

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE AT CHENNAI.**

ORIGINAL APPLICATION NO.103 OF 2020 (SZ)

Tribunal on its own motion Suo Motu

...Applicant(s)

Vs

**The District Environment Engineer,
The Tamil Nadu Pollution Control Board,
and others.**

...Respondent(s)

INDEX

S.No	Description	Page No.
1.	REPORT FILED ON BEHALF OF THE 1 ST RESPONDENT - TAMIL NADU POLLUTION CONTROL BOARD.	1- 4



**Filed by
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.**

**BEFORE THE NATIONAL GREEN TRIBUNAL,
SOUTHERN ZONE AT CHENNAI
O.A No. 103 of 2020**

Tribunal on its own motion Suo Motu

.....Applicant

-Vs-

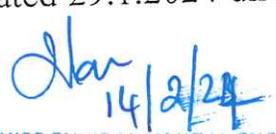
1. The District Environmental Engineer,
Tamilnadu Pollution Control Board,
Siva Tower, Post Box No. 457, No 1/276,
Meyyanur Main Road, Salem-636 004.
2. The District Collector
Chairman, Salaem Local Planning,
Authority Collectorate, Room No :101,
First Floor, Salem-636001.
3. The Superintending Engineer,
TNGEDCO,
Mettur Circle Bhavani-Erode Rd,
Mettur, Tamil Nadu 636401
4. Mr. Selvaraj
P.K.S Building,
KattuvelayuthamMudali street,
Ward 6. Tharamangamal Post,
Salem District-636502

.....Respondents

REPORT FILED ON BEHALF OF THE 1ST RESPONDENT
- TAMIL NADU POLLUTION CONTROL BOARD

I, R.Sarasavani, daughter of Thiru.J.Raghavan, Hindu, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032, do hereby solemnly affirm and sincerely state as follows:

1. I am the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am filing this report on behalf of the ^{1ST} respondents and as such I am well acquainted with the facts of the case from the records and authorized to file this report on behalf of the respondents.
2. It is submitted that the Hon'ble Tribunal in its order dated 29.1.2024 directed that


**JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.**

“to expedite the process, we request the Chairman – Tamil Nadu Pollution Control Board to convene a meeting and at least identify the areas for potential noise reduction. If that is indicated, appropriate expertise may be supplied for them. Hence, we request the Tamil Nadu Pollution Control Board to give an outline of the study.

3. Post the matter on 16.02.2024.

3. It is submitted that the Tamil Nadu Pollution Control Board has awarded a project on "Pilot Plant Study to identify device/technology to mitigate noise pollution generated from the power loom", for a period of twelve months from 03.08.2023 to 02.08.2024 at a total cost of Rs. 18,72,660/-(Rupees Eighteen Lakhs seventy two thousand six hundred and sixty only) and released the first installment in 03.08.2023.
4. It is submitted that as per the order passed by the Hon`ble Tribunal the Tamil Nadu Pollution Control Board has requested the Anna University, Chennai to give an outline of the study. On 9.2.2024, the status report of the study regarding "Pilot Plant Study to identify device/technology to mitigate noise pollution generated from the power loom" was received from the Anna University and the same is enclosed herewith vide Annexure.
5. It is submitted that based on status report of the Study that has been conducted by the Anna University, Chennai, the present status of the terms of reference reported by the Anna University is as follows:
 - a. To review and report the international practices with regard to the noise control measures/device/technology in power looms which are prevalent.

Status: The International and National status on various types of power looms in prevalence and common methods of noise prevention/control measures at the source, transmission path and receiver end have been reviewed.
 - b. To develop contour map of noise level at a representative power loom at day and night with and without noise control measures from the source to every one meter with 1.5 m height from ground level on all four directions.

