

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

Original Application No. 01 of 2017

R.L. Srinivasan,
31/36, Porkali Amman Street,
Kaatukuppam, Ennore,
Chennai-600 057.

...Applicant

Vs

1. Union of India
Through the Secretary
Ministry of Environment, Forests & Climate Change
Indira Paryavarn Bhavan,
Jor Bag Road,
New Delhi – 110003 & 4 ors.

...Respondents

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

BEFORE THE HONOURABLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI IN ORIGINAL APPLICATION NO.1 OF
2017 FILED BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
(SZ), CHENNAI BY THIRU. R.L. SRINIVASAN

Individual Report of TNPCB

I. INTRODUCTION

It is respectfully submitted that Thiru. R.L. Srinivasan filed an affidavit vide Original Application No.01 of 2017 before the Hon'ble NGT (SZ), Chennai with the following prayer:-

" direct that no construction of roads should take place at Buckingham Canal and the Kosasthalaiyar River and any of its tributaries on which the fisher folk depend on for their livelihood".

"direct the TANGEDCO to remove all existing construction debris from the said area and restore the affected part of the river behind the Ennore Thermal Power Station in accordance with the polluter pays principle".

It is respectfully submitted that the Hon'ble NGT (SZ) has passed order in the said application dated 13.12.2019 that:

"we feel it appropriate to appoint a joint committee consisting of a senior officer from the Regional Office of Ministry of Environment, Forest and Climate Change (MoEF& CC) at Chennai, Tamil Nadu Coastal Zone Management Authority, Tamil Nadu State Pollution Control Board, NEERI and Indian Institute of Technology (IIT) Chennai, to inspect the area in question where the alleged encroachments were made, ascertain whether the entire encroachments has been removed as directed, ascertain whether any damage has been caused to the environment on account of the encroachment, assess environment compensation which should include damage caused to environment, loss of ecological service and cost required for restoration and submit a

factual and action taken report within one month to this Tribunal through email @ ngtszfilng@gmail.com.

BACKGROUND

It is respectfully submitted that as per the aforesaid order of the Hon'ble NGT (SZ), Chennai, a Joint Committee has been constituted and the Joint Committee members inspected the encroachment area at Ennore (Ennore Creek and Buckingham canal behind ETPS) on 30.01.2019 and submitted the report to the Hon'ble NGT(SZ), Chennai through TNPCB on 18.11.2020. The detailed study conducted by the Joint Committee at site involves the following:-

- a) The removal of earthen bund (kutcha roads) below the water level at site of Ennore creek and Buckingham canal has to be checked to conclude complete removal of the same, for which bathymetric study is required. IIT Madras, Ocean Engineering Division has agreed to carry out the bathymetric study and furnish a report (Action: IIT Madras, Ocean Engineering Division)
- b) The details of temporary approach roads (kutcha roads) constructed and removed at the site of Ennore Creek and Buckingham canal by TANGEDCO shall be obtained to verify the exact quantity and details of materials. Further to audit/verify the quantity and details of the materials (a) used for construction of approach roads 1 & 2 and (b) Removed when clearing the approach roads 1 & 2 shall be obtained from TANGEDCO. (Action: TANGEDCO)
- c) The statistics of fish catch within the Ennore creek shall be obtained from the Fisheries department for five years in order to check the variation in the fish catch. This is to authenticate the views of the local fishermen. (Action: Fisheries Department)
- d) At the time of visual inspection, Joint Committee observed that no mangroves were seen at the site. Since it was alleged in

the petition, that mangroves were cut and removed, it was felt necessary by the committee to interact with the petitioner to identify the specific area, alleged of removal of mangroves following which super imposed map of GIS shall be obtained from Institute of Remote sensing, Anna University to verify the actual fact.(Action: IRS, Anna University)

- e) To carry out study on sediment sampling to understand if any construction debris are left over in the area where once the approach roads existed. (Action: IIT Madras, Ocean Engineering Division)

It is respectfully submitted that the TANGEDCO has been addressed to engage the services of IIT Madras, Ocean Engineering & Institute of Remote sensing, Anna University to conduct study on the above action points and furnish the report. The Hon'ble NGT (SZ), Chennai in its order dated 03.01.2022 has directed the Joint Committee vide para 7 inter alia that

