

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

**IN
ORIGINAL APPLICATION NO. 27 OF 2021 (SZ)**

IN THE MATTER OF

**Tribunal on its own motion
Suo Motu based on the news
item in The Hindu E-Paper, Edition
dt. 28.01.2021, "Faecal contamination
high in Perandoor, Edappally Canals" : Applicant(s)**

Verses

The Chairman, SPCB & Others : Respondent(s)

**UPDATED STATUS REPORT FILED BY THE CHIEF ENVIRONMENTAL
ENGINEER, REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF OF
THE 4th RESPONDENT IN OA No.27 of 2021 IN COMPLIANCE WITH THE
ORDER DATED 02.01.2023**



Dated this the 1st day of February 2023

**Adv. Rema Smrithi,
ADDITIONAL STANDING COUNSEL FOR THE 4th RESPONDENT**

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

**IN
ORIGINAL APPLICATION NO. 27 OF 2021 (SZ)**

IN THE MATTER OF

**Tribunal on its own motion
Suo Motu based on the news
item in The Hindu E-Paper, Edition
dt. 28.01.2021, "Faecal contamination
high in Perandoor, Edappally Canals" : Applicant(s)**

Verses

The Chairman, SPCB & Others : Respondent(s)

VOLUME 1

Index

Sl.No.	Description	Pages
1	Report submitted by the Chief Environmental Engineer	1-4

Dated this the 1st day of February 2023

Adv. Rema Smrithi,
ADDITIONAL STANDING COUNSEL FOR THE 4th RESPONDENT

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

ORIGINAL APPLICATION NO.27 OF 2021 (SZ)

Tribunal on its own motion

Suo Motu based on the news

item in The Hindu E-Paper, Edition

dt. 28.01.2021, "Faecal contamination

high in Perandoor, Edappally Canals" : Applicant(s)

Versus

The Chairman, SPCB & Others : Respondent(s)

**UPDATED STATUS REPORT FILED BY THE CHIEF ENVIRONMENTAL
ENGINEER, REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF OF
THE 4th RESPONDENT AS PER THE ORDER DATED 02.01.2023 IN THE
ABOVE ORIGINAL APPLICATION**

I, Baburajan P K, 52 years, S/o P.A. Kuttappan (Late), now working as Chief Environmental Engineer, Regional Office, Kerala State Pollution Control Board, Ernakulam. I am competent to and duly authorized to represent the 4th Respondent in OA 27 of 2021. I know the facts and circumstances of the case. The factual submissions made hereunder are true and correct to the best of my knowledge, information and belief. In these circumstances, it is just and necessary that this Hon'ble Tribunal may be pleased to accept the accompanying information on file and it is so humbly prayed in the interests of justice in this case.

1. It is respectfully submitted that in compliance to the order of the Hon'ble tribunal, Board has initiated steps to identify the industries/establishments located along the banks of the canals and along the banks of the drains leading to the canal. During the inspections, it was noticed that many apartments/establishments were operating without proper sewage treatment system and without obtaining consent to operate of the Board. It may be noted that the apartments/high rise building were brought under the consent purview of the Board in the year 2006. Most of the apartments/buildings which are not having sewage treatment plant and occupying without consent to operate of the Board,




BABURAJAN P.K.
Chief Environmental Engineer

were established before 2006. They have provided conventional type septic tank and soak pit system and they are disposing the septage through tanker lorries, but no mechanism to ensure whether the septage is reaching the STPs and treated there. The inspection details of 88 units and action taken report is produced herewith and marked as **Annexure-1**. The Board had issued show cause notices /direction to 66 nos. of identified violators including the 23 establishments already reported before the Hon'ble tribunal in the previous report. The Board had given direction to the Secretary, Kochi Corporation to close the Kaloor slaughter house, owned by Kochi Corporation one of the major sources of pollution of Perandoor canal and it was closed down on 26.09.2022. After that the Kochi Corporation took a number of temporary measures to prevent the waste water discharge to the Perandoor canal. Based on the measures taken, the Board revoked the closure order conditionally. Board is closely monitoring the control measures provided in the slaughter house to prevent the waste water discharge to the Perandoor canal.

2. On 11.01.2023, a meeting was convened by the Board to formulate a plan for the follow up action to be taken for the abatement of pollution in Perandoor Canal. In the meeting it was decided to conduct public awareness programs for all stake holders, quantification of effluent generated from establishments; action to be taken for the compliance of Railways, unregistered tankers, establishments, to review the progress made by the agencies on the implementation of pollution control projects. A copy of the minutes is produced herewith and marked as **Annexure-2**. Action plan format prepared by the Board was forwarded to the Secretary Kochi Corporation on 18.01.2023; copy is produced herewith and marked as **Annexure-3**. As decided in the meeting held on 11.01.2023, Divisional Railway Manager, Thiruvananthapuram was instructed to intervene to take action to construct Sewage Treatment plant at Ernakulam Junction Railway station and to provide facility for proper disposal waste containing oil from loco shed, copy of the letter is produced herewith and marked as **Annexure-4**.

3. In continuation to the above the Board conducted a public awareness program with the participation of all stakeholders and concerned authorities on 21.01.2023. In the programme, Justice. K. Ramakrishnan, Retired Judicial Member, National Green Tribunal (SZ) gave key note address in which he briefly explained about the importance of waste management system and duties and responsibilities of waste generators. He opined that the person who is generating waste should dispose it in a scientific manner and it is the responsibility of public to protect the environment. The Chairman & Member Secretary, Kerala State Pollution Control Board and the Additional Secretary, Environment




BABURAJAN P.K.
 Chief Environmental Engineer

Department, Government of Kerala, Officials from Kerala State Pollution Control Board, Kerala Water Authority (KWA) Sewerage circle, Irrigation Department, The Regional Joint Director Of Urban Affairs, Ernakulam, Harithakeralam Mission, Suchitwa Mission, Greater Cochin Development Authority (GCDA), Kochi Municipal Corporation, Kochi Metro Rail Limited (KMRL), Kalamassery Municipality and other officers concerned were present. The representatives of Ernakulam District Residence Association Apex Council and representatives of various residence associations from the apartments and other establishments also attended the program. Representatives of various apartments raised their issue regarding the installation of Sewage Treatment Plant such as land constraints as the apartments were constructed long back. The Member Secretary, KSPCB requested the Kerala Water Authority and GCDA officials to report the possibility of treatment of wastewater in the underutilized sewage treatment plants. Kochi Corporation was also requested to implement the licensing of unregistered tankers and to provide online tracking system from wastewater tankers as done in Thiruvananthapuram city for proper tracking of registered vehicles. A copy of report of the awareness program is produced herewith and marked as **Annexure- 5**.

4. A meeting of the various stake holder departments was also conducted on 21.01.2023 to discuss the issues and to find a permanent solution for the protection of water bodies. In the meeting, the Chairman, Kerala State Pollution Control Board asked the Kerala Water Authority and GCDA to consider whether the co - treatment of waste water from the apartments and other establishments established long back and lacking the waste water treatment facilities could be included in the common STPs. He also insisted all the departments to submit a detailed report including the action taken by them, short term and long-term measure proposed to adopt as a mitigation measure for the safe disposal of sewage and septage in the city. Copy of the minutes of the meeting is produced herewith and marked as **Annexure - 6**.

5. It is humbly submitted that Board instructed the Kerala Water Authority and Kochi Corporation vide letter dated 31.01.2023, to fully utilize the underutilized new 5MLD STP at Elamkulam by collecting wastewater through tankers as laying of sewer line network for 1.75 MLD is under DPR stage and also there is space limitations in old high rise buildings for providing STP with list of establishments having no STP enclosed and to report the efficiency of existing old sewer line and to furnish the action plan with timeline. Copy of the letter is produced herewith and marked as **Annexure -7**.




BABURAJAN P.K.
 Chief Environmental Engineer

7. Instruction was also issued to Kochi Corporation and GCDA on 31.01.2023 to fully utilize the underutilized 750KLD STP at Kaloor by collecting waste water through tankers and to report the action plan with time line. . Copy of the letter is produced herewith and marked as **Annexure –8**. Kochi Corporation was directed on 31.01.2023 to report the status of actions taken for licensing of unregistered tankers and implementation of online tracking system for wastewater tankers. Copy of the letter is produced herewith and marked as **Annexure –9**. Further DPRs prepared by Kochi Metro Rail Limited duly vetted by CUBE-IIT Chennai for STPs and sewer line at Muttar, Perandoor, Vennala, Elamkulam for an amount of Rs.324.28 Crore, Rs.232.68 Crore, RS 499.26 Crore , Rs.367.63 Crore respectively were forwarded to Ministry Of Jal Shakti for the consideration of getting funding under NRCD. Copy of the letter is produced herewith and marked as **Annexure-10**.

