

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

IN

ORIGINAL APPLICATION No. O A 514 of 2019(PB)

RENUMBERED AS O A 77 of 2021(SZ)

IN THE MATTER OF

Suo Motu proceedings initiated

based on letter received

From Justice A.V. Ramakrishna Pillai,

Former Judge, High Court of

Kerala, Chairman,

SLMC, Kerala.

:

Applicant(s)

Verses

The Chief Secretary,

Government of Kerala,

Thiruvananthapuram and Others

:

Respondent(s)And

ORIGINAL APPLICATION No. O A 442/2013(SZ)

Applicant(s) : Jith Kumar, Muthedathu

Versus

Respondent(s) : The State of Kerala & others

And

ORIGINAL APPLICATION No. O A 20 / 2017(SZ)

Abdul Basheer

Versus

Kochi Municipal Corporation & Others

And

ORIGINAL APPLICATION No. O A 276/2017(SZ)

Lawyers Environmental Awareness Forum

Versus

SEIAA, Thiruvananthapuram

VOLUME 2

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Dated this the 17th May 2021

Rema Smrithi, Advocate

STANDING COUNSEL FOR THE RESPONDENT



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No.MOE2-10948/17

09/04/2021

From
Secretary

To
The Chief Environmental Engineer
Kerala State Pollution Control Board
Regional Office, Gandhi Nagar Ernakulam
682022

Sir,

Sub: Explanation to the show cause notice

Ref. 1. Notice No.PCB/RO-EKM/GEN-258/19 dated 16/03/2021

2. Letter No.MOE2/3760/18 dated 30/03/2021

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.

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

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.

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 Kadambayar and Chitrapuzha 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 Kadambayar river.

There are many industrial establishments in the upstream portion of the Kadambayar in Brahmapuram itself of which Pollution Control Board is discreet. There are physical evidences of such industrial units draining their toxic effluent into Kadambayar without any treatment. Without established data on the water quality of the river Kadambayar 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 informed that application for renewal of authorisation obtained in 2008 was submitted to Pollution Control Board on 01/07/2016 with the processing fee of Rs.30000 (DD.No.400893 dated 01/07/2016) vide letter no.MOE2/21941/16 dated 01/07/2016 and vide letter no. MOE2/21941/16 dated 28/10/2016 proposal for leachate treatment plant was also submitted to the Environmental Engineer of Ernakulam District Office –II. Only on 28/07/2018 the online application was returned by Pollution Control Board citing to submit the details of leachate treatment plant and present status of MSW plant and to remit the fees for the current year. As it was returned online no alerts were received at this office for follow up action.

Though the work for preparation of DPR for leachate treatment plant was awarded after tendering process to the lowest bidder on 29/07/2019, GIZ a German collaboration agency who supports Corporation under the sustainable urban development - climate smart cities project was also engaged to suggest suitable technology for the leachate treatment plant.

As the technology proposed by GIZ that of Sequencing Batch Reactor was different from that proposed by Suchitwa Mission of Electrocoagulation, the council that met on 03/03/2020 referred the matter to the Health Standing Committee and the committee wanted to take a suggestion from Suchitwa Mission. Accordingly Suchitwa Mission was requested on 04/08/2020.

The technical committee on liquid waste management constituted by Suchitwa Mission that met on 25/09/2020 in which Chief Environmental Engineer of Regional Office Pollution Control Board Thiruvananthapuram is also a member suggested to opt for treating the leachate in the septage treatment plant now and to go for construction of leachate treatment plant after the reconstruction of the compost plant shed. (Direction of Suchitwa Mission attached)

It is of no concern, treating of leachate in the septage treatment plant, as the septage treatment plant is designed to take septage of more than 9000mg/l BOD(Biological Oxygen Demand). It may also be noted that even the conventional Activated Sludge Process of waste water treatment or sewage takes care of the heavy metals if any present in the waste water by way of microbial metabolism.

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 atleast 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.

To clear all kind of non-biodegradable waste and legacy waste tenders were invited by KSIDC for Kochi Corporation. Kochi Corporation has also reassessed the quantity of legacy waste by engaging NIT Calicut on 9/2/2021. On getting the approval of the State Election Commission the work can be awarded.

The fire spread occurred on 05/03/2021 was under control by around 6:00pm the same day and it was only a mild fire and could be doused immediately using the fire hydrants and fire monitors installed by Kochi Corporation.

Most of the directions which could be implemented in short period of time were implemented. The remaining works are those that require time and support from the Government and other stakeholders as well.

For preventing and dousing of fire, 5 water monitors and 3 hydrants were installed at Brahmapuram which to a great extent helped to control the spread of fire.

