankulam, Manissery	10.784896	76.348387	600 m	Used for domestic purpose other than drinking
3	Pond	PAS 2822	Sankaranarayanan Poovathpara -mbil, South Panamanna	10.784275	76.348847	500 m	Used for domestic purpose other than drinking

The result of the analysis is given below in Table 4.

Table 4. Water quality study around Legacy Waste dump-site of Ottapalam Municipality at Panamanna

Date of Sampling: 26.06.2020			Result		
	PARAMETERS	UNIT	PAS2820	PAS2821	PAS2823
1	pH	-	7.05	6.93	7.21
2	TOTAL DISSOLVED SOLIDS	mg/L	102	158	102



Krishnan M. N.
KRISHNAN M. N.
 ENVIRONMENTAL ENGINEER

3	TOTAL HARDNESS as CaCO ₃	mg/L	56	72	52
4	CHLORIDES	mg/L	19.7	37.5	14.79
5	NITRATE as NO ₃	mg/L	0.159	2.089	0.543
6	IRON as Fe	mg/L	0.46	0.28	0.46
7	CADMIUM	mg/L	BDL	BDL	BDL
8	HEXAVALENT CHROMIUM	mg/L	BDL	BDL	BDL
9	COPPER	mg/L	BDL	BDL	BDL
10	PHENOLIC COMPOUNDS	mg/L	BDL	BDL	BDL
11	NICKEL	mg/L	BDL	BDL	BDL
12	LEAD	mg/L	BDL	BDL	BDL
13	ZINC	mg/L	BDL	BDL	0.02
14	ARSENIC	mg/L	BDL	BDL	BDL
15	CYNIDE	mg/L	BDL	BDL	BDL
16	TOTAL COLIFORM	CFU/ 100 ml	1750	1000	1500
17	FECAL COLIFORM	CFU/ 100 ml	950	500	750

The Analysis Report showed that presence of heavy metal is below the desirable limit in drinking water except zinc of small concentration. However the well water is found to be contaminated with presence of coliform. The dumpsite is far away from the wells and coliform including fecal coliform are not much expected from the dumpsite.

9. It is submitted that the grievances raised in the application are genuine. Door to door collection of solid waste is not done in a fraction of the households and establishments leading to littering and burning of waste by citizens. But it is also stated that door to door collection has commenced




KRISHNANI M. N.
ENVIRONMENTAL ENGINEER

recently in the Panamanna ward where the applicant lives, which has solved one of the grievances in the application.. The Municipality has to do a number of solid actions to comply with the environmental laws. Secretary of the Municipality has submitted a reply no. H1-20412/18 dated 30.12.2020 to the Annexure B notice of Pollution Control Board. In the letter, they have proposed certain actions for each of the points raised, as given below:

- As it was pointed out that there is gap between generation and collection of Solid Waste, the gap will be filled by utilizing informal waste collectors like scrap-merchants.
- For wet-waste, three decentralized aerobic composting units (Thumboormoozhi model) have been installed and will be made operational at the earliest.
- D2D collection will shortly be extended to 100% households and commercial establishments.
- Illegal littering in public places will be curbed and punitive actions will be taken against offenders.
- Enough fund will be set aside for biomining legacy waste in the proposed revision of annual plan.

The Municipality has applied for Authorization under Solid Waste Management Rules, 2016 from Board and the application is under consideration. It is humbly submitted that the Board shall take necessary action to ensure that full compliance is achieved by the Municipality failing which necessary action as per Rules & levy of Environmental Compensation will be initiated.

Dated this the 30th December, 2020.





DEPONENT

**KRISHNAN. M. N.
ENVIRONMENTAL ENGINEER**



**KRISHNAN. M. N.
ENVIRONMENTAL ENGINEER**



KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
ജില്ലാ ഓഫീസ്, പാലക്കാട്
DISTRICT OFFICE, PALAKKAD
NEAR DISTRICT PANCHAYATH OFFICE, PALAKKAD - 678 001
www.keralapcb.nic.in

D. 24/09/2020

Regd. with A/D

Ref No PCB/PLKD/TG-88/MSW-GEN/2019

Dated 22/09/2020

SHOW CAUSE NOTICE

Ref- This office letter no PCB/PLKD/TG-68/MSW-GEN/2019 dated 18.10.2019.