It is humbly submitted that only with the joint efforts of all stake holders, pollution abatement measures can successfully be implemented to abate the pollution of canals in Kochi Corporation. Earnest steps are being taken for arriving at solutions for the abatement of pollution of canals.

All the facts stated above are true to the best of my knowledge, information and belief.

Dated this the 1st day of February 2023




Chief Environmental Engineer
BABURAJAN P.K.
Chief Environmental Engineer

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN BENCH, CHENNAI
ORIGINAL APPLICATION NO. 27 OF 2021 (SZ)

Tribunal on its own motion
Suo Motu based on the news
item in The Hindu E-Paper, Edition
dt. 28.01.2021, "Faecal contamination
high in Perandoor, Edappally Canals" : Applicant(s)

Verses

The Chairman, SPCB & Others : Respondent(s)

VOLUME 2

Index

Sl.No.	Description	Pages
1	Annexure 1: Inspection details and action taken report	1-11
2	Annexure 2 : Copy of the Minutes of meeting on 11.01.2023	12-14
3	Annexure 3 : Action plan for the abatement of pollution to vembanad lake and its canals in kochi corporation	15-23
4	Annexure 4 : Copy of the letter issued to Ernakulam Junction Railway station on 24.01.2023	24-25
5	Annexure 5 : Copy of the report of Awareness Programme held on 21.01.2023	26-30
6	Annexure 6 : Copy of the Minutes of meeting with Stakeholder Departments conducted on 21.01.2023	31-33
7	Annexure 7 : Copy of the letter issued to the Kerala Water Authority 31.01.2023	34
8	Annexure 8 : Copy of the letter issued to the Kochi Corporation and GCDA on 31.01.2023	35
9	Annexure 9 : Copy of the letter issued to the Kochi Corporation on 31.01.2023	36
10	Annexure 10 : Copy of the letter issued to Ministry of Jalashakti, Department of Water Resources on 31.01.2023	37-38

Dated this the 1st day of February 2023

Adv. RemaSmrithi,
ADDITIONAL STANDING COUNSEL FOR THE 4TH RESPONDENT

Annexure -1

Details of Residential Apartments /Establishments without Board's Consent and without having STP

SI No	Residential Apartments /Establishments	Date of Inspection	Remarks
1.	Bennison Heights, Umman Mani ,7C, Jennison Heights, Judges Avenue, Kaloor- 682017	05.02.2022	No consent (16000 sq. ft.), No STP, Soak pit overflow discharging to canal. Letter issued Replied to Board's letter stating that to exempt flat from construction of STP.
2.	Skyline Marble Arch, Kattakara Road West, Kathrikadav, Kaloor. 682017	05.02.2022	No Consent, No STP Soak pit overflow discharging to canal. Notice issued. Replied to Board's letter stating that apartment had commissioned on 1999, requested to exempt flat from construction of STP
3.	ABM tower, Kadavanthra,682020	05.02.2022	No Consent, No STP Soak pit overflow discharging to canal. Notice issued
4	Star Homes, South Star Apartment Owners Association, Opp. KSRTC Stand, Kochi, 682017	05.02.2022	No consent, No STP, Soak pit overflow discharging to canal. Notice issued
5.	Water Melon Apartment,Opp. KSRTC Stand, Kochi, 682017	05.02.2022	No consent, No STP, Soak pit overflow discharging to canal. Notice issued
6	Vanshika Apartments, Secretary , Sujith, Vidhya Nagar Road, Panampilly Nagar	08.02.2022	No STP, No Consent, Discharging to canal. Notice issued
7	DD Bhavanam. Vidhya Nagar Road, Kadavanthra P.O ,Ernakulum	08.02.2022 & 31.05.2022	No STP, no consent, waste water discharging to drain. Sample collected , parameters are above standards. Notice issued

8	Skyline Zircon Apartment Association,Vidhya Nagar Road, Kadavanthra P.O Ernakulum	08.02.2022	No STP, No consent, waste water after passing through filter discharging to the drain. Notice issued
9	PMJ Towers, Vidhya Nagar,	08.02.2022	No STP, no consent, waste water discharging to drain. Notice issued
10	DD Roses Gate, Sunitha , Secretary, Anjiparambil Lane, Kadavanthra P.O Ernakulum	08.02.2022	No STP, no consent, waste water discharging to drain. Notice issued
11	Galaxy Hamilton, Chilavannoor, Ernakulam, Kerala	13.09.2022	No consent and no STP, Notice issued
12	Galaxy kibgston, Chilavannoor, Ernakulam, Kerala	13.09.2022	No consent and no STP, Notice issued
13	Galaxy winston, Chilavannoor, Ernakulam, Kerala	13.09.2022	No consent and no STP, Notice issued
14	Little soi restuarent, adhithya tower,K.V colony ,Panampilly nagar	21.06.2022	No ETP. Issued direction for obtaining Boards consent
15	Days residence ladies hostel,Judges avenue,kaloor	14.12.2022	Notice issued. proposal for treatment system is submitted. Issued letter for submitting application
16	Galaxy Peach Garden,bava building/Kaloor,682023	07.12.2022	No STP and not obtained Boards consent. Direction issued.
17	VB residence ,sastha temple Rd,Kaloor,Ernakulam-682017	07.12.2022	No STP and not obtained Boards consent. Direction issued.
18	JM Manor,Link avenue Kaloor, Ernakulam,kerala-682017	08.08.2022	No STP and not obtained Boards consent. Direction issued.
19	Presidency Homes,provident fund road, journalist colony,Kathrikadavu,Kaloor, Ernakulam,	08.08.2022	No STP and not obtained Boards consent. Direction issued.

20	J.K. Royal House, Chammany Rd,Kathrikadavu,Kaloor,Ernakulam- 682017	08.08.2022	No STP and not obtained Boards consent. Direction issued.
21	Galaxy Wintage Apartment Aryapadam Lane, Mamangalam Elamakkara, Ernakulam- 682017	20.08.2022	No STP and not obtained Boards consent. Direction issued.
22	LIC Officers quarters & VIP Guest house kaloor-682018	20.08.2022	No STP and not obtained Boards consent. Direction issued.
23	AG Account General staff quarters Golden Jubile Road Kaloor, Ernakulam-682017	20.08.2022	No STP and not obtained Boards consent. Direction issued.
24	Vinayaka Boys Hostel Banerji Road, Backside of metro station kaloor-682017	20.08.2022	Septic tank is provided and no consent. letter issued
25	CBI quarters CBI Road, Kathrikadav Kaloor-682017	20.08.2022	No STP and not obtained Boards consent. Direction issued.
26	Ernakulam Junction Railway station Ernakulam		Not constructed STP and Consent Revoke intention Notice issued.
27	Dhe Puttu, Resturent, Bypass Road Edappally Pin-682024	22.07.2022	No consent ,STP not provided Direction issued
28	Malabar Gate, Apartments, marottichodu road,edappally-682026	22.07.2022	No consent ,STP not provided Direction issued Combined inspection conducted with cochin corporation on 13.01.2023. Report was given to district collector
29	Galaxy Marvel, Apartments, Edappally, Pin-682026	17.09.2022	No consent ,STP not provided Direction issued
30	Kalpaka Rajmahal, ApartmEnts, Bts Road, Edappally, Cochin-24	17.09.2022	No consent ,STP not provided Direction issued

