

**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 Principal Secretary to  
Govt of Kerala, Environment**

**Department & Ors. : Respondent(s)**

**UPDATED STATUS REPORT FILED BY THE CHIEF ENVIRONMENTAL  
ENGINEER, REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF  
OF THE 4<sup>th</sup> RESPONDENT AS PER THE ORDER DATED 15.05.2023 IN  
THE ABOVE CASE**

Dated this the 14th day of July 2023



**Adv. Rema Smrithi,**

**ADDITIONAL STANDING COUNSEL FOR THE 4th RESPONDENT**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL**

**SOUTHERN BENCH, CHENNAI**

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Department & Ors. : Respondent(s)**

**VOLUME - I**

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Dated this the 14th day of July 2023

**Adv. Rema Smrithi,**

**ADDITIONAL STANDING COUNSEL FOR THE 4th RESPONDENT**

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
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**UPDATED STATUS REPORT FILED BY THE CHIEF ENVIRONMENTAL  
ENGINEER, REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF OF  
THE 4<sup>th</sup> RESPONDENT**

I, Baburajan P K , aged 53 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 4<sup>th</sup> Respondent in OA 27 of 2021. 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 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.



  
**BABURAJAN P.K.**  
**Chief Environmental Engineer**

1. It is respectfully submitted that Board had conducted inspection at establishments near Edapally thodu, Thevara –Perandoor canal which include residential apartment, commercial buildings, hotels and restaurants. Notices were issued to 200 units. Out of 200 establishments, 95units had submitted reply to the Board. Some apartments had submitted detailed proposal for installation of STP. Board had issued directions to these apartments for installing STP within three months. Board will monitor the status of these units and initiate stringent action against the establishments who have not replied to the notice and not complied with the directions.
2. It is submitted that as a temporary measure, Kerala Water Authority (KWA) and Greater Cochin Development Authority (GCDA) were instructed to take urgent action to divert untreated waste water from nearby establishment/ apartments to CSTP at Elamkulam/STP of GCDA for its full utilization. Co-treatment facility was provided in CSTP at Elamkulam by converting collection tank of old STP into dilution tank. The trial run was conducted from 23.05.2023 to 29.05.2023. During trial run, the septage was diluted in dilution tank and then charged to CSTP. After charging the septage into CSTP, Board collected samples from different stages of treatment system. The analysis reports shows that even after charging the septage, there is no noticeable change in the organic loading rate of treatment units. KWA reported that the CSTP is designed for the organic loading rate BOD- 250 mg/lit. During the trial run, BOD rate rise only to 30.2 mg/lit from 17.8 mg/lit. As per the results, the treatment of sewage and septage in the CSTP transported through tanker lorries seems to be feasible. Board had informed the matter to KWA. Further decision on utilizing the CSTP is to be taken by KWA. KWA was already addressed for reporting the quantity of septage treated in the treatment plant in May 2023 and June 2023. The matter will be followed up by the Board.



  
**BABURAJAN P.K.**  
**Chief Environmental Engineer**

3. It was already submitted to this Hon'ble Tribunal that the Railway station at Ernakulam Junction was identified as one of the major contributor of pollution in Perandoor canal. Though Integrated Consent to Operate was issued to Railway station at Ernakulam Junction with validity up to 31/03/2023 with a condition to set up Sewage Treatment Plant, it is not yet provided and also the area behind the loco shed behind the South Railway station is contaminated with oil. Several instructions/ notices had been issued to the Railway from the Board. No action has been initiated for the remediation of oil contaminated area till date by the railway authorities. Hence show cause notices were issued to Ernakulam junction railway station and Diesel Loco shed , Ernakulam on 27/06/2023 for not levying of environmental compensation for non-installation of STP and for lapses in remediation of oil contaminated area respectively .Copies of show cause notices issued to the railway station and diesel locoshed are produced herewith and marked as **Annexure 1** and **Annexure 2** respectively.
4. It is humbly submitted that in continuation to the online presentation done by NEERI with regards to Phytoid Wastewater Treatment Technology on 13.03.2023 for officials of local bodies, Suchitwa mission and the Board in the subject matter, NEERI was addressed to depute experts for field visit to understand the location and feasibility of this technology in Kerala condition. Accordingly two scientists namely Er. Pravin Manekar and Dr. S. Bhuvanesh were deputed to conduct field visit from 11/05/2023 to 13/05/2023. Site visit was conducted by the NEERI scientists along with officials of KWA, Suchitwa Mission, LSGIs and Board. In the report CSIR-NEERI informed that for suggesting suitable/appropriate technology depending on the type of waste water, detailed feasibility study is required and detailed project proposal will be submitted after getting confirmation from the Board. On 22.06.2023, NEERI was addressed to submit a report with specific recommendations regarding suitable treatment technology applicable to different sites in order to implement the same



