

**JUSTICE A.V. RAMAKRISHNA PILLAI**  
(Former Judge, High Court Of Kerala)  
**CHAIRMAN**

**State Level Monitoring Committee, Kerala**

(An authority constituted by the  
National Green Tribunal)  
"AMPAZHAVELIL"  
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24.1.2022

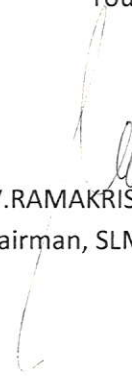
Madam,

Kindly see the appended Report in O.A.Nos.442/2013(SZ), 20/2017(SZ) and 276/2017(SZ) regarding the fire incident occurred on 18.1.2022 in the Solid Waste Dumping Yard at Brahmapuram in Ernakulam District of Kerala.

The same may kindly be placed before the Hon'ble Tribunal for consideration and orders.

The case stands posted to 24<sup>th</sup> January, 2022.

Yours Sincerely,

  
JUSTICE A.V. RAMAKRISHNA PILLAI,  
(Chairman, SLMC, KERALA)

To  
The Registrar,  
National Green Tribunal, Southern Zone Bench,  
Kalas Mahal, Kamarajar Salai, PWD Estate,  
Chepauk, Triplicane, Chennai, Tamil Nadu-600005.

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,  
SOUTHERN ZONE, CHENNAI**

**O.A. Nos.442/2013(SZ), 20/2017(SZ) and 276/2017(SZ)**

**REPORT**

PRESENTED BY JUSTICE A.V.RAMAKRISHNA PILLAI  
(FORMER JUDGE, HIGH COURT OF KERALA)  
CHAIRMAN, STATE LEVEL MONITORING COMMITTEE, KERALA  
(FOR AND ON BEHALF OF THE AFORESAID COMMITTEE)  
REGARDING THE FIRE INCIDENT OCCURED ON 18.01.2022 IN THE  
SOLID WASTE DUMPING YARD AT BRAHMAPURAM IN  
ERNAKULAM DISTRICT

**PRESENTED ON : 24.01.2022**

**DATE OF POSTING: 24.01.2022**

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## **REPORT**

At about 5 p.m on 18.1.2022 I received a message from the Chief Environmental Engineer, Kerala State Pollution Control Board, Regional Office, Ernakulam informing that there was a fire outbreak in the Solid Waste Dumping Yard at Brahmapuram during the course of the day. (It was on the same day that there was an outbreak of fire at the plastic waste storage yard at Kalamassery, regarding which I have forwarded a report on 23.01.2022). **Annexure-I** series are the screen shots received from him. It was informed that the surveillance team of the Board had rushed to the spot. I along with the Chief Environmental Engineer, KSPCB, Regional Office, Ernakulam inspected the site at about 12.30 p.m. on 20.01.2022. **Annexure-II** is the photograph taken at the time of inspection.

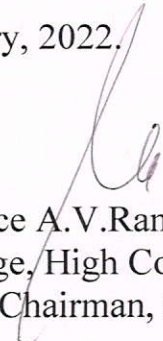
### **REMARKS**

- a. The solid waste dumping is having an extent of about 110 Acres allocated for disposal of bio-degradable, non-biodegradable and septage waste.
  - b. Huge heaps of legacy waste deposit is the constant phenomena of the yard, which is under the control of Kochi Municipal Corporation.
  - c. It is given to understand that the Kochi Municipal Corporation had recently placed a proposal for bio-mining which has started functioning at the entrance of the yard using certain machineries. However, this process is going on at a low pace, though the old trommel machines also are operational.
  - d. The previous proposal for the waste to energy plant is not materialized till date.
  - e. The septage treatment plant is now under closure for repair.
  - f. As usual plastic waste materials were found dumped in the open space along the south east side as well as at the entrance.
  - g. There are no sufficient facilities to process the plastic waste. There is a shed which is not capable to accommodate the entire plastic waste coming to the yard.
  - h. The plastic shredding machine installed at the site was seen kept idle as usual.
- 