As mentioned in the preceding paragraphs strict directions were given to the local bodies who bring wastes to Brahmapuram not to bring unsegregated wastes and all directions of the NGT were passed on. Pollution Control Board may insist the local bodies who bring waste to Brahmapuram to make provision for waste treatment on their own.

The fire incidents happened after 2019, was of lesser magnitude and was under control within few hours and has not caused and quantifiable damage to the ambient air or the environment as a whole.

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.

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.

Status of the major works associated with the Brahmapuram solid waste treatment plant and solid waste management of Kochi Corporation is furnished below:

1. Biomining of legacy waste(waste lying in Brahmapuram for a prolonged period of time)

A large portion of the dump site was capped in 2011 itself, and on 21/02/2019 Expression of Interest was called for capping the wastes in the dumping yard with closing date on 07/03/2019, later as per the direction of the State Level Monitoring Committee of NGT in its meeting on 06/04/2019 to bio-mine the legacy waste instead of capping, the EOIs obtained for capping were cancelled and fresh tender for bio-mining the legacy wastes was floated on 14/08/2019 after vetting of the tender document by Pollution Control Board and with closing date on 04/09/2019. As nobody participated in the tender the closing date was

extended to 20/09/2019. Even then nobody participated in the tender. The work was re-tendered on 26/10/2019 with closing date on 18/11/2019; and was extended till 26/11/2019. Only one bidder participated in the tender, and the council that met on 13/12/2019 approved the bid evaluation report. Financial bid was opened on 24/11/2019 was placed before the council meeting scheduled on 13/01/2020 for approval of the financial bid with quoted rate of Rs. 597/m³. The council deferred its decision. Later when the matter was placed before the special council for Brahmapuram on 03/03/2020 the council again deferred its decision.

Government intervened in the matter and took over the work of bio-mining the legacy waste at Brahmapuram from Kochi Municipal Corporation vide G.O (Ms)No.8/2020/DMD dated Thiruvananthapuram 05/03/2020 and assigned KSIDC to float fresh tenders after cancelling the tender floated by Kochi Corporation. On 20/03/2020 KSIDC invited tenders for bio-mining of legacy waste. As only 1 bidder was technically qualified the work was re-tendered on 24/06/2020 with last date for submission on 27/08/2020. *Technical bids were opened on 03/09/2020 and after evaluation the financial bid of the responsive tender was opened on 12/10/2020.*

Vide letter No.238/DC1/2019/LSGD dated 22/10/2020 Principal Secretary LSGD directed Kochi Corporation to examine the quantity of legacy waste assessed and rate quoted by the bidder M/s Zonta Infratech Pvt Ltd for the work of biomining of legacy waste.

To examine the quantity of legacy waste, NIT Calicut was engaged as per the approval of the Corporation council held on 21/01/2021 and the survey was done on 9/2/2021.

NIT Calicut conducted the survey on 9/2/2021 and has submitted the report on 06/03/2021. The report is being analysed.

2. Waste to Energy project

As the concessionaire could not demonstrate and submit the financial closure or financial plan for funding the project even after 1400 days of signing the agreement, Government vide G.O (Rt)No.805/2020/LSGD Dated 30/04/2020 cancelled the approval granted to the concessionaire M/s GJ Ecopower Pvt Ltd and directed Kochi Corporation to terminate the concession agreement. KSIDC was directed to float fresh tenders for

the waste to energy project. The concession agreement was terminated by Kochi Corporation accordingly. The concessionaire was also heard by the Government as directed by Hon'ble High Court and Vide G.O (Rt)No.1064/2020/LSGD dated 05/06/2020 Government affirmed that the concessionaire would not be able to implement the project even if more time is granted and directed KSIDC to go ahead with tendering of the work.

New tenders for waste to energy plant were invited by MD, KSIDC on 24/06/2020(as the concession agreement signed in February 2016 was cancelled by the Government as the concessionaire could not submit the financial close) with last date for submission of bids on 04/09/2020. As only one bidder got qualified retenders were invited on 08/01/2021 with closing date on 23/01/2021. Bidder has been selected. Evaluation and finalisation of the tender is being done at the Government level.

3. Installation of fire hydrant at Brahmapuram to prevent fire.

Works completed

4. Construction of leachate treatment plant.

The work for preparation of DPR for leachate treatment plant was awarded after tendering process to the lowest bidder on 29/07/2019. GIZ a German collaboration agency who supports Corporation under the Sustainable Urban Development -Smart Cities project was also engaged to suggest suitable technology for the leachate treatment plant. As the technology proposed by GIZ that of Sequencing Batch Reactor was different from that proposed by Suchitwa Mission of Electrocoagulation, the council that met on 03/03/2020 referred the matter to the Health Standing Committee and the committee wanted to take a suggestion from Suchitwa Mission.