  
**BABURAJAN P.K.**  
**Chief Environmental Engineer**

as a model. Board has issued a letter to NEERI on 04/07/2023 for submitting project proposal with scope of work and financial budget urgently. The matter is being followed up.

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

Dated this the 14<sup>th</sup> day of July 2023



**Chief Environmental Engineer**  
**BABURAJAN P.K.**  
**Chief Environmental Engineer**

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**VOLUME – II**

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Dated this the 14th day of July 2023

**Adv. Rema Smrithi,**

**ADDITIONAL STANDING COUNSEL FOR THE 4th RESPONDENT**

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☎: General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151  
e-mail: [chn.kspcb@gov.in](mailto:chn.kspcb@gov.in); [ms.kspcb@gov.in](mailto:ms.kspcb@gov.in) FAX: 2318152 web: [kspcb.kerala.gov.in](http://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/EE1/EKM-DO-1/GEN/09/2020

Date: 27 /06/2023

**SHOW CAUSE NOTICE**



Sub: Levying of Environmental Compensation – Non Compliance of consent conditions – Non Installation of STP in Ernakulam Junction Railway Station - Reg.

- Ref: 1) Consent No.PCB/EKM/DO-1/R20ERR241639/20dated:10.03.2021 valid up to 15.11.2023.
- 2) PCB/EKM/DO-1/GEN-07/2021 Consent Revoke Intention Notice Dated-21/11/2022.

WHEREAS, the Government of Kerala have constituted the Kerala State Pollution Control Board (hereinafter referred to as the Board) as per Section 4 of the Water (Prevention and Control of Pollution) Act 1974;

WHEREAS, the Board is the enforcing authority of the Environmental legislations, under Water (Prevention & Control of Pollution) Act, 1974 Air (Prevention & Control of Pollution) Act 1981 and Environmental Protection Act, 1986in the State;

WHEREAS, as per the order of Hon'ble NGT in OA No. 141/2014 dated 18.08.2020 all major railway stations are required to obtain consents under Air (Prevention & Control of Pollution) Act 1981 and Water (Prevention & Control of Pollution) Act, 1974 and authorization under Hazardous waste (Management & Trans boundary movement) Rules, 2016 from concerned SPCBs/PCCs in accordance with directions issued by CPCB on the matter;

Handwritten notes: AE 2, 4/7/23, 3367, 4/7/23

WHEREAS M/s. Ernakulam Junction Railway Station, Ernakulam - 682011, comes under the purview of water (Prevention & Control of Pollution) Act 1974, Air (Prevention & Control of Pollution) Act 1981 and Environment (Protection) Act, 1986 and is bound to comply with the provisions of the said acts;

WHEREAS as per the reference (1) above, Board had issued Consent to Operate for the railway station with specific conditions;

WHEREAS as per condition number 5.10 of Board's consent, Sewage Treatment Plant as per proposal shall be constructed and commissioned within 4 months;

WHEREAS you have not constructed the Sewage Treatment Plant till date and not reported the compliance of Board's directions till date;

WHEREAS as several directions were issued to you to report the present status of STP construction;

WHEREAS Consent Revoke Intention Notice was issued to you for the non-compliance vide letter cited (2);

WHEREAS the reply submitted by you to the notice is not satisfactory;

WHEREAS the disposal of untreated sewage is in violation of section 24 of Water (Prevention & Control of Pollution) Act 1974;