- i. The fire incident on 18.1.2022 was at the area where old plastic materials were heaped. This is at the southern boundary of the yard. This area is boarded on the south by a tributary of Chithrapuzha.
- j. The Fire and Secure team were able to control the fire during the same night itself. However, it is learnt that there was emission of heavy smoke due to the burning of plastic.
- k. The fire incident occurred at the yard on 18.1.2022 is not a solitary incident. There were fire outbreaks on the yard in 2019, 2020 and 2021 also.
- l. A study was conducted by the NIIST, Thiruvananthapuram after the fire incident at the yard in the year 2019 and it was found that the dioxin level observed was dangerously high. The findings in the study report was referred to in pages 6 and 7 of my previous report dated 28.07.2021.
- m. During my inspection on 20.1.2022, water hydrants were seen operational and no fire or smoke was observed at that time (Kindly see Annexure-II).
- n. There is no change in the general condition of the entire dumping yard which was detailed out in my previous report dated 28.07.2021.
- o. In response to the show cause notice dated 16.3.2021 issued by the KSPCB to the Kochi Municipal Corporation, the Corporation had given a reply on 9.4.2021 along with certain Annexures which were produced as Annexure-X5 series in my previous report dated 28.7.2021. This was found unsatisfactory by the KSPCB and it was informed that Kochi Municipal Corporation is liable to be proceeded with for violation of the provisions of the Solid Waste Management Rules, 2016. This was an as per notice dated 1.5.2021, the copy of which is produced as **Annexure-III**.

The above facts are placed for consideration and appropriate orders of this Hon'ble Tribunal.

Dated this the 24<sup>th</sup> day of January, 2022.

  
Justice A.V. Ramakrishna Pillai  
(Former Judge, High Court of Kerala )  
Chairman, SLMC, Kerala.

ANNEXURE - I (a)



Snapshot on 18/1/2022

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ANNEXURE I (6)



(Seized on 18/1/2022)

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ANNEXURE I (C)