Accordingly Suchitwa Mission was requested on 04/08/2020. Vide letter No.1202/G/2018/SM dated 09/11/2020 Suchitwa mission had directed to take up construction of leachate treatment plant only after constructing the collapsed roof of the compost plant and assessing the actual quantity of leachate generated. Till then the leachate can be treated in the septage treatment plant. Accordingly *5 truckloads of leachate are taken to the septage treatment plant and treated there.*

5. Construction of collapsed roof and structure of the compost plant shed

An amount of Rs.1 Crore has been budgeted in the plan fund of 2020-21 for preparing the design and initial work. College of Engineering, Kothamangalam and Cochin University was requested to give proposal for the same. College of Engineering

Kothamangalam visited the Brahmapuram plant on 3/01/2021 but as after that there was no response from their side, the work was tendered on 20/2/2021 with closing date on 1/03/2021. Two bidders have participated in the tender and the lowest bidder M/s Esteem Builders have been selected.

6. Development of biopark and plantation around the waste treatment plant

In the OA 514 heard on 21/01/2021, it was directed to develop the Brahmapuram plant area into a biopark. Action initiated to develop biopark in association with Haritha Kerala Mission and Ayyankali Employment Guarantee scheme under the "Pachathuruthu program".

7. Implementation of adequate facility for waste treatment

When the compost plant gets repaired, the waste can be processed in the compost plant itself.

The status of other works carried out as per the direction of NGT,SLMC of NGT and Pollution Control Board is annexed.

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.

Yours faithfully,


Secretary

- Enclosed: 1. Letter No.373/DC1/18/LSGD dated 08/01/2020 of Additional Chief Secretary LSGD Government of Kerala
2. Minutes of the Technical Committee on Liquid waste management held on 25/09/2021
3. Letter No.1202/G/2018/SM dated 09/11/2020 of ED Suchitwa Mission

Annexure-1

Schedule of works carried out at Brahmapuram since December 2018			
	Item	Status	Remarks
	Immediate		
1	Formation of windrows in compost plant	✓	
2	Clearing and cleaning of drains	✓	
3	Identification of collection points and fixing tanks	✓	
4	Installation of leachate treatment plant on trial basis	✓	
5	Channelizing leachate to drains and collection tanks	✓	
	Short term (Expected completion before 31/03/19)		
6	Proper segregation of waste	✓	
7	Repair of waste sieving trommels	✓	
8	Setting up proper drainage around compos plant	✓	
9	Establishing semi permanent leachate plant	✗	Leachate is treated in the nearby septage treatment plant
10	Processing of legacy waste/Biomining	✗	Tendered by KSIDC for Govt. Tender finalized. Work to be awarded
11	Construction of scientific landfill	✗	Regional landfill has been sanctioned by Govt. near Brahmapuram
12	Proper segregation of waste	✓	
	Midterm (Expected completion before 15/06/19)		
13	Proper segregation of waste	✓	
14	Fully functional leachate treatment plant	✗	
15	Remediation of legacy waste/Biomining	✗	Will get completed by 30/12/2021
	Long term (Till commissioning of waste to energy)		
16	Construction of scientific landfill	✗	Regional landfill has been sanctioned by Govt. Vide G.O (Rt)No.1198/2020/LSGD dated 18/06/2020
17	Proper segregation of waste in place	✓	
	Directions of SLMC		
18	Strengthening of plant security	✓	
19	Installation of surveillance camera	✓	
20	Lighting of plant premises	✓	
21	Transportation of waste in covered trucks	✓	
22	Issuing of vehicle pass for waste transportation	✓	
23	Banning of plastic carry bags	✓	

24	Supply of Personal Protective Equipments to workers	✓	
25	Making 6 selected roads waste free	✓	
26	Bulk waste generators to process waste on their own	✓	
27	Starting of Escrow A/c for emergency expenses	✓	
28	Construction of overhead tank	✗	Work awarded Will be completed in August 2021
29	Laying of road inside legacy waste dumping yard	✓	
30	Installation of fire hydrant system	✓	Work completed
	Additional works taken up by Kochi Corporation		
31	Hiring of trucks for carrying leachate to septage plant	✓	
32	Construction of leachate collection tank	✓	
33	Construction of ramp to weigh bridge and service station	✓	
34	Rectification of damaged compound wall and gate	✗	



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

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 Kadambayar 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 Kadambayar 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 advise 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.