31	Mandalay Point Flat, Edappally, NH Road	17.09.2022	No consent , STP not provided Direction issued
32	Penta Queen Apartment-A Block, Padivattom, Edapally, Ernakulam-682024	17.09.2022	No consent , STP not provided Direction issued
33	Penta Queen Apartment-B1 Block, Padivattom Edapally, Ernakulam-682024	17.09.2022	No consent , STP not provided Direction issued
34	Penta Queen Apartment-B2 Block, Padivattom Edapally, Ernakulam-682024	17.09.2022	No consent , STP not provided Direction issued
35	Penta Queen Apartment-B3 Block, Padivattom Edapally, Ernakulam-682024	17.09.2022	No consent , STP not provided Direction issued
36	Penta Queen Apartment-C Block, Padivattom, Edapally, Ernakulam- 682024	17.09.2022	No consent , STP not provided Direction issued
37	Maria Chicken Centre Kadavanthra Market	13.09.2022	No consent , STP not provided Direction issued
38	Malabar Chicken Centre Kadavanthra Market	13.09.2022	No consent , STP not provided Direction issued
39	Vigyana Sagar Hostel Marine Engineering Training Institute, Vidyana Sagar, Giri Nagar Shipyard Limited, near Bhavans Vidya Mandir, Kochi	13.09.2022	No consent , STP not provided Direction issued
40	Namasita Apartment, Vidya Nagar Road, Panampilly Nagar, Pin - 682020	13.09.2022	No consent , STP not provided Direction issued
41	Skyline Belair Apartment, Shihab Thangal Road, Near Passport Office, Panampilly Nagar, Pin - 682036	13.09.2022	No consent , STP not provided Direction issued
42	RDS Avenue One, Shihab Thangal Road, Near Passport Office, Panampilly Nagar, Pin - 682036	13.09.2022	No consent , STP not provided Direction issued

43	West rock one apartment P J Antony Road, Pachalam, Ernakulam 682012	23.09.2022	No consent , STP not provided Direction issued
44	Galaxy Arcade Peediyakkal Road Abdul Rahman Line, SRM road, Pin:682018	23.09.2022	No consent , STP not provided Direction issued
45	Century Terrace Yuvajana Samajam Road, Elenikal line Kadavanthra P.O. Cochin -682020	23.09.2022	No consent , STP not provided Direction issued
46	Dadd's Extended stay Canal road, A.L. Jacob Railway Overbridge, Kammattipadam, Ernakulam-682016	23.09.2022	No consent , STP not provided Direction issued
47	Metro Paradise Apartment Chittoor - Cheranallur Rd, Amrita Nagar, Edappally, Ernakulam, 682024	08.08.2022	No Consent, NoSTP
48	NB Spring Terrace Apartment Tagore Lane, Elamakkara 682026	19.08.2022	No consent, No STP
49	The Tapioca - Restaurant Mylaady Chambers, Goshree Chathiyath Road, Pottakuzhy Rd, Kaloor, 682017	08.11.2022	No consent ,waste water discharged to a pit, Direction issued.
50	Slaughter House owned by Cochin Corporation	03.12.2022	Effluent discharged directly to Perandoor Canal. Closure direction issued and closed down on 26.09.2022. After that cochin corporation has taken some temporary measures to prevent the waste water discharge to the Perandoor canal and the Board has issued an order revoking the closure order insisting stringent conditions on 24.12.2022. Waste disposed to Brahmapuram plant.

**Details of Residential apartments /Establishments having STP but without
obtain Board Consent**

Sl No	Residential apartments /Establishments	Date of Inspection	Remarks
1	Muthoott Royal tower, Muthoothu mini corporate office, Kaloor, Kochi-682017	05.02.2022	Application for renewal submitted, inspection conducted STP is not properly working. Notice issued for outside discharge. Presently application resubmitted
2.	Skyline Opal Arch, , Kattakara Road West, Kathrikadav, Kaloor, 682017	05.02.2022	STP rectified and application under processing
3	Trinity Citaden, Opp. KSRTC Stand, Kammattipadam, Kochi, 682017	05.02.2022	No consent ,STP working,
4.	ABAD CLOUD NINE Residence Association, Vidhya Nagar Cross Road,Panampilly Nagar	08.02.2022	STP working, consent expired, treated water after filtration discharging to the canal, sample collected. Notice issued. Apartment Requested 20 days time for submitting the application
5.	Silver Streak, Vidhya Nagar Cross Road,Panampilly Nagar	08.02.2022	STP consists of screening chamber, aeration tank, filtration, chlorination and this water discharging to canal. Sample taken, consent not valid. Direction issued. Replied to Board's letter, asking Instruction for applying Board's consent
6.	Infra Hamlin Owners Association, Vidhya Nagar,Kadavanthra P.O , Ernakulum	19.10.2022	STP is working and application for consent to operate renewal under processing

7.	Empire Residenz, Girinagar, Kadavanthra P.O	08.02.2022	No occupants. So STP not working.
8	RDS Aura, Owners Association, Kadavanthra P.O Ernakulum	08.02.2022	STP rectified, application under processing
9	The Atria, Sikh Gurudwara Road Perumanoor, Thevara	19.10.2022	STP is working and application for Consent to operate renewal under processing
10.	Jal vayu vihar,Panampilly nagar	24.11.2022	No consent, STP is working. Sample collected , parameters are above standards. Notice issued. Application returned online on 22.01.2023
11.	The orchard apartment ,Panampilly nagar	24.11.2022	CTE expired. STP is working and sample collected
12.	Skyline primrose, Pachalam Road,Pottakuzhi,mamangalam elamakara	07.12.2022	STP working not satisfactory and not obtained Boards consent. Direction issued.
13	Jewel Oak field,SRM road,Kaloor,kochi-682012	07.12.2022	STP working not satisfactory and not obtained Boards consent. Direction issued.
14.	ACE HOMES,Kaloor,kochi,kerala-682017	07.12.2022	STP not working and not obtained Boards consent. Direction issued.
15.	Paradise tower,south chittoor,chittoor,kerala,682027	08.11.2022	STP not working and not obtained Boards consent. Direction issued.
16	Dream Flower Bonita apartment Green ripple road, swamippady 682026	19.08.2022	No consent ,STP not functioning . Direction issued.
17	Vithayathil Metropolw apartment Aryapadam Lane, Perandoor Road Kaloor-682017	20.08.2022	STP provided and working. No consent and letter issued for obtaining Board's consent.

18	Amar Samrat Apartments Kathrikadav-682017	20.08.2022	STP working not satisfactory and not obtained Boards consent. Direction issued..
19.	Diesel locoshed, South railway station	11.11.2022	Consent Expired. Direction issued for maintaining proper ETP running and hazardous waste disposal regarding
20	The Woodford Yuvajana Samajam Road, Kadavanthra Residence Association, Girinagar Pin - 682020	23.09.2022	No consent , STP working and sample collected from filter outlet. Direction issued
21	Galaxy Homes_Golden Dale Vidya Nagar Panampilly Nagar Pin - 682036	23.09.2022	No consent , STP provided but not working during inspection(construction ongoing). Direction issued
22	Sparkle scape Apartment, Tagore Lane, Elamakkara 682026	19.08.2022	Consent expired, STP Working, Treated waste water used for gardening purpose (Sample collected)

Details of Residential Apartments /Establishments have valid consent and STP working

Sl No	Residential Apartments /Establishments	Date of Inspection	Remarks
1	Uni Residenz, Kaloor	05.02.2022	Consent valid, STP working, samplecollected.
2	M/s Noel Octave	05.02.2022	Consent valid, STP working, samplecollected
3	Arya Bhangy Pine Tree, Ware house Road, Kadavanthra, 682017	05.02.2022	Consent Valid, STP working.
4	RDS Legacy, Vidhya Nagar Road, Kadavanthra P.O Ernakulum	08.02.2022	STP working, Consent valid, treated water discharging to canal, sample collected. Notice issued
5	Lisie hospital	13.12.2021	STP working and sample collected
6	Dream flower Magnum opus, perandoor road, elamakkara	28.10.2022	STP is working and obtained Boards consent.
7	The legend by skyline ,kaloor	28.11.2022	STP is working and obtained Boards consent.
8	Asset Ocean Grove, near chittoor sree Krishna swamy temple, south chittoor, kochi-682027	08.11.2022	STP is working and have valid consent
9	Bhaskareeyam Convention Centre saraswathi vidya nikethan campus perandoor road, Elamakkara-682026	19.08.2022 20.01.2023	Consent to operate valid upto 01.05.2023. STP operational and treated water is used for gardening purpose (Sample collected)
10	Gokulam Convention Centre Banerji Road, Opp PVS Hospital kaloor, kochi-682017	20.08.2022	Have valid Board's consent and STP is functioning
11	Sunny Palace Apartments, Samaad Hi Road, Edapally	17.09.2022	Valid consent, STP working

12	Pothys ,Banerji road, kaloor	20.01.2023	Inspection conducted on 20.01.2023, Consent valid, STP working, sample collected
----	------------------------------	------------	--

Details of Residential Apartments/Establishments having valid consent and STP not working

SI No	Residential Apartments/Establishments	Date of Inspection	Remarks
1	Clearway astrum M/S Clearway astrum,near aster medcity,ananda marga school road,south chittoor,cheranallur	08.11.2022	Have valid consent , but STP not functioning satisfactorily. Direction issued.
2	Poorna Vysan Paradise P J Antony Road, Pachalam, Ernakulam 682012	23.09.2022	Consent valid , STP not working. Direction issued
3	Galaxy High Field Vidya Nagar Panampilly Nagar Pin - 682036	23.09.2022	Consent valid , STP construction is ongoing. Direction issued
4	Travancore food Company 42/356, Ambedkar road, Vennala	22.12.2022	Complaint existed against the unit. Direction issued to rectify the ETP. Reply received from the unit stating that ETP rectified.