Status: A Model power loom at Taramanagalm was identified by the TNPCB and a joint visit by the CES (Centre for Environmental Study) Team and


 16/2/24
 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

TNPCB officials was made on 14.12.2023. Subsequently, the ambient noise levels during simultaneous operation of one, two and three machines in the shed were monitored at every 1.5 meter distance in all directions radially at 1.5 m height on 22.12.2023. The background noise levels were also monitored without operation of the power looms. Based on the monitored noise level, noise contour maps have been developed using Arc-GIS

c. To identify suitable technology/device to reduce noise level of power looms and their effect on reduction of noise level in compliance with the noise pollution (Regulation and Control) Rules, 2000.

Status: Target Level of Noise Reduction from the control Measures

Existing Noise level in the shed-100dB (A) (actual)

By Replacement of different materials at source = minimum 15 dB(A)

By Providing sound absorbing enclosure - minimum 25dB(A)

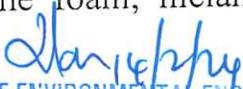
Acoustics of the building minimum of 12 dB(A) (actual)

d. To identify and analyse source correction methods to reduce noise level in power loom plant for the compliance of ambient noise levels with the noise pollution (Regulation and Control) Rules, 2000.

Status: Based on the field observations and review of literature, the following source correction methods have been identified. Material replacement/ material modification for picking mechanism (use of Poly ethylene or poly urethane). gear mechanisms (replacement of spur gears with helical gears, enclosing gears, belt transmission in place of metal gears), conversion of shuttle loom into rapier loom, introduction of steel springs and rubber insertion to the picker. The analysis of identified modifications and their impact on noise is to be studied.

e. To identify various measures on noise control between source and receptor to reduce noise levels at residential and other zones for the compliance of ambient noise levels with the noise pollution (Regulation and Control) Rules, 2000 and their economic analysis.

Status: An acoustic enclosure combined with dampening pads made up of materials such as thermocol, pyramid shaped Polyurethane foam, melamine


 JOINT CHIEF ENVIRONMENTAL ENGINEER
 TAMIL NADU POLLUTION CONTROL BOARD
 No.76, MOUNT SALAI, GUINDY,
 CHENNAI-600 032.

foam, mineral wool/polypropylene blend and glass fibre mats have been identified as control measures at transmission path. The selection of appropriate materials for frequency noise from power loom machine and their effect on noise control is being studied.

f. Identification of suitable PPE or work practices for the power loom workers.

Status: The frequency of noise generated from a typical power looms are 1400 to 5000 Hz. The commercially available PPEs (IPAN) are generally not suitable for such high frequency. Therefore, the PPE suitable for the remaining noise frequency after absorption the high frequency by providing appropriate acoustic material will be analysed.

6. It is submitted that based on the findings of the study, the Anna University stated that an interim report will be submitted by the second week of March 2024.

For the reasons stated above, it is therefore prayed that this Hon'ble Tribunal (SZ), may be pleased to pass such order or other orders as this Hon'ble Tribunal may deem fit and necessary in the circumstances of the case and thus render justice.

Handwritten signature
14/2/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

VERIFICATION

I, R.Sarasavani, daughter of Thiru.J.Raghavan, aged about 58 years having office at No.76, Mount Salai, Guindy, Chennai 600 032, do hereby verify that the contents of above report are true to the best of my knowledge through records.

Handwritten signature
14/2/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

**BEFORE THE NATIONAL GREEN
TRIBUNAL, SOUTHERN ZONE AT
CHENNAI.**

O.A.NO.103 OF 2020 (SZ)

Tribunal on its own motion Suo Motu

...Applicant(s)

Vs

**The District Environment Engineer,
The Tamil Nadu Pollution Control Board and
others.**

...Respondent(s)

**REPORT FILED ON BEHALF OF THE 1ST
RESPONDENT - TAMILNADU POLLUTION
CONTROL BOARD.**

**Advocate for Respondent TNPCB
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.**

Date:14.02.2024.

Date of hearing on:16.02.2024