**KERALA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY**

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല



Certificate No.
TC-8525

ANALYSIS REPORT

Analysis Report No.	PCB/CL/1446/20-21	Date	22 Apr 2021	Doc.No: PCB/CL/CH/F-7
Ref.No.	PCB/RO dated 03.03.2021	Date Of Collection	03 Mar 2021	
Received From	R O ERNAKULAM	Date Of Receipt	03 Mar 2021	
No. Of Sample	1	Period Of Analysis	03 Mar 2021 - 22 Apr 2021	
Source	Brahmapuram solid waste plant leachate	Scientist-in-charge	Rajeena	
Sample Condition	fit for analysis	Sample Type	Waste Water	
Sample collected by	CEE, RO ERNAKULAM	Sample volume & container type	2L plastic can	
Sample preservation	As per APHA/ IS :3025(Part-1)	Type of test	CHEMICAL	
Sampling Point	Leachate drain			

Sample ID : BLD-GEN

Sl.No	Parameters	Unit	Value	Test Method	Detection Limit
1	pH	-	7.6	APHA, 4500- H+B, 4-95 to 4- 99, 23rdEdition: 2017	1
2	Chloride	mg/L	4573.0	APHA, 4500- Cl /B, 4-75 to 4-76, 23 rd Edition: 2017	1 mg/L
3	Fluoride	mg/L	0.06	APHA, 4500- F C, 4-89 to 4-90, 23rd Edition (Ion Selective Electrode Method): 2017	0.1 mg/L
4	Sulphate	mg/L	1014.0	APHA, 4500-SO42- E, 4-199 to 4-200, 23 rd Edition: 2017	1 mg/L
5	Sulphide	mg/L	59.6	APHA, 4500 S2 F, 4-187 , 23rd Edition: 2017	1 mg/L
6	Nitrate as Nitrogen	mg/L	61.98	APHA, 4500 NO3 -,B,4-127 , 23 rd Edition (Ultraviolet Spectrophotometric Method): 2017	0.05 mg/L
7	Phosphate	mg/L	58.9	APHA, 4500- P, E, 4-164 to 4-165 ,23 rd Edition: 2017	0.1mg/L

GANDHI NAGAR, KOCHI - 682 020

ഗാന്ധിനഗർ, കൊച്ചി - 682020

Telephone Nos. Direct: 0484 - 220 7781, EPABX: 0484 220 7783 - 86, Fax: 0484 - 220 7781

E Mail: kspcbclcm@gmail.com Web : www.keralapcb.nic.in

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09/01

8	Magnesium	mg/L	89.1	APHA, 3500- Mg B, 386, 23rd Edition: 2017	0.2 mg/L
9	Biochemical Oxygen Demand (BOD)	mg/L	4269.0	IS 3025 (Part 44): 1993	0.1 mg/L
10	Phenolic compounds	mg/l	1.14	APHA 5530-C, 22nd Edition	0.001mg/l

-- End of Report --

Checked by

Rajeena
22/4/12

RAJEENA. R
Assistant Environmental Scientist

Authorised by

M. H. Smerafudeen

M. H. SMERAFUDEEN
Senior Environmental Scientist & Govt Analyst

Note: The test results relate only to the sample submitted for analysis and it shouldn't be reproduced except in full without the written permission of the authorised signatory of the lab.

GANDHI NAGAR, KOCHI - 682 020

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KERALA STATE POLLUTION CONTROL BOARD CENTRAL LABORATORY

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്
കേന്ദ്ര പരീക്ഷണശാല



Certificate No.
TC-8525

ANALYSIS REPORT

Analysis Report No.	PCB/CL/1448/20-21	Date	24 Mar 2021	Doc.No: PCB/CL/CH/F-7
Ref.No.	PCB/RO dated 03.03.2021	Date Of Collection	03 Mar 2021	
Received From	R O ERNAKULAM	Date Of Receipt	03 Mar 2021	
No. Of Sample	1	Period Of Analysis	03 Mar 2021 - 24 Mar 2021	
Source	Brahmapuram solid waste plant leachate	Scientist-in-charge	Geetha P	
Sample Condition	fit for analysis	Sample Type	Waste Water	
Sample collected by	CEE, RO ERNAKULAM	Sample volume & container type	300 ml sterile BOD bottle	
Sample preservation	As per APHA/ IS :3025(Part-1)	Type of test	MICROBIOLOGY	
Sampling Point	Leachate drain			

Sample ID : 486

Sl.No	Parameters	Unit	Value	Test Method	Detection Limit
1	Total Coliform	cfu/100ml	2400	APHA 9222 B, 23rd Ed.2017	1cfu/100ml

-- End of Report --

Checked by

Zahida P Z
24/3/21

ZAHIDA P Z
Assistant Scientist

Authorised by

Geetha P
24/3/2021

P. GEETHA
Environmental Scientist

Note: The test results relate only to the sample submitted for analysis and it shouldn't be reproduced except in full without the written permission of the authorised signatory of the lab.