"The TANGEDCO is also directed to submit the entire report to the Joint Committee members, so that the Joint Committee can also peruse the same and come with their independent opinion regarding the report submitted as to whether that is sufficient and comprehensive covering flood mitigation measures also or further study, if any is to be conducted, if so what is the nature of further study will have to be conducted before the next hearing date"

It is respectfully submitted that the above order and the entire report submitted by the TANGEDCO was forwarded to the Committee Members through email message dated 21.01.2022 to file the independent opinion so as to file the same before the Hon'ble NGT(SZ), Chennai vide Chairman, TNPCB Lr.No.TNPCB/LAW/LA-1/NGT/20531/2017 dated 21.01.2022 & E-mail dated 21.01.2022 from Law Section, TNPCB. It is also submitted that the subsequent Hon'ble NGT(SZ), Chennai orders dated 26.04.2022 & 04.05.2022 in O.A.No.01 of 2017 were also

forwarded to the following Joint Committee Members through email message with a request to furnish the independent opinion so as to file the same before the Hon'ble NGT(SZ), Chennai.

- i. Dr.C.Kaliyaperumal,
Director, MoEF&CC
Regional Office, Chennai.
- ii. Dr.Thirumalaivasan,
Director, IRS
Anna University, Chennai.
- iii. Dr.M.Thirunavoukkarasu,
Chief Scientist and Head,
NEERI, Chennai.
- iv. Dr.V.Sundar,
Professor Emeritus, Department of Ocean Engineering,
IIT Madras, Chennai.

It is respectfully submitted that Dr.C.Kaliyaperumal, Director, MoEF&CC, Regional Office, Chennai has filed the individual report as per the direction of the Hon'ble NGT (SZ), Chennai (Copy submitted). It is also submitted that as on date no report has been received from the other Joint Committee Members.

OPINION ON THE REPORTS SUBMITTED BY TNAGEDCO

It is respectfully submitted that, the TNPCB being a nodal agency and also one of the Member in the above Joint Committee submitting its opinion on the on the report furnished by the TANGEDCO in respect of the Original Application No.01 of 2017 filed before the Hon'ble National Green Tribunal (SZ), Chennai by Thiru. R.L. Srinivasan stating as follows

- I. The Department of Ocean Engineering, Indian Institute of Technology Madras** has conducted the bathymetric study and sediment sampling in the locations/site of Ennore Creek and Buckingham canal at Ennore and furnished the following conclusion:

- a. The bathymetry survey was carried out along and across the removed approach road length of 50m of Buckingham canal for about 30m width covering an area of 1500 sq.m. The minimum water depth observed on the north and middle portion of the canal was 0.2 to 0.3 m respectively. The depth increases towards the bank of canal to about 0.6m to 0.8m. This shows that some minor impediment exists in the middle and the northern portion about 5m to 30m from the northern bank to southern bank of the removed approach road regions and on 03rd August 2020 sediment samplings carried out.
- b. The bathymetry survey was carried out along and across the Ennore Creek near the approach road claimed to be removed for about 250m length and 70m width covering an area of 17500 sq.m. The bathymetry along this stretch shows the existence of traces of the minor remnants of impediments along the removed stretch (from 10m to 30m and from 90m to 210m (north to south)). At present, the Ennore creek three sediment samples collected from the removed approach road are uniformly well graded soils. However, due to the existence of the above said traced minor remnants of impediments, the flow of water and the eco-system in the Ennore Creek and in the Buckingham Canal area are not affected.

Hence, it is respectfully submitted that the study conducted reveals that the flow of water and the eco-system in the Ennore Creek and in the Buckingham Canal area are not affected due to the existence of traced minor remnants of impediments, TNPCB opined that further study may not be necessary at this juncture.