Minutes of the Meeting conducted at 2.00 pm on 11/01/2023 regarding Perandoor Canal in O.A No. 27/2021

The meeting commenced at 2.00 pm with the Chairman presiding. The following officers were present:-

- | | | |
|---------------------------|---|---|
| 1. Dr. Sheela A M | - | Member Secretary |
| 2. Sri. Baburajan P.K. | - | Chief Environmental Engineer,
Regional Office, Ernakulam |
| 3. Smt. Bindhu V. Gopal | - | Senior Environmental Engineer-1, HO |
| 4. Smt. Sreelakshmy P. B. | - | Environmental Engineer,
DO-I, Ernakulam |
| 5. Smt. Ramya G | - | Environmental Engineer-1, HO |
| 6. Smt. Bincy B.S. | - | Environmental Engineer-3, HO |
| 7. Smt. Pravitha P.K. | - | Assistant Environmental Engineer-1,
HO |
| 8. Smt. Shahna | - | Assistant Environmental Engineer, RO |
| 9. Smt. Nazni N | - | Assistant Engineer-17, HO |

The Chairman discussed about the latest NGT order dated 02/01/2023. Hon'ble NGT has directed the concerned authorities to file report before 02/02/2023. The Environmental Engineer, District Office-I, Ernakulam informed that there is no industrial discharge to Perandoor Canal. Only sewage contamination has been reported in the canal, for which the local body should initiate action. The Member Secretary enquired about the units namely flats, hotels, hospitals, malls for which the Board issued consent and on compliance status of such units. Environmental Engineer, DO1 informed that some units are complying with standards. It was informed that Ernakulam Railway (South) has not provided waste water treatment plant and also pollution problems exists from their Locomotive plant. The Member Secretary informed that Kochi Corporation was earlier directed to ensure that there are no waste water outlet pipes into the drains in connection with direction of OA 147/2022 which pertains to Vembanad lake. Regarding the utilization of existing sewage treatment plants at Elamkulam of Kerala Water Authority and that of GCDA at two places namely Kaloor and Palarivattom, it was reported that same is only partially utilized. Waste

3/7

water from flats, hotels in nearby areas can be brought to these STPs for full utilization. Environmental Engineer DO1 reported that action has been taken to prevent the discharge of any waste water from Kaloor slaughter house, as the same is taken to Brahmpuram Septage plant through tankers. The need to give separate treatment for sewage and sullage so that fecal coliform is not reaching the canals was suggested. The Chief Environmental Engineer, Regional office informed that Assistant Engineer from Regional office, Ernakulam can be engaged for the works relating to NGT order. Chairman suggested to conduct meeting with the concerned departments and stakeholders to work out the way forward in case of old flats who do not possess the consent of the Board. The following decisions were taken in the meeting.

1. Conduct public awareness program on 21/1/2023 that includes stake holders, Kerala Water Authority and Kochi Metro as directed in the order. Both former Justice Ramakrishna Pillai, SLMC Chairman and former NGT Justice K. Ramakrishnan are to be invited for the meeting. The departments can sit together after hearing the stakeholders and chart out a feasible program.

2. Issue notice to Divisional Office of Railway for non compliance of directions for installation of STP. Status of compliance of all railway stations is to be reported by concerned sections.

3. Prepare list of flats/hospitals/malls that are complying, partially complying and non complying with Board's directions/consent conditions along the banks of T.P canal. The quantification of effluent generated from the establishments namely flats, hospitals, high rise buildings is to be assessed in connection with the usage of common STPs.

4. Action taken by Corporation against unregistered tankers is to be collected.

5. Issue notice to all hotels and other establishments for non compliance.

6. Report the status of the 23 establishments mentioned in the NGT order that are given notices by Board.
 7. Feasibility of remedial measures to be adopted for discharge of waste water from flats suggested by EE, DO-1, EKM is to be checked.
 8. Solid waste management shall be as per Solid Waste Management Rules, 2016 and Plastic Waste Management Rules, 2016. Measures shall be taken to prevent the entry of any plastic waste into the canals.
 9. The progress on the projects of agencies like KMRL is to be ascertained.
 10. The CEE will support the District Office by providing a staff for the works.
 11. The above activities are to be brought to the notice of the District Collector, Ernakulam and its progress is to be reviewed regularly.
- Meeting came to a close at 3.30



CHAIRMAN

☎: General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151
E-mail: ms.kspcb@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/EE3/NGT/O.A No.147/2022/06/2022 (3)

Date:18/01/2023

From

The Member Secretary

TOP PRIORITY

To

The Secretary
Corporation of Kochi

Sub:- ~~O.A.No.~~ O.A 147/2022 (PB)- Vembanad Lake - before the Hon'ble
National Green Tribunal

Ref:- 1) Order dated 23/08/2022 in O.A. 147/2022

2) This office letter No. PCB/HO/EE4/NGT/O.A 147/2022-2 dated 31/12/2022

3) Order dated 02/01/2023 in O.A.27/2021

Sir,

As per the order dated 06.01.2023, in OA 147/2022 of Hon'ble NGT directed State of Kerala to submit a meaningful action taken report within two months . The action plan in this regard has prepared and forwarded via email. You are requested to update/fill the details regarding liquid and solid waste management coming under your jurisdiction & also the action taken report in the format attached and return urgently. Please take this as most urgent.

Yours faithfully,

Sheela P J

MEMBER SECRETARY

Copy to :1) The Chief Environmental Engineer
Regional Office, Ernakulam
2) The Environmental Engineer
District Office-1, Ernakulam

**ACTION PLAN FOR THE ABATEMENT OF POLLUTION TO VEMBANAD LAKE AND ITS CANALS IN
KOCHI CORPORATION**

1							
Liquid and solid waste management							
Kochi Corporation							
I. Short term measures							
No.	Activity	Gap	Proposed activity	Implementing agency	Budget	Timeline	Action so far taken
1.1	Full utilisation of common sewage treatment plants		1.1.1. Identification of flats, hotels, establishments from which waste water can be diverted to said common STP	Kochi Corporation KWA Suchitwa Mission		31-3-2023	Elamulam STP plant has been commissioned
	1.1.a Elamkulam 5 MLD	1.5 MLD					
	1.1.b Wellington FSTP 100KLD		1.1.2 Quantification of waste water generated from these establishments from water consumption from KWA			31-3-2023	Wellington plant is treating septage
	1.1.c Brahmapuram FSTP 100KLD		1.1.3 To make unregistered tankers to registered tankers			31-3-2023	Brahmapuram plant is also treating leachate from Brahmapuram plant
	1.1.d GCDA, Kadavanthra 0.45MLD		1.1.4 Online system shall be implemented to ensure disposal of waste water including septage at treatment plant and thus tracking of vehicles can be done			31-3-2023	Plant is working
	1.1.e GCDA, Kaloor 0.75 MLD					31-3-2023	Plant is working
1.2	Stop the discharge of waste water in to the canals and lakes and for ensuring adoption of treatment measures by flats, high rise buildings, hotels, commercial buildings, hospitals, shops, households, workshops, service stations etc.		1.2.1 Inspection to be conducted for the removal of waste water outlet pipes into the canals and lakes	Kochi Corporation Irrigation department KWA	Nil	31-3-2023	
			1.2.2 Inspection to be conducted for checking sewage and sullage treatment facilities in the units	Suchitwa Mission		31-3-2023	