GANDHI NAGAR, KOCHI - 682 020

താസ്തിനഗർ, കൊച്ചി - 682020

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KERALA STATE POLLUTION CONTROL BOARD**CENTRAL LABORATORY, KOCHI - 682 020****FORM-II
REPORT OF THE BOARD ANALYST
(See rule 27)**

Report No .PCB/CL/LEGAL/ES11/2019

Dated 19th March, 2021

I hereby certify that, P. Geetha, Board analyst, duly appointed under subsection (3) of section 53 of the water (prevention and control of pollution) act 1974 (act 6 of 1974) received at 4:00 pm on 06.03.2021 from the Environmental Engineer, Kerala State Pollution Control Board, District Office-11, Perumbavoor two samples of effluent Bottle No PCB/DO2/LS-1 and PCB/DO2/LS-2 collected by Smt. Rameena.V.V, Assistant Environmental Engineer, Kerala State Pollution Control Board, District Office-2, Perumbavoor,Ernakulam at 12.30 pm on 06.03.2021 from the Septage Treatment Plant of Kochi Corporation at Brahmapuram . The sample was in a condition fit for analysis as reported below.

I further certify that I have analysed the aforementioned samples on 09.03.2021 to 19.03.2021 and declare the result of the analysis to be as follows:

Sl. No.	Parameter	Unit	Values	Method of Analysis
1	p ^H	-	6.8	APHA, 4500-H+B,4-95 to 4-99, 23 rd Ed.,2017
2	BOD(3Days at 27 °C)	mg/l	135	IS 3025 part 44 1993
3	Oil and Grease	mg/l	BDL	APHA, 5520-B,5-42 to 5-44, 23 rd Ed.,2017
4	COD	mg/l	448	APHA, 5520-B, 23 rd Ed
5	Nitrate as Nitrogen	mg/l	7.4	APHA,4500NO ₃ -,B,4-127,23 rd Edition (Ultraviolet Spectrophotometric Method) 2017
6	Phosphates	mg/l	36.67	APHA,4500P,E,4-164 to 4-165, 23 rd Edition:2017
7	Sulphates	mg/l	63.1	APHA, 4500-SO ₄ 2-E, 23 rd Ed., 2017
8	Free Ammonia	mg/l	0.75	GEMS OPERATONAL GUIDE WHO
9	Total Kjeldhal Nitrogen	mg/l	114.2	APHA, 4500-N Org B, 23 rd Ed., 2017
10	Total Coliform	CFU/100ml	620000	APHA 9222 B, 23 rd Ed.2017

11	Faecal Coliform	CFU/100ml	480000	APHA 9222 D, 23 rd Ed.2017
12	Faecal Streptococci	CFU/100ml	1000	APHA 9230 C, 9-119 to 9-122. 23 rd Ed.2017
13	Ammoniacal Nitrogen	mg/l	94.0	APHA,4500 NH3 F,4-119 TO 4-120Phenate method, Colourimetric),23 rd Edition:2017

The condition of the seals, fastening and containers on receipt was as follows:

The sample was contained in brown coloured 2.5 litre for general parameter and 1L Glass bottles for Oil & Grease, 300ml sterilized BOD bottle for Microbiology analysis securely sealed with sealing wax. There was no leak. The impression both on the seals and on the attached tags were representative of the Kerala State Pollution control Board. The impressions of each party on the seal and the tag were identical. The tag contained the signature of

Sri. Prasannan.C, Health Inspector, Brahmapuram MSW plant, Kochi Corporation.

The seal were opened by me just before analysis.

Signed this 19th March, 2021.



P. Geetha
 Board Analyst
 P. GEETHA
 Environmental Scientist
 Central Laboratory
 Kerala State Pollution Control Board
 Gandhi Nagar, Kochi-20

Address: P. Geetha,
 Environmental Scientist (HG)
 Central Laboratory
 Kerala State Pollution control Board,
 Gandhi Nagar, Kochi - 20

To: The Member Secretary,
 Kerala State Pollution control Board,
 Pattom Palace P.O.,
 Thiruvananthapuram – 695 004.