WHEREAS the Central Government notified the Environmental (Protection) Act, 1986 for the protection and improvement of environment and for matters connected therewith;

WHEREAS as per Section 3, 6 and 25 of the Environment (Protection) Act, 1986, the Central Government re-notified the Solid Waste Management Rules, 2016 (here in after referred as SWM Rules) vide notification S.O. 1357(E) dated 08.04.2016;

WHEREAS there is a dumpsite of legacy waste at South Panamanna;

WHEREAS as per Rule 15 (zj) of the Solid Waste Management Rules, local body has to take necessary action to bio-mine such dump sites;

WHEREAS as per Rule 22, the time frame for implementation of bio-mining of dumpsites is 5 years which is about to expire in 2021;

WHEREAS letter of even no. dated 18.10.2019 was issued instructing you to take necessary action for bio-remediation/bio-mining of legacy waste in the dump site;

WHEREAS you have not submitted any proposal for bio-mining conforming to Central Pollution Control Board Guidelines for the process which was attached to the referred letter;



True copy
[Signature]
KRISHNAN. M. N.
ENVIRONMENTAL ENGINEER

WHEREAS by various orders of the Hon'ble National Green Tribunal OA 606/2019 and OA 386/2019, the Tribunal has directed the Board to take legal action against non-compliance of Rules,

WHEREAS the Hon'ble National Green Tribunal, Principal Bench, New Delhi in the order dated 22.11.2018 in O.A. No. 353/2016 clarified that apart from prosecution, the statutory authorities under the Environment (Protection) Act, 1986, the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, must, in exercise of their incidental powers, prescribe scale of compensation to be collected from the polluters on the "Polluter Pays Principle". Such scale which may be laid down at various levels, having regard to the local condition or as per direction in the hierarchy of the authorities. In various other applications also, the Hon'ble NGT passed similar orders, for instance, in the Order dated 20.11.2018 in O.A. No. 117/2014, 499/2014 and 102/2014 the Hon'ble NGT noted as, "Needless to say that statutory authorities under the Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 are entitled to assess and recover damages as "Pollution Pays Principle" in exercise of incidental powers to protect environment".

AND WHEREAS the Board is constrained to issue legal notice in view of the NGT orders and in view of the responsibility of Board under the Rule 16 (a) to enforce SWM Rules 2016, in the state of Kerala;

NOW THEREFORE, you are directed to show cause within 15 days of receipt of this notice as to why it shall not be recommended to the Chairman of the Board to initiate legal proceedings against you;

Dated this the 22nd day of September, 2020.

For and on behalf of the
KERALA STATE POLLUTION CONTROL BOARD



ENVIRONMENTAL ENGINEER

To
The Secretary, Ottapalam Municipality.



True copy


KRISHNAN. M. N.
ENVIRONMENTAL ENGINEER

28/12/20

Phone: 0491 - 2505542

E-mail: kspcbpalakkad@gmail.com



KERALA STATE POLLUTION CONTROL BOARD

DISTRICT OFFICE, PALAKKAD
NEAR DISTRICT PANCHAYATH OFFICE, PALAKKAD - 678 001
www.keralapcb.nic.in

In reply please refer to: PCB/PLKD/TG-345/2020

Date: 24/12/2020

Registered with A/D

From

Environmental Engineer

To

The Secretary,
Ottapalam Municipality,
Ottapalam, Palakkad, Kerala.
secotplml@gmail.com

- Sub - OA No. 147/2020 before Hon'ble National Green Tribunal - Grievance against Solid Waste disposal in solid waste processing plant at Panamanna.
- Ref- 1. Order passed by National Green Tribunal in Original Application No. 147/2020 dated 27.11.2020.
2. Show Cause Notice No. PCB/PLKD/TG-88/MSW- GEN/2019 dated on 22.09.2020.
3. Your letter No. HI-10277/19 dated 28.10.2020
4. This office letter of even no. dated 15.12.2020.
5. Your letter No. HI-20412/18 dated 18.12.2020