		1.2.3 Levying of fine from unauthorised units			31-3-2023
		1.2.4 Issue of notice to unauthorised units			31-3-2023
		1.2.5 Retrofitting measures are to be ensured in those units			31-3-2023
		1.2.6 Number of units for which retrofitting measures provided			
		1.2.7 Ensure that existing sewerage network of Kerala Water Authority for Elamkulam is leakage free and entire waste water is reaching common sewage treatment plant and also sewerlines are laid across canals			31-3-2023
		1.2.8 Permanent solution to prevent overflow through manholes, pipelines and pumping stations			31-3-2023
		1.2.9 Adequacy of sewer line is to be checked. The quantity of water consumption in this area and the quantity of sewage reaching common STP is to be ascertained			31-3-2023
		1.2.10 Number of Houses and establishments connected to the existing sewer network and the houses and establishments not connected to sewer network are to be identified and			31-3-2023

		ensure that they are having proper sewage and sullage treatment facility				
1.3	Inspection of flats, high rise buildings, hospitals, hotels, educational institutions, hostels, lodges, commercial establishments, markets, worship places etc in Corporation catchment	1.3.1 Identification of complying, partially complying and non-complying units List of the units and compliance status is to be provided	KSPCB Kochi Corporation		31-3-2023	
		1.3.2 Ascertain the possible remedial measures to be adopted in the case of partially and non-complying units	KSPCB Suchitwa Mission, KWA		31-3-2023	
		1.3.3 Inspection of workshops and service stations and on disposal of waste oil from such units	KSPCB		31-3-2023	
		1.3.4 Strict monitoring of waste disposal (sewage, sullage, biodegradable waste, non-biodegradable waste) in flats, offices, educational institutions, shops, lodges, auditoriums, hospitals in the canal catchment			31-3-2023	
		1.3.5 Verify whether consent to operate of the Board exists			31-3-2023	
		1.3.6 Verify on compliance of consent conditions in the consent to operate			31-3-2023	
		1.3.7 Treated sample should be taken from the flats/establishments once in a month.			31-3-2023	

		1.3.8 Ensure proper treatment and disposal facility for sewage, sullage and garbage in the flats and establishments			31-3-2023	
		1.3.9 Monthly progress report is to be submitted by the District Office to Head Office			31-3-2023	
		1.3.10 Issue of instructions for providing remedial measures	KSPCB		31-3-2023	
		1.3.11 Levying of environmental compensation in case of continuing non-compliance to the Board's instructions	KSPCB		30-4-2023	
1.4	Railway South Ernakulam	1.4.1 Sewage treatment plant of railways	Railways KSPCB			
		1.4.2 Waste management in locomotive shed of railway				
1.5	Slaughter house, Kaloor	1.5.1 Ensure that waste water is not discharged into canals and it is diverted to Brahmapuram plant	Kochi Corporation KSPCB			
1.6	HOUSE BOATS	1.6.1 Identification of houseboats having consent from the Board	Tourism DTPC			
		1.6.2 Whether complying with consent conditions				
		1.6.3 Treatment facility for waste water from houseboats				
		1.6.4 Treatment of biodegradable and non biodegradable wastes				
1.7	Solid waste management in households and establishments namely hospitals, worship places, hotels, educational institutions, hostels, lodges, commercial	1.7.1 Ensure segregation of biodegradable and non biodegradable waste at source	Kochi Corporation		31-3-2023	
		1.7.2 Whether biodegradable waste is taken by authorised collectors to places	Kochi Corporation		31-3-2023	

	establishments, markets, worship places etc in Corporation catchment	having consent of the Board or they have provided any onsite facilities for treatment of biodegradable				
		1.7.3 Whether waste from all chicken stalls diverted to rendering plants in Ernakulam	Kochi Corporation		31-3-2023	
		1.7.4 Whether initiatives taken for diversion of sanitary wastes like diaper to common biomedical waste facility				
		1.7.5 Initiatives for construction and demolition wastes				
		1.7.7 Whether non-biodegradable waste namely plastic waste is taken by authorised collectors like harithakarmasena who are taking waste to units having consent of the Board	Kochi Corporation		31-3-2023	
		1.7.8 Ensure that no waste shall be thrown to canals or dumped on land	Kochi Corporation		31-3-2023	
		1.7.9 Check for the implementation of single use plastic ban order and fine levied	Kochi Corporation		31-3-2023	
1.8	Solid waste management in Railways	Whether segregation at source; treatment facility of biodegradable waste exists; segregated non biodegradable waste is given to aut	KSPCB			
1.9	Cleaning of canals for removing of wastes and to prevent stagnation	Desilting of canals is to be done. Wastes removed are to be taken away from canal banks and are to be disposed safely	Irrigation department			
1.10	Take measures to protect canals	Fencing to canals, CCTV	Irrigation department			
1.11	Fining the unauthorised units discharging waste water into canals	Fining and reporting	Irrigation department			

	and lakes					
1.12	Documentation of the activities undertaken and submission to the Hon'ble NGT, Urban department and KSPCB	All the above activities are to be monitored systematically	Kochi Corporation		31-3-2023	
1.13	Water Quality Monitoring	Monitoring of lake and canals	KSPCB			Board is monitoring water quality
1.14	Awareness programmes	Awareness to stakeholders				
	II. Long term measures					
2.1	STPs under KMRL's Integrated Water Transport System project at Elamkulam, Vennala, Muttar, Perandur of a total capacity of 31MLD	STP at Elamkulam-10MLD	KMRL			
		STP at Muttar-7MLD	KMRL			
		STP at Perandur-4 MLD	KMRL			
		STP at Vennala-10MLD	KMRL			
2.2	STP at Kochi Corporation Division-16		Amruth			
2.3	STP at Kochi Corporation Division 1-4		Cochin Smart city			
2.4	STP at Kochi Urban Agglomeration -2 MLD					
2.5	Slaughter house at Kaloor	Provision for treating the generated waste water is established and working	Kochi Corporation			
2.6	Waste to energy plant	Biomining of dumpsite is being carried out at Brachmapuram and that place is identified for Waste to energy plant				Biodegradable wastes from Kochi Corporation is taken to Common Windrow compost plant exists at Brahmapuram, Ernakulam

3. ANY OTHER PROPOSED ACTIVITIES WITH TIMELINE, FUNDING AND IMPLEMENTING AGENCY

ACTION TAKEN BY THE LOCAL BODY, ARYAD- FOR THE MANAGEMENT OF LIQUID WASTE AND SOLID WASTE FOR THE PROTECTION OF VEMBANAD LAKE

Corporation	Kochi						
Municipality	Alappuzha	Cherthala	Maradu	Thrippunithura	Vaikom		
Panchaayth	Aroor	Arpookkara	Arukutty	Aryad	Aymanam	Chempu	Chellanam
	Chennam	Elankunnapuzha	Ezhikkara	Ezhupunna	Kadamakkudy	Kainakiri	Kodamthuruth
	Kottuvally	Kumbalam	Kumbalangy	Kuthiyathode	Maravanthuruth	Mannancherry	Mulavukadu
	Muhamma	Mulavukadu	Pallipuram	Panavally	Perumpanam	Thaikattussery	Thalayazham
	Thanneermukkam	Thuravur	TV Puram	Udayanapuram	Udayamperoor	Valayar	Varapuzha
	Vechoor						

1. General

Sl.No.	Items	
1.	Population	39683
2.	No of wards	18
3.	No of houses	8087
4.	No of establishments	705
5.	Total quantity of waste water generated	16.174 T
6.	Total quantity of solid waste generated	4.852

2. Liquid waste

Sl.No.	Items
1.	Total quantity of domestic wastewater
2.	Quantity of sewage in KLD
3.	Quantity of sullage in KLD
4.	Treatment options for sewage (Septic tank- soak pit/STP/Common STP)
	a)No of houses having septic tank and soakpit for sewage
	b)No of houses having soakpit for sewage
	c)No of houses connected to common STP
	d)No of houses discharging sewage into drain/lake/streams
5.	Gap in treatment of sewage
6.	Action plan for treatment for sewage to reduce gap
7.	Treatment options for sullage
	a)No of houses discharging sullage into soakpit
	b)No of houses discharging sullage for irrigation
	No of houses discharging sullage into drain/lake/streams
8.	Gap in treatment of sullage
9.	Action plan for treatment for sullage to reduce gap
10.	No of establishments(commercial buildings/ highrise buildings/hotels/hospitals etc) having proper wastewater treatment facility
11.	No of such establishments having no treatment facility
12.	Gap in treatment
13.	Action plan