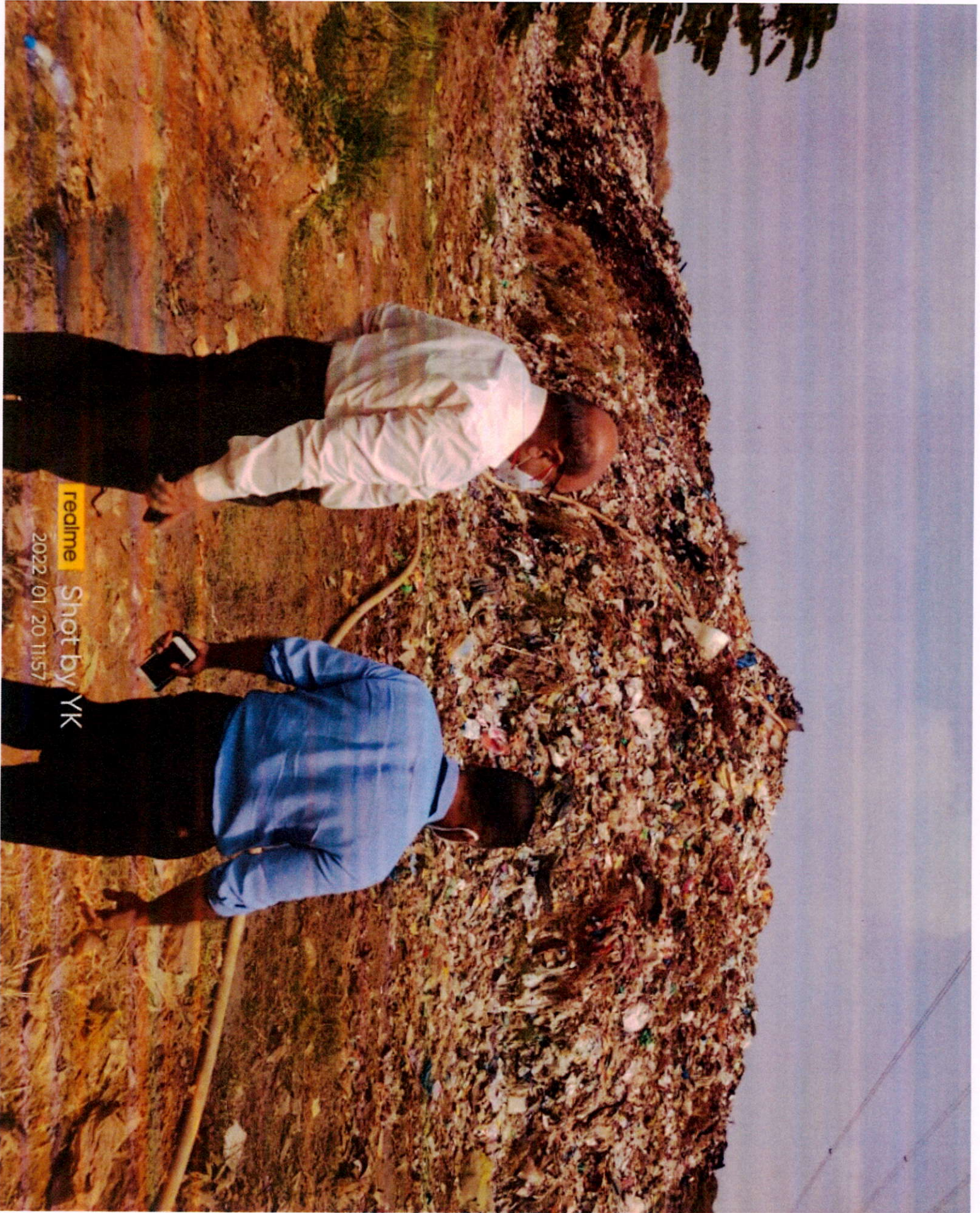


(Incident on 18/1/2022)

P.5-



ANNEXURE II



(Jaspedia m 20/1/2022)

u-6-

ANNEXURE III

~~Annexure 2~~

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**KERALA STATE POLLUTION CONTROL BOARD**  
**REGIONAL OFFICE, GANDHI NAGAR, ERNAKULAM – 682 020**

[www.keralapcb.nic.in](http://www.keralapcb.nic.in)

PCB/RO-EKM/GEN-258/19

01.05.2021

From

The Chief Environmental Engineer

To

The Secretary

Kochi Corporation

Sub: Brahmapuram Solid waste Yard- Show Cause Notice – the Environment Protection Act 1986, the Solid Waste Management Rules, 2016, and the Water (Prevention and Control of Pollution) Act 1974 - Clarifications - Reg.

Ref: 1. Your reply No. MOE2-10948/17 dated 09.04.2021 to SCN dated 16.03.2021.

Sir,

In response to your reply vide reference cited, following specific clarifications to your contentions (**Items a - i**) may be noted for immediate responses if any. Please note that this is without prejudice to initiate legal actions stipulated as per the relevant provisions of the Environment Protection Act 1986 (Herein after EP Act 1986) with specific reference to the Solid Waste Management Rules, 2016 (Herein after SWM Rules) and the Water (Prevention and Control of Pollution) Act 1974.

a. *Based on the directions of NGT, State Level Monitoring Committee of NGT and Pollution Control Board, several works have been carried out at the solid waste treatment plant of Kochi Corporation and several works to improve the facility are ongoing of which the inspection team has not taken note of is unfortunate.*

Please take note that the Corporation is operating a Solid Waste management plant without an authorization for the last 11 years and the Board from the beginning stage and the SLMC from 2019 onwards, are giving specific directions to properly maintain the solid waste management plant but the conditions seem to be further deteriorated and officials of SPCB and the Chairman,

SLMC had personally visited the plant several times and convinced the severity which are self explanatory from the various reports submitted before the Chairman, SLMC and were detailed in different orders of the Principal Bench and Southern Bench of the Hon'ble Tribunal. Several directions were also given to Corporation officials during different SLMC meetings. May be personally verified.