Sir,

In O.A. No.147/2020 filed by Sri. Sajeev Vijayan, regarding the solid waste dumpsite, the Hon'ble NGT has ordered on 27.11.2020 referred(1) to submit a detailed report regarding solid waste collection, processing and disposal in the processing plant at Ottapalam Municipality at Panamanna. Based on the order, on 18.12.2020, Board Officials conducted a site inspection of your solid waste plant at Panamanna. You were earlier issued a show cause notice no. PCB/PLKD/TG-88/MSW-GEN/2019 dated 22.09.2020, referred(2), to submit an action plan for the disposal of legacy waste. Your reply letter referred (3) was not satisfactory as it had no solid action plan or details of sufficient fund allotted for biomining. You had been issued letter referred (4) to report present status of solid waste management and informing that the proceedings to levy environmental compensation will be initiated against you. In reply you had submitted certain details vide letter referred (5). Based on all the above, you are directed that:-

1. Total solid waste collected by the Municipality is approximately 1.2 tons a day only. Estimated solid waste generation from your municipality is much more. There is a



True copy
Krishnan M. N.

KRISHNAN. M. N.
ENVIRONMENTAL ENGINEER

huge gap between the solid waste generation and solid waste collected. You may include the solid waste disposed by scrap-collectors and other informal sectors. Still a huge gap exists which must be filled.

2. Wet waste is collected from street littering mixed with dry waste. It is dumped along with the legacy waste since wet-waste-processing is not functional in the processing plant. Wet waste must be processed in any scientific manner as per Rules.
3. Door to Door collection of solid waste is not achieved 100%. As per the records submitted by the Municipality, the present status of Door to Door (D2D) collection of solid waste (Dry waste) is only 47.5% (including households & commercial Establishment). Apart from this, wet waste is not collected from households & commercial establishments. D2D must be extended to 100% of waste generator units including collection of wet waste, for those who don't have source-level disposal facility.
4. During site inspection several spots were found in the Municipality where littering of solid waste were there. By increasing the D2D collection efficiency to 100% and by enforcing punitive action against those who burn or dump or litter waste, littering should be curtailed.

Rule 15 of Solid Waste Management Rules, 2016 is not complied.

The timeline for achieving 100% D2D collection as per Rule 22 is already expired.

The timeline for Bio-mining/Bio-remediation on legacy waste is about to expire in March 2021.

You are reminded once again that legal proceeding including levying environmental compensation (EC) will be initiated, if no satisfactory progress is achieved and reported in 30 days.

Yours faithfully,

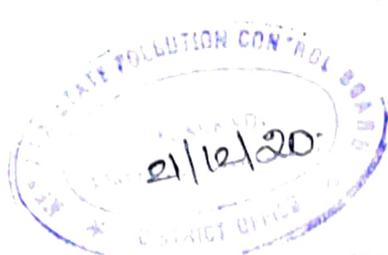
KRISHNAN M N Digitally signed by KRISHNAN M N
Date: 2020.12.24 20:03:01 +05'30'

ENVIRONMENTAL ENGINEER



True copy
Krishnan

KRISHNAN, M. N.
ENVIRONMENTAL ENGINEER



☎: General: 0471-2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151
E-mail: ms.keralapcb@gov.in FAX: 0471-2318134, 2318152 web: www.keralapcb.nic.in



KERALA STATE POLLUTION CONTROL BOARD
കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram - 695 004
പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB/HO/EE4/NGT/O.A NO. 147/2020(PB)

Date: 18/12/2020

AUTHORISATION

Sub: O.A NO. 147/2020(PB) - reg.

The Environmental Engineer, District Office, Palakkad is hereby authorised to represent the Board in the above O.A.

985

For and on behalf of the
KERALA STATE POLLUTION CONTROL BOARD


MEMBER SECRETARY

To
The Environmental Engineer,
District Office
Palakkad

Copy to:
Adv. Jogy Scaria
Advocate-on-Record
Supreme Court of India
SB-41, Sophia Apartment,
Abhaykhand-4, Indirapuram
Ghaziabad, UP-201010
(O) 01204264302

nam-2
km
OA 147 TG file