WHEREAS the Environmental Engineer, District Office-1, Ernakulam has assessed the environmental compensation as per the CPCB guidelines as mentioned below, and reported the same vide letter dated 12.05.2023;

$$EC = PI \times N \times R \times S \times LF$$

Where PI Pollution index of industrial sector = 80

N = Number of days from the date on which violation is observed

(04/01/2021- 09/05/23) = 855 days

R = A factor in Rupees for EC = 250

S = Factor for scale of operation = 0.5

LF = Location factor = 1.25

EC =  $80 \times 855 \times 250 \times 0.5 \times 1.25 = \text{Rs. } 10,687,500/-$

NOW THEREFORE in exercise of the powers vested under Section 5 of Environment (Protection) Act, 1986, you are hereby directed to show cause, if any, **within 15 days of receipt** of this notice as to why the unit shall not be directed to remit an Environmental Compensation of Rs.10,687,500/- (**Rupees One Crore Six Lakhs Eighty Seven Thousand & Five Hundred Only**)

Dated this 27<sup>th</sup> day of June 2023.

**For and on behalf of the  
KERALA STATE POLLUTION CONTROL BOARD**

  
**CHAIRMAN**

To

The Station Manager,  
Ernakulam Junction Railway Station,  
Ernakulam South - 682011

Copy to:-

1. The Chief Environmental Engineer,  
Regional Office, Ernakulam.
2. The Divisional Railway Manager,  
TC 24/466, Gandhi Bhavan Road,  
Housing Board, Thycaud,  
Thiruvananthapuram.

☎: General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151  
e-mail: [chn.kspcb@gov.in](mailto:chn.kspcb@gov.in); [ms.kspcb@gov.in](mailto:ms.kspcb@gov.in) FAX: 2318152 web: [kspcb.kerala.gov.in](http://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/EE1/EKM-DO-1/GEN/09/2020



**SHOW CAUSE NOTICE**

Sub: Levying of Environmental Compensation – Non Compliance of consent conditions – Lapses in remediation of oil contaminated are at Diesel Loco Shed, Southern Railway, Ernakulam – Reg.

- Ref: 1) Consent No.RI5ERRCTOR 799917 dated:03/11/2018.
- 2) Order dated 02/01/2023 in OA 27/2021.
- 3) Order dated 23/08/2022 and 06/01/2023 in OA 147/2022.
- 4) Letter No.PCB/EKM-DO-1/OA-444/15 dated 18/02/2021, 20/05/2021 and 20/12/2022.
- 5) Letter No.PCB/HO/EE1/EKM/DO-1/GEN/09/2020 dated, 24/01/2023.

WHEREAS, THE Government of Kerala have constituted the Kerala State Pollution Control Board (hereinafter referred to as the Board) as per Section 4 of the Water (Prevention and Control of Pollution) Act 1974;

WHEREAS, the Board is the enforcing authority of the Environmental legislations, under Water (Prevention & Control of Pollution) Act, 1974 Air (Prevention & Control of Pollution) Act 1981 and Environmental (Protection) Act, 1986 in the State;

WHEREAS the Diesel Loco Shed of Southern Railway at Ernakulam Junction Railway Station comes under the purview of Water (Prevention & Control of Pollution) Act 1974, Air (Prevention & Control of Pollution) Act 1981 and Environment (Protection) Act, 1986 and is bound to comply with the provisions of the said acts;

AE 2

Handwritten notes: 4/7/23, 3369, 4/7/23

WHEREAS as per the reference (1) above, Board had issued Consent to Operate for the Diesel Loco Shed with specific conditions;

WHEREAS, 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 Edappally – Perandoor canals leading to Vembanad Lake;

WHEREAS, in OA 147/2022, Hon'ble NGT directed vide order dated 06/01/2023 to take urgent action for preventing pollution of Vembanad Lake;

WHEREAS, oil containing waste from the Loco Shed is contaminating the canals leading to the Vembanad Lake;

WHEREAS, the matter was brought to the notice of Railways;

WHEREAS, Board has issued several directions in this regard vide letters cited (4) & (5) above;