*b. Several rounds of directions were given to the Municipalities who bring their waste to Brahmapuram plant for treatment not to send un segregated biodegradable waste. But still about 10% of the wastes brought to the plant are mixed with non-biodegradable waste.*

Please go through the relevant sections of the SWM Rules 2016 where the responsibilities of the Secretaries of respective local bodies are clearly indicated and you have no responsibility to cater to the need of other local bodies and that too knowingly to an unscientifically operated solid waste treatment plant. They may be allowed to use your facility only when the proposed waste to energy or other satisfactory common solid waste treatment plant is materialized. Presently you are continuously violating the Rules and liable to be proceeded against as per the provisions of the EP Act 1986, the Water Act 1974 and SWM Rules 2016.

*c. No directions have ever been given to us to practice source level treatment of waste. When Corporation had initiated activities on its own to install source level and community level waste treatment systems, Vide letter No.373/DC1/18/LSGD dated 08/01/2020 Additional Chief Secretary LSGD Government of Kerala had directed Corporation not to undertake any projects on its own in parallel to the proposed waste to energy project and we had to refrain from going ahead with source level waste treatment systems.*

It is highly regretted to note that the contention by you that the Corporation had not been reminded about the mismanagement of solid waste is nowhere near the facts and is an utter negligence shown towards the order of the Hon'ble NGT and directions of the SLMC constituted by the Hon'ble NGT. Minutes of various SLMC meetings may be verified which are self explanatory that the Corporation was advised to manage solid waste whatever be the facilities proposed to do. Hence, needless to say that the Corporation was bound to comply with the Municipal Solid Waste Rules 2000 till 2016 and the SWM Rules from that onwards. It is pertinent to note that the Corporation was not able to practice scientific management of solid waste at Brahmapuram though there were specific directions from the Board as per several orders of the Principal as well as Southern

Zone Benches of Hon'ble NGT. It may also be noted that the Board Chairman had given authorization vide proceedings No PCB/HO/SEE2/KOCHICORPN/2019 dated 31.07.2020 as a last resort where all other directions were seen ignored by the Corporation explaining vague arguments. It may also be noted with due seriousness that an amount of Rs 14.92 Crores was imposed after hearing nothing / disappointing response from the Corporation on an assessment of an amount of Rs 13.95 Crores towards Environmental compensation.

*d. Though the plant roof is collapsed heaping and composting of the waste is being done. Only during rainy season the issue of rain water infiltration sets in. No leachate is flowing into the Kadambrayar and Chithrapuzha river. A 1 lakh litre capacity tank constructed behind the plant collects all the leachate from the plant through a network of drain constructed around the compost plant. The collected leachate is taken to the septage treatment facility of Corporation and treated there. There is no draining of leachate into the Kadambrayar river.*

It may be noted that your arguments is unjustifiable as the Chairman, SLMC had visited the solid waste dumping yard, Septage treatment plant and the site of Waste to Energy Plant several times along with the Chairman, KSPCB and the undersigned and physically identified the grave situation existing/existed there. As directed by the Chairman only, reports were prepared and submitted before the Hon'ble Tribunal and it is important to see that the Hon'ble Tribunal expressly directed as per the order dated 03.07.2020 as follows,

*"We find that the steps taken to be inadequate having regard to the serious adverse consequences of acknowledged unscientific handling of waste management. Suggestion 'c' above shows that 1 lakh litre collection capacity for the leachate is nearing completion and the leachate is to be diverted to septage treatment plant. It is doubtful whether leachate can be treated in an ordinary septage treatment plant as it contains heavy metals. The progress appears to be very slow and in disregard to the statutory and constitutional obligation of providing clean environment. It is the responsibility of the KSPCB to initiate prosecution and recover compensation for such failures failing which, the Chairman and the Member Secretary of the KSPCB may be liable for their failure"*

Also, please take note that in the SCN also, all the violations as on date were explained with solid proofs but you are still explaining reasons those will not substantiate any of your practices at Brahmapuram plant where huge quantities of solid waste including plastics are being brought from Corporation as well as from other local body areas and the facility is just act as a dumping yard only. It may be pertinent to note that the unmanageable plastic masses was the reason for

recurring fire hazards which was already monitored by the NIIST as directed by the Chairman, KSPCB and the SLMC.