3. Solid waste

Sl.No.	Items	
1.	Total quantity of solid waste generated in TPD	0
2.	Total quantity of biodegradable waste in TPD	16.174 T
3.	Total quantity of non biodegradable waste in TPD	0.6T
4.	Treatment options for households for biodegradable waste with number and capacity	BIOGAS FOR 89 HOUSEHOLD
5.	Treatment options for establishments from biodegradable waste with number and capacity	
5.	Quantify of biodegradable waste treated	16.174 T
6.	Number of Haritha Karma sena members	38
7.	Any other agency exists, if so whether it is taking waste to places having board's consent and documentation on the quantification of waste treated and on the place of disposal available with local body	
8.	Quantity of non biodegradable waste collected	0.6 T
9.	Door to door collection in households	8087
10.	Door to door collection in establishments	705
11.	Number of MCF	1
12.	Number of MRF	1
13.	Number and capacity of aerobins, biobins, biogas plants at source level at households and quantity treated including those provided by owner as well as by local body	1 AEROBIN,89 BIO GAS
14.	Number and capacity of aerobins, biobins, biogas plants at source level at establishments and quantity treated	0
15.	Number and capacity of aerobins, biobins, biogas plants at community level and quantity treated	1AEROBIN
16.	Number and capacity of aerobins, biobins, biogas plants at institutional level and quantity treated	0
17.	Quantify of biodegradable solid waste treated at community level and quantity treated	0
18.	Quantity of biodegradable solid waste treated at institutional level and quantity treated	0
19.	Quantity of biodegradable solid waste treated at centralised level and quantity treated	0
20.	Quantity of chicken waste treated in rendering plants	0
21.	Quantity of sanitary waste treated in common biomedical facility	0
22.	Total quantity of biodegradable waste treated	16.174 T
23.	Total quantity of non biodegradable waste collected and disposed	0.6 T
24.	Total quantity of solid waste treated	0
25.	Gap in treatment	0
26.	Proposed action plan with timeline, funding agency	
27.	Initiatives in construction and demolition wastes, e-waste, battery waste etc.	

4. Regulations

Sl.No.		Fine amount Rs	No. of notices	Details
1.	Fine levied for unauthorised outlet pipes	0	0	
2.	Fine levied for littering			
3.	Fine levied on single use plastic ban	2000	2	
4.	Total fine levied	2000	2	
5.	Notices issued for unauthorised outlet pipes	0	28	
6.	Notices issued for littering			
7.	Notices issued on single use plastic ban			



Kerala State Pollution Control Board, Chairman, Member Secretary,
 Mail: ms.kspcb@gov.in, FAX: 2318153, web: www.keralapcb.com

KERALA STATE POLLUTION CONTROL BOARD

THIRUVANANTHAPURAM

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

PCB/HO/EE1/EKM-DO-1/GEN/09/2020

Date: 24/01/2023

From

The Member Secretary

To

Divisional Railway Manager
 FXR4 + 9PF, Housing Board
 Thycaud
 Thiruvananthapuram- 695014



Sub:- Remediation of Oil contaminated area at Diesel Loco Shed/ Ernakulam- reg.

Ref:- 1) Order dated 02/01/2023 in OA 27/2021.

2) Orders dated 23/08/2022 and 06/01/2023 in OA 147/2022.

3) Letter No. PCB/EKM-DO-1/OA-444/15 dated 20/05/2021 & 13/10/2021.

4) Consent number R20ERRCTO668184 valid upto 31/03/2023.

5) Order dated in OA.141/2014 on railway station.

Sir,

The Hon'ble NGT vide order dated 02/01/2023 in OA.27/2021 directed to report the action taken and progress in the activities to curtail pollution of Vembanad Lake. In OA 147/2022, Hon'ble NGT directed vide order dated 06/01/2023 to take urgent action for preventing pollution of Vembanad Lake. As the Waste Water from Ernakulam South Railway Station, and oil containing waste from the locoshed are contaminating the canals leading to the Vembanad Lake, the matter was brought to the notice of Railways. Board has issued several directions in this regard vide letters cited (3). Further, the integrated Consent to Operate was issued to the Ernakulam Junction Railway station with a condition to construct and commission the Sewage Treatment Plant on or before 20/10/2021. Though the time limit mentioned above has elapsed, the treatment plants is not yet commissioned, thereby violating condition no. 5.10 of the consent issued by the Board vide order cited (4) above. Further though instructions issued for the proper disposal of wastes from locoshed, pollution still continues due to the activities of locoshed.

Since the matter needs urgent attention, kindly intervene and take urgent necessary steps to resolve the issue. You are also requested to report the actions taken at the earliest, as the Action Taken Report is to be submitted before the Hon'ble NGT.

Yours faithfully,

S. Kumar

MEMBER SECRETARY

Copy to:

O/C

1. The Chief Environmental Engineer
Regional Office,
Ernakulam
2. Environmental Engineer
District Office-1,
Ernakulam

Report of the Awareness Programme held on 21/01/2023 at Kerala State Pollution Control Board, Regional Office, Ernakulam in connection with OA no.27 of 2021 as per the Order of Hon'ble National Green Tribunal dated 02.01.2023

The Awareness programme commenced at 11.00 A.M at the auditorium and training centre, Regional Office, Kerala State Pollution Control Board, Ernakulam. Former Judicial Member, National Green Tribunal (SZ) Justice. K. Ramakrishnan was the chief guest for the programme. The Chairman, Kerala State Pollution Control Board, the Member Secretary, Kerala State Pollution Control Board and the Additional Secretary, Environment Department, Government of Kerala were present. Officials from Kerala State Pollution Control Board, Kerala Water Authority(KWA) Sewerage circle, Irrigation Department, Regional Joint Director Of Urban Affairs, Ernakulam, Harithakeralam Mission, SuchitwaMission, Greater Cochin Development Authority (GCDA), Kochi Municipal Corporation, Kochi Metro Rail Limited (KMRL), Kalamassery Municipality and other officers concerned were present to provide their valuable inputs. The programme was attended by representatives from Kerala Hotel & Restaurant Association (KHRA), Residents Associations Apex Council and representatives of the Establishments/Residential apartments along the bank of the Perandoor & Edappally canal. Attendance sheets of the participants are attached as **Annexure-1.**

Sri. Baburajan P K, Chief Environmental Engineer, KSPCB, Regional Office, Ernakulam welcomed all the participants to the meeting and gave brief introduction about the origin of the Original Application no.27 of 2021. He conveyed that the above original application was taken on its motion "Suomotu" based on a Newspaper report published in the Hindu E-paper Edition dated 28.01.2021 under the caption Faecal Contamination high in Perandoor, Edappally canals". Hon'ble NGT through its order dated 05.02.2021 constituted a Joint committee towards the effective implementation of different regulatory mechanisms. He also informed that Hon'ble NGT through its latest order dated 02.01.2023 made some comments which are as follows "*We regret to state that even after almost 23 months, no concrete steps have been taken and the action that are so far taken by the respective authorities are going only at a snail's pace.*"

He added that NGT consider this as a serious issue and that NGT may take drastic measures against the violators. Also the Hon'ble NGT has directed to conduct an awareness programme in this matter

and hence this programme was arranged to discuss the measures to be taken to avoid the pollution of Perandoor & Edappally canals.

Sri. Pradeep Kumar A.B., Chairman, Kerala State Pollution Control Board, explained about the importance of conducting the awareness programme. He added that even though the Board has taken several steps to comply with various directions given by the NGT, but not yet reached in a permanent solution. Some of the Establishments near the bank of the Perandoor & Edappally canal operating without proper treatment facility and discharging waste water directly to the canal. NGT may take strict action against the violators. He informed that this programme is mainly arranged to provide an awareness to those persons about the management of sewage and other waste water in compliance with the environmental laws.

He added the following points:

- Before purchasing a new flat the buyer should check whether all the clearances are obtained from statutory authorities.
- Coliform level is high in Edappally and Perandoor canal and this will lead to the occurrence of various diseases. To avoid this situation waste generated should be disposed in compliance with the environmental laws.
- Board issued several directions/notice to the Establishments/Residential Apartments operating without proper treatment facility and discharging waste water directly to the Perandoor & Edappally canal. But the response is very poor and Board will be forced to initiate legal actions against the violators.
- Kochi Metro Rail Limited (KMRL) have been entrusted the work of Integrated Urban Regeneration and Water Transport System (IURWTS) in Kochi by the Government of Kerala. The proposed project envisages the rejuvenation of the 5 canals and installation of 4 STPs. The major aim of the project is to regenerate the urban area in and around the canals. But this is a time consuming project. Hence there is need to arrange temporary measures to prevent further contamination of water bodies.
- As a temporary measure, he asked about the possibility of transportation of sewage/waste water through containers to the existing treatment plants that are not operating at full capacity under Kerala Water Authority/GCDA.