Copy to: The Chief Environmental Engineer,

SOLID WASTE MANAGEMENT SCORES LSGDS (PERCENTAGE ACHIEVEMENT & SCORING PATTERN)		
SL NO	PRIORITIES	MARKS
1	Harithakarmasena	19(Max)
a	Formation	5
b	Training, Id card , Uniform issued, Safety	4
c	Activities (D/D collection, Segregation at Source)	5
d	Street sweeping	5
2	Dry waste (Plastic waste/E waste)	33(Max)
a	Collection (Shop,House&Road)	8
b	Segregation&Temporary storage	6
c	MCF	3
d	MRF	3
e	Plastic squad formed, activities, fine imposed	3
f	Notice issued (ban on carry bag)	1
g	EPR Alternatives	2
h	Alternatives provided(cloth bag)	1
i	Other activities (sign board, awareness programme, appointing staffs etc)	3
j	E waste collection/Domestic Hazardous waste	3
3	Wet waste	38(Max)
a	Door to Door Collection of Segregated Waste (shop&house)	10
b	Decentralized Facility(House Hold)	5
c	Sufficient Cluster facilities, vermi compost or ring compost or biogas plant or pipe compost, Thumboormoozhy models provided with houses	5
d	Centralized Facility	15
e	Anaerobic digestors (Centralized)	3
4	Vehicles	10(Max)
a	GPS mounted	5
b	Covering/Leachate protection etc.	5
5	Grand Total	100

Minutes of the State Level Meeting held by the Chief Secretary on 11.12.2020 for reviewing actions taken for ensuring effective implementation of the Rules framed under the Environment (Protection) Act, 1986 and the relevant orders of Hon'ble National Green Tribunal in that context

The meeting commenced by 11 am with Chief Secretary presiding. The meeting was attended by the Secretaries of the various departments, District Collectors, Heads of Government Departments, and senior officials of various departments of the State. Detailed attendance list is attached.

The meeting was convened to assess the progress made on various fronts in implementing the environmental rules in the State. The Chief Secretary asked the Chairman, KSPCB to brief on the status of implementation. The Chairman briefed on the subject which was followed with a detailed presentation by the Member Secretary on the actions taken as revealed from the reports received in KSPCB from other departments. The main issue in OA No. 606 of 2018 was non-compliance of the local bodies in implementing the solid waste management Rules. It was noted that even after the intervention of NGT, following which continuous follow ups were done from State Level Monitoring Committee, DLMC and KSPCB, no remarkable progress was achieved in solid waste management including remediation of legacy waste dumps.

The issue of the 21 polluted river stretches in the State taken up by the NGT in OA No. 673 of 2018 saw the approval of action plans by the State RRC and the CPCB, and this is now being implemented and reviewed monthly by the Central Monitoring Committee. Though the actions plans for the 21 river stretches were in place, the pace of progress with respect to the proposed treatment plants were not commensurate with the requirement. It was noted that there were delays in getting the DPRs prepared, according of administrative and technical sanctions, allotment of funds etc. The prevalent pandemic situation was a major compelling reason for the delays. Another contributing factor was the local body elections which got scheduled in December 2020. As most of the Rules were related to waste management and were to be delivered through the local bodies, the above circumstances posed a challenging situation. As the entire State machinery particularly the health, the local bodies and district administration were mostly geared up to tackle and contain the pandemic to save precious lives and to ensure a

mechanism for the free and fair exercise of franchise which was fundamental to any democratic system, the delays were inevitable and also justifiable to an extent. However, now no more time can be wasted and proper planning and follow-up need to be done to avoid any adverse remarks of the Hon'ble NGT.

The role of the District Collectors was brought to the notice by the Chairman, KSPCB citing the relevant rule 12 provisions in Solid Waste Management Rules, 2016 and the specific comment of the Hon'ble NGT. The monitoring regime was made more stringent by the Tribunal vide orders dated 2.04.2019, 7.01.2020 and 2.07.2020 in OA No. 606 of 2018 owing to the fact that the implementation was nowhere near what was envisaged in the Rules. The need to file quarterly report in time and the status of pending quarterly report was also mentioned. As the personal appearance of the Chief Secretary of the State is scheduled on 8.02.2021, the need to file updated quarterly report well in advance in January 2021, for the quarter ending December 31st 2020 was also highlighted.