*e. There are many industrial establishments in the upstream portion of the Kadambrayar in Brahmapuram itself of which Pollution Control Board is discreet. There are physical evidences of such industrial units draining their toxic effluent into Kadambrayar without any treatment. Without established data on the water quality of the river Kadambrayar at the downstream and upstream portion of the solid waste treatment plant, it is to be inferred that Pollution Control Board is targeting and blaming only Kochi Corporation's solid waste treatment plant in polluting the river at its pleasure which cannot be accepted*

It is hereby informed that the Board is continuously monitoring the Chithrapuzha and Kadambrayar under State Water Monitoring Programme (SWMP). These river streams are already identified as polluted river stretches by the CPCB and action plans are being initiated by the DLTC in which you are also a member. As you are well aware that the RRC had already approved the report prepared by the DLTC and submitted before the Hon'ble NGT in OA No. 673/2018. It may be noted that there are several monitoring reports of leachate discharge from solid waste dumping yard and septage treatment plant which are self explanatory that it contain higher concentration of different parameters. From the reports it is very much evident that you are not able to manage leachate and still you are not provided leachate treatment plant and not properly managing the septage treatment plant at Brahmapuram. During the inspection conducted along with the Chairman, SLMC it was found that the entire discharge area spread over with untreated sewage and the reports of monitoring conducted by the Board confirmed the exceedance of different parameters. It may also be noted that the mentioned area is a catchment area of Chithrapuzha and your claim that the Board is targeting the Corporation is baseless as there are different conclusions of different SLMC meetings against the mismanagement of Solid waste treatment plant owned and operated by the Kochi Corporation and solid proofs for untreated effluent discharges.

*f. It was due to plant breakdown, and as overhauling of the plant was carried out septage was seen spread around the plant in the land owned by Kochi Corporation. Chitrapuzha river stream extending to the eastern side near to the plant is having meager or no flow of water and is at least 200m away from the septage treatment plant and no water can flow till the river. It may be noted that this has neither caused any public nuisance nor any pollution and hence The Water*

*(Prevention and Control of Pollution) Act 1974 and the Environment Protection Act 1986 does not get invoked.*

It is important to note that you have admitted that there were episodes of untreated effluent discharges from septage plant. There are evident results of monitoring which include statutory sampling that also confirms that you had violated relevant Rules under the Water (Prevention and Control of Pollution) Act 1974 and Environment Protection Act 1986 by way of discharging untreated effluent into marshy land which is hardly 100 m away from the river Chithrapuzha and there are no other streams other than Chithrapuzha which in turn consume this untreated effluent discharge even during summer season and direct flow is a regular phenomena during rainy seasons. No treatment of effluent/sewage is being carried out there except dilution using water. Your attention is invited to the statutory sampling conducted by the District Office, Perumbavoor where results show concentration exceedance for BOD [135 mg/L (Limit 30 mg/L)], COD [448 mg/L (Limit 250 mg/L)] etc and a coliform count of 620000 CFU/100 ml. It is with due gravity the Board observed that you have not provided energy meter in the plant and the effluent flow meter is found to be faulty and you are still not able to repair or reinstall it.

*g. The leachate generated is collected in the 100000 litres capacity collection tank behind the compost plant through a network of drains. The collected leachate is taken to the septage treatment in tanker trucks to the septage treatment plant for treatment. The septage treatment plant is also having the capacity to store or collect 100000 litres of septage or leachate at a time. Even in monsoon treatment of leachate could not be a problem with the available capacity for treatment at the septage treatment plant. The septage treatment plant as claimed by the Pollution Control Board is not malfunctioning.*

