

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN BENCH, CHENNAI
ORIGINAL APPLICATION NO.246 of 2024(SZ)**

Suo Moto matter in respect of news item appearing in "The Times of India" dated 06.05.2024 titled "Zinc, lead... fish in Kochi estuary are „heavy, daily intake risky”.which has been transferred to Southern bench and re numbered as Application No.246 of 2024 (SZ).

: Applicants

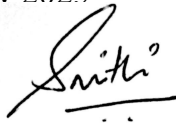
Versus

**National Centre for Coastal Research,
Through its Director, Chennai and Ors.**

: Respondents

**PRELIMINARY REPORT FILED BY THE ENVIRONMENTAL
ENGINEER, KERALA STATE POLLUTION CONTROL BOARD,
DISTRICT OFFICE-1, ERNAKULAM FOR AND ON BEHALF OF
THE 3rd RESPONDENT.**

Dated this the 2nd day of January 2025



Adv. Rema Smrithi, Advocate

ADDITIONAL STANDING COUNSEL FOR THE RESPONDENT 3

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INDEX

Sl. No.	Description	Page
1.	Preliminary report Filed by the Environmental Engineer, Kerala State Pollution Control Board, District Office-1, Ernakulam for and on behalf of the 3 rd Respondent	1-5

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DISTRICT OFFICE-1, ERNAKULAM FOR AND ON BEHALF OF
THE 3rd RESPONDENT.**

I, Sreelakshmy P.B , aged 42 years, W/o Sajeev Kumar J.S, now working as the Environmental Engineer, Kerala State Pollution Control Board, District Office-1, Ernakulam. I am competent to and duly authorized to represent the 3rd Respondent in OA 246/2024. I know the facts and circumstances of the case. The factual submissions made here under are true and correct to the best of my knowledge, information and




Sreelakshmy P.B
Environmental Engineer
KSPCB, District Office-1,Ernakulam

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 the Hon'ble Tribunal in its own motion registered "Suo Moto" on basis of the news item titled "Zinc, lead... fish in Kochi estuary are „heavy, daily intake risk" appearing in The Times of India dated 06.05.2024. The article is regarding the findings of a study conducted by Cochin University of Science and Technology (CUSAT), Kochi , Kerala. The study is conducted by a National Grant –in-Aid network project, implemented by the National Center for Coastal Research (NCCR) under the Ministry of Earth Sciences (MoES), Government of India and executed by the Department of Marine Biology, Microbiology and Biochemistry at the school of Marine Sciences , CUSAT. The study is being conducted with an objective to develop draft seawater quality criteria/standards for heavy metals discharged into the Cochin coastal waters. The area of study is mainly concentrated in the Cochin estuary covering the northern, southern and central zones of the estuary. In their study, samples of water , sediments, species like fish, shellfish etc were collected from the study area for analysis verifying the heavy metal elements and for assessing contamination.
2. It is respectfully submitted that the major rivers such as Periyar, Chitrapuzha, Kadambayar, joins the Kochi Kayal and ultimately joins the seamouth at Vypin. Kochi city is a major township located in and around the Kochi mainland. Among the several groups of small islands that the Kochi Lake forms home are, Vypin, Mulavukad, Vallarpadam, Willington Island etc. The major townships present are Maradu Municipality, Kochi Corporation, many panchayats.
3. It is respectfully submitted that the presence of heavy metals in the environment is mainly due to natural and anthropogenic sources. Anthropogenic reasons include urban domestic waste contributed from liquid and solid waste, land runoff and industrial activities. Action plan has been already prepared and being



implemented in these areas under different cases of the Hon'ble NGT in OA 147/2022(Ashtamudi –Vembanad Koel wetlands), OA 673/2018 (PB) (Polluted river stretches); OA 395/2013(Periyar river); OA 27/2021(Perandoor canal) . Based on continuous efforts taken in control of pollution of water bodies related to OA 673/2018, the water quality of river Kadambrayar (Manckakadavu to Brahmapuram) has improved and the river stretch which was in Priority IV during 2018 has moved to a lesser Priority V in 2022.

4. It is respectfully submitted that Board had taken action to prevent the pollution of the Vembanad lake. The Hon'ble NGT in OA 147/2022 related to case rejuvenation of Vembanad lake had issued stringent directions to the establishments. This respondent had initiated action to identify the pollution sources and conducted inspection in various establishments situated at the bank of Vembanad lake and also identified various drains joining the lake. Board have been analysing the water quality as part of the National Water Monitoring Programme (NWMP) across the Kochi Kayal. This respondent had conducted several inspections in the apartments /hotel/commercial complexes, seafood processing units etc near the bank of Kochi Kayal(Vembanad Lake). The Board is conducting frequent inspections for ensuring that no waste water is being discharged to the waterbody. Show cause notices were issued to the violators. Based on the instructions issued by the Board, many apartments and establishments have initiated the installation of Sewage Treatment Plants and started to apply for Board's Consent. Major industrial activities present in the Kochi kayal are Cochin Shipyard, Cochin Port etc. The Board have also taken action to bring the Cochin Port under Board's consent administration. The Board had issued notices to rectify the issues noted at Cochin Shipyard regarding oil contamination and effluent disposal. Directions were also issued to Ernakulam North Railway station, Marshelling yard, and Diesel Locoshed. Remediation work was done by the Diesel Locoshed. The major industrial belt present is in the Eloor-Edayar stretch along the Periyar river. Environmental Surveillance Centre of the Board functioning round o'clock in the area is monitoring the water



quality of Periyar as well as industrial monitoring in the industrial area. Action is taken in the case of noncompliance by industrial units. 5MLD common sewage treatment plant of Kerala Water Authority started functioning in Ernakulam at Elamkulam and action is being taken for recommissioning of septage also. Septage treatment plants of 100 KLD are also functioning at Brahmapuram and Wellington islands. Detailed project reports of four sewage treatment plants were prepared by Kochi Metro Limited and action is also being taken for its implementation. NEERI, Nagpur is conducting feasibility study of treatment system in the Perandoor –Edappally canals of Kochi area.

5. The Board is monitoring monthly water quality of the 44 rivers, fresh water lakes and estuaries in the state including in this study area. Additionally, heavy metals and pesticides in water are also assessed once in a year. As per the order of the Hon'ble NGT in this case, the Board had collected water and sediments samples on 28.12.2024 from different zones of CUSAT study areas in Cochin estuary so as to analyse the quality of water sample and to assess the presence of heavy metal. The analysis report of the samples collected are awaited. It is humbly submitted that Board will file a detailed report on the matter.

6. It is the respectfully submitted that the Board will be arranging a detailed discussion with CUSAT in connection with its study evaluating aspects such as location, standards and probable pollution sources and all other aspects concerned. The detailed report will be submitted on the basis of the detailed discussions, analysis reports of the Board and on the action plans developed and implemented on the basis of orders of the Hon'ble National Green Tribunal in this area.





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Environmental Engineer
KSPCB, District Office-1, Ernakulam

7. It is humbly requested for a time of two months may kindly be granted for the submission of detailed report by the Board covering the entire aspects on this matter.

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

Dated this the 2nd day of January 2025




Environmental Engineer,
Kerala State Pollution Control Board,
District Office-1, Ernakulam

Sreelakshmy P.B
Environmental Engineer
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