The ACS WRD enlightened on the actions initiated by the WRD to look into the probability of getting DPRs prepared for the river stretches within 90 days, through engineering colleges which are willing to take up such studies as part of student's initiatives. It is also proposed to earmark an amount of Rs. 500 Crores in the next financial year, exclusively for river action plans or related items. ACS also observed that the illegal disposal of domestic wastes through the drains leading to rivers and the wanton disposal of solid wastes near the banks of rivers and littering of wastes into the drains and also directly into the water sources were the main causes of water pollution and that the same could only be addressed through community participation, public vigil and proper awareness. Further alternate systems for management of solid and liquid wastes shall be provided so as to prevent illegal littering / disposal of wastes, on the grounds of unsatisfactory infrastructure facilities. For providing technical guidance for liquid and solid waste management a vertical of 20-30 engineers have been formed by the Department whose expertise could be utilized by the local bodies or District Collectors for various projects. Their expertise could also be utilized for the CETP proposed at Edayar industrial area. ACS also elaborated on the good initiative taken by KSPCB in setting up a website exclusively for the river rejuvenation programme and related status updation. The ACS WRD and the Prl. Secretary, Env't. Dept. suggested that the website can be modified a step further by making it more

interactive and by providing a user interface so as to enable the line departments to update their progress details periodically. Further it was also suggested that the norms and siting guidelines etc. for setting up of treatment plants, be detailed in the FAQ section of the website maintained by KSPCB.

The Principal Secretary LSGD briefed on the role played by the Department in ensuring compliance to the Rules and the various liquid waste projects at hand which were being implemented through AMRUT and IMPACT. The Principal Secretary LSGD (urban) informed that the projects for waste management should come from the LSGIs and that the role of the Department is very limited. The Chief Secretary emphasized that the Government should be aware of the projects that are proposed and now under implementation through the local bodies also. There need to be concerted efforts to streamline the processes and to co-ordinate with all concerned, from the Government Departments and to interfere when needed, so as to get the Rules implemented in the best interest of the State and its people.

While observing the comments from the District Collectors that the mandate before the District Collectors is very vast and that it is doubtful on how best the LSGIs could be convinced to get the projects implemented at the earliest, it was suggested by the Principal Secretary LSGD that as the District Planning Committees have District Collectors as its Member Secretary, the priorities of the State Government for ensuring a safe and effective waste management in the State and need for complying with the orders issued by the NGT can be brought to the notice of all concerned. While sanctioning projects during such committees, high priorities may be assigned to the projects that need be taken up based on NGT orders and for ensuring Rule implementation. Proper awareness to the local bodies would be helpful and would help in serving and implementing the Rules. From the next financial budgets specific amounts can be earmarked for such projects for implementing through LSGIs.

As the projects being implemented / proposed by the LSGIs were not available with the State Government Departments, the District Collectors while reviewing the environmental norms in their districts shall call for the details of all such projects taken up by various authorities and collate the same and a holistic picture on Rule implementation in the District shall be brought to the notice of the LSGD,

Urban Affairs and Panchayat Directorates. Directorates may evaluate the situation with LSGD on a monthly basis and be updated on all progresses being made. They may also intervene to ensure effective implementation of Rules.

While deliberating on the present and forthcoming common facilities for biomedical waste treatment in the State it was informed that a meeting by the Principal Secretary, Environment was due on the same day to reach at a consensus on the districts which were to be allotted for the two upcoming common treatment plants shortly to come up in Ernakulam, one under KEIL and the other under IMA. The common plant of the KEIL will be the first to be commissioned in Ernakulam as its construction and installation is almost over and trial run may take place in January 2021.

Clean Kerala Company which was involved in the management of plastic wastes, informed that the plastic and non-biodegradable wastes from the State were routed to the plant of ACC and as ACC's plant at Coimbatore was under shutdown, the waste may now have to be taken to Madukkari, Bangalore where another plant of ACC is functional. This may increase the tipping fee on local bodies. Chief Secretary enquired about the status of the proposal for co-incineration to be taken up through M/s. Malabar Cements to which the Principal Secretary Environment responded that the proposal and funding were approved. Chief Secretary wanted the Malar Cements to do the needful to provide facilities for co-incineration at the plant situated in Kerala as it would cut down the cost involved and further, the State needs to explore possibilities of utilizing facilities in the State before looking for other alternatives or depending on other States.

Following decisions were taken subsequent to the discussions and deliberations:

- 1. All the District Collectors shall** review the implementation of environment related Rules in the State biweekly as ordered by the Tribunal and may forward the minutes of the DLMC meetings with specific recommendations for effective implementation of the Rules to the Directorate of Urban Affairs and Directorate of Panchayats, with copy to the Principal Secretary LSGD and Principal Secretary LSGD (Urban), without fail. District Collectors may call for the details from each and every stakeholder concerned who are

responsible for getting the project materialized. Even as the time limit for the biomining of legacy waste dump sites granted by NGT has expired in Nov 2020, no action has been taken even with respect to large dumps sites including that at Vilappilsala (Thiruvananthapuram), Sarvodayapuram (Alappuzha), Vadavathur (Kottayam), BPL Koottupatha (Palakkad) and Thalassery (Kannur). **Hence the issues of legacy waste dump sites may be given high priority. The progress of polluted river stretches may also be reviewed during DLMC meetings.** As directed by the ACS WRD, the EE, Tvpmm Corporation may be asked to report on the number of HKS provided in each ward in Karamana and Killiyar basin.