It may be noted that a study was conducted in the month of May 2020 by conducting surprise inspections by surveillance team of the Regional Office of the Board to evaluate the efficiency of the Septage treatment plant which showed no or very limited quantity of effluent received there as per the records available at the plant. It was also very much visible that the plant was malfunctioned during the visit along with the Chairman, SLMC. It was also found while inspection that untreated effluent was being discharged to nearby area which is very much close to river Chithrapuzha, an identified polluted river stretch by the CPCB where serious actions are being initiated for rejuvenation of the river. It may also be noted

that the other side of the solid waste dumping area there are visible direct leachate discharges to river Kadambayar. You may note that monitoring was conducted on 03.03.2021 and the results show concentration exceedance for BOD [4269 mg/L (Limit 30 mg/L)], Nitrate as Nitrogen [61.98 mg/L (Limit 10 mg/L)] , Sulphide [59.6 mg/L (Limit 2 mg/L)] etc.

*h. As you may be aware that solid waste management works are peculiar kind of works and cannot be executed only at the behest of Secretary alone, it requires support from the Corporation council, Government and other stakeholders as well.*

Please take note that the Solid Waste Management Rules, 2016 stipulate as per section 15 the duties of the Secretary in charge of the Local body and you are empowered to advice the Corporation Council to comply with such Rules effectively and instantly so that any more pollution occurred due to unscientific management of such plant will not be happened. It is the duty of a Secretary to convince the Corporation Council about the Solid waste dump yard which was surrounded by two rivers, ie Chithrapuzha and Kadambayar which are already identified by the CPCB as polluted river stretches where river rejuvenation procedures are being actively implemented by the Government. Please note that there are several proofs which are self explanatory that you have violated the Rules in a haphazard manner and still not actively involving finding out a solution even after the lag of about 11 years especially after 2 years of the constitution of SLMC by the Hon'ble NGT.

*i. It is hereby informed that we will complete all the works as directed by the NGT and as per the SWM Rules 2016 at the earliest as the major works have already been tendered and are in the work awarding stage. Any action intended to be initiated against Corporation may kindly be deferred.*

Please take note that the Principal Bench of Hon'ble NGT vide the order dated 03.07.2020 directed that prosecution shall be initiated against the Secretary, Kochi Corporation and the Board initiated several actions even before this order and issued notices to other officials acting as Secretary of the Corporation. It is from you the Board had obtained list of officials in the cadre of Secretary in charge from 2010 onwards, the year from which the validity of conditional authorization ended. As you are well aware and committed that you are allowing other local bodies also to dispose solid waste to Brahmapuram yard which is owned and

operated by the Corporation even then you are well aware that this facility is act as a dumping yard only. Those are violations as per the relevant sections of the EP Act 1986 and SWM Rules 2016 and actions will be initiated which include prosecution against you as per the order in OA 514 of 2019 dated 03.07.2020 and the authorization given by the Chairman, KSPCB.

At this juncture, you are hereby informed that the solid waste management activities are not proper and you are still operating the Brahmapuram solid waste plant as a dump yard without providing scientific facilities for the management of solid waste which include plastic waste too. You are allowing bio degradable fraction of solid waste from other local bodies also in addition to waste from your area to be dumped in. This huge dumping results heavy leachate flow to nearby river streams where the monitoring results of such leachate show exceeding concentrations for different parameters as illustrated earlier. Also, you are still not able to maintain the Septage treatment plant properly where you are allowing sewage from different parts of the District in addition to the leachate from Brahmapuram dumping yard where no scientific treatment is being observed and you are allowing untreated or partially treated sewage/ septage to nearby marshy land which is finding its way to Chithrapuzha and polluting the river stretch. It may be noted that the Board, as mentioned earlier conducted monitoring and obtained exceeding concentration for different parameters.

In these circumstances, the reply submitted by you to the Show Cause Notice is not at all satisfactory and you are liable to be proceeded against as per the relevant provisions of the EP Act 1986 and the Solid Waste Management Rules, 2016.

Yours faithfully,



CHIEF ENVIRONMENTAL ENGINEER



- Copy to: 1. The Member Secretary, Thiruvananthapuram.  
2. The Environmental Engineer, District Office-2, Ernakulam.