WHEREAS, vide letter number PCB/EKM/DO-1/GEN-07/2021 dated 20/01/2021 it was instructed that the contamination can be controlled only if the entire oil contaminated sludge is removed from the site and directed to submit detailed action plan for the remediation work;

WHEREAS, Environmental Engineer, District Office-1, vide letter dated 12.05.2023, informed that the land adjacent to the Loco Shed (water logged area) is contaminated with oil spilled from the operation of Loco Shed;

WHEREAS, it was also reported that oil sludge has been accumulated in the area due to the continuous discharge of oil from Loco Shed since several years:

WHEREAS, the above is in violation to the condition no.5.2 of the Integrated Consent issued to you vide Consent No. PCB/RO-EKM/ICO-4/R1/14, whereby the waste oil generated shall be stored in storage tank and shall be disposed through authorised recyclers;

WHEREAS, this discharged oil contaminates the Mullassery canal which joins with Perandoor canal finally reaching the Vembanad Lake:

WHEREAS, the operation of railway Loco Shed has caused contamination of land and water due to discharge and accumulation of oil which is violation of Hazardous & Other Waste Management Rules, 2016;

WHEREAS, as CPCB has issued specific guidelines for “determination of environmental compensation to be recovered for violation of Hazardous and other wastes (management and trans boundary movement) Rules, 2016;

WHEREAS, as per the guideline, cases where mismanagement of hazardous or other waste may have caused environmental damage and such damages & remediation required, including cost thereof, are difficult to assess comes under “Category B2”.

WHEREAS, under such circumstances, financial penalty and Environmental Compensation both shall be levied;

WHEREAS, the Environmental Engineer, District Office-1, Ernakulam has assessed the Environmental Compensation as per the CPCB guidelines as mentioned under Category B2 and recommended to levy the same vide letter dated 12.05.2023.

## ENVIRONMENTAL COMPENSATION

$$EC \text{ (IN Rs)} = T \times S \times C \times ECF \times Y$$

T = Type of facility factor = 1

S = Scale of operation factor of the facility = 0.5

C = Category of Facility Factor (Red Category) = 1

ECF = Environmental Compensation Factor = 20,00,000/-

Y = No of years of operation of the facility = 5

EC =  $1 \times 0.5 \times 1 \times 20,00,000 \times 5 = \text{Rs. } 50,00,000/-$

WHEREAS, financial penalty required to be imposed and collected from the violators as maximum of Rs.1,00,000/- for violation of each provision stipulated under Hazardous & Other Waste Management Rules, 2016;

WHEREAS, the following violations are reported on the part of railways

- i. Failure in managing the hazardous and other wastes in safe and environmentally sound manner.
- ii. Non initiation of steps, while managing hazardous and other wastes, to contain contamination and prevent accidents and limit their consequences on human beings and the environment.
- iii. Non fulfillment of liability for assessment of contamination, and liability for remediation of contaminated site.

WHEREAS, the financial penalty is calculated as Rs. 3,00,000/- for the above 3 violations;

WHEREAS, the total amount to be levied including Environmental Compensation & final penalty comes to **Rs. 53,00,000/- ( Fifty Three Lakhs Only)**

NOW THEREFORE in exercise of the powers vested under Section 5 of Environment (Protection) Act, 1986, you are hereby directed to show cause, if any, **within 15 days of receipt** of this notice as to why the unit shall not be

directed to remit an Environmental Compensation of Rs. **53,00,000/- (Rupees Fifty Three Lakhs Only)**

Dated this 27<sup>th</sup> day of June 2023.

**For and on behalf of the  
KERALA STATE POLLUTION CONTROL BOARD**



**CHAIRMAN**

To,

The Divisional Mechanical Engineer,  
Divisional Office, Mechanical Branch (DSL)  
Diesel Loco Shed,  
Southern Railway,  
Ernakulam,  
Kochi – 682016.

Copy to:-

1. ✓ The Chief Environmental Engineer,  
Regional Office, Ernakulam.
2. The Divisional Railway Manager,  
TC 24/466, Gandhi Bhavan Road,  
Housing Board, Thycaud,  
Thiruvananthapuram.
3. The Environmental Engineer ,  
District Office-1,  
Ernakulam.