He also informed that a meeting will be conducted after the awareness program with the officials to chart out the action plans for O.A. 27/2021

Justice. K. Ramakrishnan, Retired Judicial Member, National Green Tribunal (SZ) gave key note address in which he briefly explained about the importance of waste management system and duties and responsibilities of waste generators. He opined that the person who is generating waste should dispose it in a scientific manner and it is the responsibility of public to protect the environment.

He added the following points:

- The effluent flowing through the outlets of establishments into Edappally & Perandoor canal ultimately reaches to the various canals and this will lead to the contamination of water bodies.
- Local bodies should take initiative to collect the waste including biodegradable waste from each and every house.
- Secretaries of Association of residential apartment must ensure that the apartments are functioning in compliance with the environmental laws, having proper STP and consent to operate of the Board.
- Residence associations have their own responsibility to implement the waste management in an effective manner.
- Local Self Government Department shall conduct the Gramasabha meeting and problems faced by public related to waste management should be discussed in the meeting.
- Importance of protecting environment and Importance of rain water harvesting.

As part of protecting the environment, the Board should take actions to close down the Establishments/Units that are operating without complying Environmental laws and without having proper treatment facility.

He also included the following points regarding the effective utilization of waste materials.

- Water hyacinth found in the water bodies can be used to make various products
- Plastic waste can be recycled and reused

- Certain percentage of compost from the biodegradable wastes of households can be used as manure. Local bodies have the responsibility to supervise this.

The Chairman, Kerala State Pollution Control Board requested the participants to share the various problems faced by them for providing proper waste management and complying with the statutes

- Sri.Rangadasa Prabhu, President, Ernakulam District Residents Associations Apex Council (EDRAAC) informed that, environment should be protected and for this education program is needed and Apex council will initiate actions for the same, and requested support from the Kerala State Pollution Control Board .

- One of the flat representative enquired that, if there are any government consultancy for STP management as they are facing many difficulties while approaching the private agencies.

- Sri,Jeevan, Association president, Dream Flower Bonita apartment informed that since they have space limitations and not having enough space for gardening they cannot reuse the treated water.

Justice. K. Ramakrishnan suggested that gardening can be done effectively by using commercially available grow bags, and planting grass around the ground. Effective methods like vertical gardens also can be used.

- Sri.Saju, flat representative, informed that their apartment was built in 1997. Since it is an old complex space limitations are there and it is very difficult to maintain the clearance as per PCB norms. He also suggested that common STP should be constructed at all possible places and increase the capacity of Elamkulam STP and he complained that there are many houses on the bank of Perandoor canal discharging waste water directly to the canal, but the PCB taking action against the flats only.

Justice K. Ramakrishnan replied that as the quantity of waste generation from the flats is more compared to houses and hence waste water from flats should be addressed.

- Sri.Kumar, flat representative complained that daily garbage collection is not often done and garbage is collected in weekly only. He opined that the Corporation is responsible for this. Also he suggested that awareness program should be given to the individual houses through the councilors.

- Sri.Ajith Kumar, Secretary, Ernakulam District Residents Associations Apex Council

(EDRAAC), informed that lack of coordination between various departments will affect the successful implementation of projects. He opined that, local bodies should issue licenses to the waste collection vehicles to avoid the dumping of waste near the road side/public areas etc.

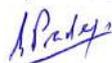
- The Executive Engineer, Kerala Water Authority reported that they are providing assistance to all the Municipalities and Corporations who are cooperating with the Water Authority for the implementation of underground sewage system projects and she informed that a master plan has been prepared for Kochi Corporation and currently a 5MLD treatment plant is operational at Elamkulam. DPR for pipe network is prepared. Another 5MLD proposal has been submitted under Amrut Scheme. She informed that DPR preparation of STP projects of KMRL in Elamkulam, Perandoor, and Muttar is completed.

After the discussion former Justice. K. Ramakrishnan put forward the following suggestions.

- Underground sewage system must be implemented and it should be connected to all the individual houses and sewage charge should be collected from each house.
- Methods like Phytoremediation can be utilized to clean the drain.

Dr. Sheela A.M., Member Secretary, Kerala State Pollution Control Board concluded the programme requesting the cooperation of all the stakeholders for the protection of water bodies. As Kerala Water Authority reported that around 3.5MLD of wastewater collected through pipelines are discharged to the newly installed 5MLD STP at Elamkulam and GCDA reported under utilization of 750 kLD plant at Kaloor, action is to be taken by Kochi Corporation, Kerala Water Authority and GCDA for the diversion of waste water from old flats which are having space limitation. The Member Secretary, KSPCB requested the Kerala Water Authority and GCDA officials to report the possibility of treatment of wastewater in the underutilized sewage treatment plants. Kochi Corporation was also requested to implement the licensing of unregistered tankers. Online tracking system from wastewater tankers as done in Thiruvananthapuram has to be provided for proper tracking of registered vehicles, in order to avoid unauthorized discharge of waste water to the water bodies. She thanked all the officials from various stakeholder departments and gathered representatives of various residential apartments/establishments.

The meeting concluded by 1.00pm.


CHAIRMAN

**Minutes of the Meeting with Stakeholder Departments conducted on
21.01.2023 in connection with O. A 27/2021**

A meeting with the officials of various stakeholder departments to discuss about the follow up actions taken with respect to the NGT matter, O. A. no. 27/2021 was conducted on 21/01/2023 by the Chairman, Kerala State Pollution Control Board at the Regional office of the Board at Kochi. The Member Secretary of the Board also was present. The details of officials attended the meeting is attached as **Annexure-1**.

Meeting started at 1.00PM. The Chairman welcomed all the officials to the meeting. The Member Secretary gave an introduction about the O.A no.27/2021 and reminded that the next hearing of O.A 27/2021 is posted on 02.02.2023. She informed that on 24.01.2023, a meeting has been scheduled by the Chief Secretary in this regard. The Chairman informed that most of the establishments located along the banks of the canals or the banks of the drain leading to the canals established before 2006 are operating with conventional septic tank and soak pit facilities for sewage and improper sullage treatment facilities which in turn affect the water quality of the canals. Also, from the discussions held with the stakeholders attended for the awareness program conducted on the same day, it is understood that, most of the above establishments are facing land constraints to establish a proper treatment facility. Hence the proper solution for protection of canals/ water bodies is to establish common treatment facilities such as Common sewage/ Septage treatment plant. Chairman asked the departments concerned to explain the details of current Sewage treatment facility, its utilization capacity and possibility of co-treatment. The Member Secretary stressed the need for full utilization of underutilized new STP of 5 MLD of Kerala Water Authority (5MLD) and STP of GCDA (750KLD) by diverting waste water from establishments and flats through tankers. Also stressed the need for the licensing of unregistered tankers and for providing online tracking mechanism.

The Executive Engineer, Kerala Water Authority informed that currently a 5MLD treatment plant is operational at Elamkulam. Now the operational capacity is 3.25MLD and waiting for the Administrative Sanction for the networking for balance 1.75MLD and now there is no facility for co-treatment in this 5MLD facility. Also, they reported that, another 5MLD STP is proposed under AMRUTH Scheme in which the co-treatment is proposed.

The Assistant Executive Engineer, GCDA informed that, GCDA is having 2 STPs, one at Marine Drive and another at Jawahar Lal Nehru Stadium (JLNS). The capacity of the STP at Marine drive is fully utilised. The capacity of the STP at JLNS is 750 KLD but only about 20KLD is reaching the plant daily. For utilising the surplus capacity, GCDA has signed MoU with 2 agencies for treating their sewage in the STP and based on that 30KLD waste water is now reaching the plant daily. The Assistant Executive Engineer, GCDA informed that more agencies are willing to utilise this treatment facility.

The Additional Secretary, Kochi Corporation informed that, Kochi Corporation is having 2 Faecal Sludge Treatment Plants of 100KLD capacity each, one at Brahmapuram

and other at Willington Island. Actions were taken to register the vehicles which transport Fecal sludge. The proposal for the same was submitted and health committee has approved the same and waiting for the Council approval. Also, as part of urban agglomeration development, a 2MLD Sewage Treatment Plant at Brahmapuram is proposed. The technical committee of Suchitwa Mission has visited the site and approved only 1MLD plant at Brahmapuram.

The officials from KMRL reported that, the DPRs with the approval of IIT Madras for the implementation of four STPs as a part of IUWRTS are put up for the approval for KIIFB and Government. He informed that the implementation of the project will take a minimum of 3 years. Regarding the desilting and cleaning of the Canals, KIIFB suggestion was that the same will be effective only after the installation of the STP. They also pointed out that the Kozhichira bund is the breeding point of water hyacinth in all the water bodies. The Irrigation department has to take necessary action in this matter.