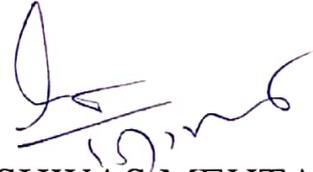
2. **The Principal Secretary LSGD and Principal Secretary LSGD (Urban) may hold monthly discussions with the Directorate of Urban Affairs and Directorate of Panchayats, to assess the situation and intervene as needed to sort out any issues for ensuring compliance to the Rules and related NGT orders. The selection of model river stretch for rejuvenation and status of model cities, towns and villages shall also be included in the Quarterly report. LSGD may forward the monthly status of Rule implementation on solid and liquid waste to KSPCB in the required format for submission to the Ministry of Jal Shakthi. Services of Suchitwa Mission or Haritha Kerala Mission shall also be sought as needed. The Annual Reports of the LSGIs may be scrutinized by the LSGD through Suchitwa mission and Haritha Kerala Mission. The details of legacy waste dumps and proposed mode of action of the LSGIs for ensuring bioremediation shall be assessed by the Department. Good initiatives of the State Government shall be included as a separate section to be incorporated in the quarterly report.**
3. **The KSPCB may update the website of the river rejuvenation committee to make it more user friendly and to enable updation of details by all Departments / authorities /agencies concerned. Further, details of norms applicable for setting up treatment plants shall be included under the FAQ as suggested by ACS WRD and Prl. Secretary Env't. Department. A webpage counter may also be incorporated in the webpage for assessing the site visits. KSPCB may update the biomedical inventory, e-waste inventory and hazardous waste inventory as required under the Rules. KSPCB may also**

prepare a detailed template for collection of details for the review by the District Collectors so that there is uniformity in assessment and reporting.

4. **District Planning Committees with the District Collectors as Member Secretaries, may prioritise the projects that need be taken up for ensuring compliance to the Rules related to waste management and the NGT orders with respect to safe guarding of environment, in due adherence to the State Policy as envisaged under the Article 48 A of the Constitution of India. The new local body members may be made aware of the waste management rules and its priorities in ensuring safety of citizens and environment. This may be included as a subject for the training imparted through KILA. Time bound compliance to the Rules shall be prioritized. New guidelines for ensuring compliance to the Rules and orders of the NGT may be made and circulated among the local bodies.**
5. **The Industries Department may take up the issue of allotment of land of HIL for setting up of ETP for remediation of contaminated site and convene meetings as needed to find a solution to the impasse. The issues with respect to remediation of contaminated sites may be considered by the Empowered Monitoring Committee. The Industries and Environment Departments may take up the issue of plastic waste disposal through co-incineration at the plant of M/s. Malabar Cements at the earliest and the matter reported.**
6. The Empowered Monitoring Committee constituted by **the Environment Department may include the Ground Water Department as well, as recommended by the Central Monitoring Committee on management of Hazardous Waste in OA No.804 of 2017.**
7. The nodal agency with respect to the restoration of water bodies shall be assigned by **the Environment Department**, in compliance to the order dated 18.11.2020 of the NGT in OA No.325 of 2015 and the agency may have a major role to play, for which cooperation of District Collectors (refer orders dated 1.06.2020 and 18.11.2020) and Irrigation Department is vital.
8. As the action plan for Periyar is to be furnished by the State by 26.02.2020 in OA No.395 of 2013, the **preliminary report from the Irrigation Department shall be reported at the earliest. Further, immediate action may be taken for constituting a Committee by the Environment Department for preparing the action plan.**

9. As the affidavit to be filed by the Chief Secretary, on the progress made in ensuring compliance in OA No. 514 of 2019 is still pending, a detailed report may soon be submitted through **LSGD (Urban)**. Further, progress in OA no. 439/2013 shall also be reported with the draft action plan by **LSGD (Urban) immediately**.
10. **All the Heads of Department / authorities which have figured in the agenda under the title 'authority concerned' may ensure that the department / institution have taken steps as required and furnish action taken reports within the stipulated time frames. Pending actions may be taken up on priority and reported.**

The meeting came to a close by 1 pm.



Dr. VISHWAS MEHTA