After the discussion, the Chairman, KSPCB instructed the Kochi Corporation to convene joint committee meeting immediately to discuss about the actions taken so far by each department in O.A 27/2021 and file joint committee report to the tribunal before the next date of hearing. He also insisted all the departments to submit a detailed report including the action taken by them, short term and long-term measure proposed to adopt as a mitigation measure for the safe disposal of sewage and septage in the city.

The meeting concluded by 1.35 pm.


CHAIRMAN

Annexure-1

Attendance sheet of officials attended the Meeting in connection with O.A.no. 27
of 2021 held on 21.01.2023

SL.No.	Name and Designation
1	Sri. Pradeep Kumar A.B, Chairman, Kerala State Pollution Control Board
2	Smt. Sheela A.M., Member Secretary, Kerala State Pollution Control Board
3	Smt.Sharmila.C,Additional Secretary, Environment Department, Government of Kerala
4	Sri.Shibu V.P.,Additional Secretary, Kochi Municipal Corporation
5	Smt.Sreelakshmi, Environmental Engineer, District Office – 1, Ernakulam, KSPCB
6	Smt.Remadevi.S, Executive Engineer, Head Office, Kerala State Electricity Board
7	Smt.ShahanaM.A, Assistant Environmental Engineer, Regional Office, Ernakulam, KSPCB
8	Smt.S.Anitha, Sr.Superintendent, Regional Joint Director of Urban Affairs
9	Dr.M.P.Ramnavas, Director (Projects), Kochi Metro Rail Ltd
10	Sri. AjithA,General Manager (Designs), Kochi Metro Rail Ltd
11	Kumari Sindhu. S., Assistant Executive Engineer, Irrigation Subdivision, Ernakulam
12	Smt. Remya. R Assistant Executive Engineer, Minor Irrigation Subdivision, Ernakulam
13	Sri. Mathew George, Junior Health Inspector, Kalamassery Municipality
14	Sri. Sujatha A., Executive Engineer, Sewerage circle, Kochi, Kerala Water Authority
15	Smt.Sumadevi D Nair, Assistant Executive Engineer, Sewerage circle, Kochi, KWA
16	Smt.Renjini.S., District Co-ordinator, Nava Keralam Karmapadhathi
17	Smt.Usha S.S., Assistant Executive Engineer, GCDA
18	Sri. Pradeep Kumar J, MET, Cochin shipyard
19	Sri. Unnikrishnan Elayath, Assistant Engineer, PPD & Sewerage Circle, Kochi
20	Smt. Anooja P.A., Environmental Engineer, Kochi Municipal Corporation
21	Sri.Sujeer TT, Technical Section, Suchitwa Mission
22	Smt.Jeenu Mary Victor, Assistant Engineer-1, Regional Office, Ernakulam, KSPCB
23	Kumari, Anagha,Assistant Engineer-2, Regional Office, Ernakulam, KSPCB
24	Smt.Aswathy K.V.,Assistant Engineer-3, Regional Office, Ernakulam, KSPCB



KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram - 695 004

പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB /HO/EE3/O.A No.27/2021(SZ)/2021

Date: 31/01/2023

From

The Member Secretary

To

1. The Managing Director
Kerala Water Authority
JalaBhavan,Nandavanam,
Vellayambalam
Thiruvananthapuram
2. The Secretary,
Kochi Corporation.

Sub:- Full utilization of 5MLD CSTP at Elamkulam-reg.

Ref:- 1.Letter No. PCB/HO/EE3/NGT/673/2018/VOL-IX/24/2021 dated
20/10/2022

2.Report of awareness programme on 21/01/2023 in connection with
O A27/2021

3. Minutes of the meeting held on 21/01/2023 in connection with
OA 27/2021

4. Order dated 02/01/2023 in OA 27/2021

Sir,

Attention is invited to the references. In the meeting held on 21/01/2023 it was suggested to fully utilize the underutilized new 5MLD STP at Elamkulam by collecting wastewater through tankers as laying of sewerline network for 1.75 MLD is under DPR stage and also there is space limitations in old high rise buildings for providing STP. The list of establishments having no STP is enclosed. The efficiency of existing old sewerline may also be reported.Please take urgent action and report the action plan with timeline urgently.

Yours faithfully,

MEMBER SECRETARY

- Copy to :1) The Chief Environmental Engineer
Regional Office, Ernakulam
2) The Environmental Engineer
DO-1, Ernakulam

} For follow up



General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151
E-mail: ms.kspcb@gov.in FAX: 0471 - 2318134, 2318152 web: www.kspcb.kerala.gov.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/EE3/O.A No.27/2021(SZ)/2021

Date: 31 /01/2023

From

The Member Secretary

To

1. The Secretary,
Kochi Corporation.
2. The Secretary,
Greater Cochin Development Authority (GCDA)
Kadavanthra P. O.
Ernakulam District-682020

Sub:- Full utilization of 750KLD STP of GCDA at Kaloor stadium-reg.

Ref:- 1.Minutes of the meeting of stakeholders departments held on 21/01/2023 in connection with OA 27/2021

2.Report of awareness programme on 21/01/2023 in connection with O A27/2021

3.Order dated 02/01/2023 in OA 27/2021

Sir,

Attention is invited to the references. In the meeting held on 21/01/2023 it was suggested to fully utilize the underutilized 750KLD STP at Kaloor by collecting waste water through tankers and it is reported that actions are already initiated in this regard. You are requested to report the action plan with timeline urgently.

Yours faithfully,

MEMBER SECRETARY

- Copy to :1) The Chief Environmental Engineer
Regional Office, Ernakulam
2) The Environmental Engineer
DO-1, Ernakulam



KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram - 695 004

പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB /HO/EE3/O.A No.27/2021(SZ)/2021

Date 31/01/2023

From

The Member Secretary

To

The Secretary,
Kochi Corporation.

Sub:- Full utilization of CSTP -reg.

Ref:- 1.Order dated 02/01/2023 in OA 27/2021

2.Minutes of the meeting held on 21/01/2023 in connection with
OA 27/2021

Sir,

Attention is invited to the references. As per the meeting held on 21/01/2023 it is understood that actions have been initiated for licensing unregistered tankers and for implementation of online tracking system. You are requested to report the status of licensing of unregistered tankers and implementation of online tracking system for wastewater tankers urgently.

Yours faithfully,

MEMBER SECRETARY

- Copy to :1) The Chief Environmental Engineer
Regional Office, Ernakulam
2) The Environmental Engineer
DO-1, Ernakulam



☎: General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151
E-mail: ms.kspcb@gov.in FAX: 0471 - 2318134, 2318152 web: www.kspcbkerala.gov.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/EE3/OA No.27/2021(SZ)/2021

Date: 31/01/2023

From

URGENT

The Member Secretary

To

The Secretary
Ministry of Jalashakti
Department of Water Resources
River Development and Ganga Rejuvenation

Sub:- Environment Department –Proposals for pollution abatement of selected river stretches -reg.

Ref :-1) D O no. J-27011/1/2022-NRCD-II dated 01.06.2022 from

Ministry of Jalashakti

2) Letter no. A3/140/2022-ENVT from Environment Department
dated 28.06.2022

3) Letter no. KMRL/IURWTS/1/11-2023 dated 31/01/23

Sir,

Kind attention is invited to the letter under reference (1), wherein Govt. of Kerala was asked to submit appropriate proposals for pollution abatement of selected river stretches. Accordingly Environment department asked the Board to submit appropriate proposals for pollution abatement of selected river stretches as annexed, directly to Central Government under intimation. Periyar river comes under priority V polluted stretch. Kochi Metro Rail Limited prepared DPRs duly vetted by CUBE-IIT Chennai for STPs and sewer line at Muttar, Perandoor, Vennala, Elamkulam for an amount of Rs.324.28 Crore, Rs.232.68

Crore, RS 499.26 Crore , Rs.367.63 Crore respectively. The said DPRs are forwarded herewith for your kind consideration for getting funding under NRCD.

Yours faithfully,



MEMBER SECRETARY

- Copy to : 1) The Additional Chief Secretary
Environment Department (with C/L)
- 2) Environment Monitoring Cell
 - 3) The General Manger
Kochi Metro Rail Limited
 - 4) The Chief Environmental Engineer
Regional Office ,Ernakulam
 - 5) The Environmental Engineer
DO-1,Ernakulam