- II. The Institute of Remote Sensing, Anna University** has carried out the GIS mapping and assessment of mangrove in the vicinity of removed temporary approach road (Eastern Bund) in Ennore Creek and Buckingham Canal stretch using "Temporal Remote Sensing Data" and submitted report with the following conclusions:

1. The temporary approach road claimed to be removed was between the northern tip of the bridge ETPS POINT - A (app. 13° 13' 56.165" N 80° 19' 4.554" E) in the Ennore creek and on the head of Buckingham canal behind Ennore ETPS POINT B (app. 13° 12' 8.897" N 80° 18' 30.029"), where Buckingham canal runs parallel to the Kosasthalaiyar river at this point. The end at the eastern side of the removed temporary approach road was referred as point A and the other end just behind the ETPS campus in the Buckingham canal was referred to as point B in this report. The results deduced from temporal analysis of satellite data, field visit for the current condition and collation of previous reports and other sources are presented as follows.
 - i. Satellite data pertaining to years 1972,1981,1991, 2000, 2011, 2014 and 2019 were analyzed for assessing the presence of mangrove at the Point A and Point B. There was no mangrove vegetation that could be identified at the point A and point B during the years of study. Other infrastructures such as the road bridge, NTPC conveyor belt already existed in that point much before.
 - ii. The approved CZMP (with HTL/LTL/ESZ) by MoEF as per 2011 CRZ guideline does not indicate presence of mangrove in the vicinity. The HTL/LTUESZ map prepared by NCSCM, Chennai (from the year 2018) and approved by MoEF also does not indicate presence of mangrove in the location under investigation.
 - iii. The nearest young and sparse vegetation patches noticed during the field visit from point A is at 57.03 m distance with an area of 20.0 sq.m on western side .
 - iv. The nearest patch of mangrove vegetation to point A on the eastern side is at 67.3 m distance with an area of 25.4 sq.m.

- v. The nearest patch of mangrove vegetation observed in the vicinity of point B is at 47.8 m. distance with an area of 348.14 sq.m. This is much less than 1000sq.m, which is the critical value for mangrove buffer as per CRZ guidelines.

Hence, it is respectfully submitted that the study conducted so far revealed that there were no mangroves vegetation as claimed by the petitioner, TNPCB opined that further study may not be necessary at this juncture.

III. The Institute of Remote Sensing, Anna University, carried out the superimposing of HTL, LTL and CRZ from approved CZMP for the sea/Bay/Tidal influenced water bodies and ecologically sensitive area in the vicinity of the proposed site and concluded as follows.

- a. the project site of M/S. TANGEDCO Limited for the proposed ETPS Expansion of Thermal Power Project(1x660MW) does not fall within 500m from HTL of Bay of Bengal except for a part of project site falling within CRZ-II (100m from creek/River)i.e., 100m from HTL of Buckingham Canal.
- b. Cooling water intake and outfall pipelines and coal pipe conveyor passes through CRZ. The HTL. LTL and Ecologically Sensitive areas indicated in the approved CZMP published vide CRZ Notification 2011 was used for preparation local level CRZ map.

Hence, it is respectfully submitted that the study conducted so far revealed a part of project site falling within CRZ-II (100m from creek/River)i.e., 100m from HTL of Buckingham Canal, TNPCB opined that the TANGEDCO shall obtain necessary clearances from the competent authority before starting any activity.

IV. Fisheries Department:

It is respectfully submitted that the statistics of fish catching details for the last 5 years in Thiruvallur District was obtained from the Fisheries department and tabulated as follows.

Year	Quantity in Tonnes
2014-2015	10384
2015-2016	14799
2016-2017	16425
2017-2018	19500
2018-2019	25081

Hence, it is respectfully submitted that the Statistics of fish catching details for the last 5 years obtained from the Fisheries department reveals that fish catch has not decreased and in fact there is a steady increase from the year 2014-15 to 2018-19, TNPCB opined that further study may not be necessary at this juncture

V. The Madras School of Social Work, Chennai has conducted the socio economic study report on the ongoing ETPS Expansion Thermal Power Project (1x660mw) Ennore, Thiruvallur District, Tamil Nadu and submitted its report with following suggestions & conclusions.

- i. Specialized agencies such as CMFRI, CIFNET, MSSRF and Department of Fisheries may collaborate to have special plans for enhancing the livelihood of fishing community in the Ennore coast by implementing innovative self employment schemes and to cope up with the latest technology (Deep sea fishing, usage of electronic gadgets etc.)
- ii. To install artificial reef in Ennore coast to increase fish breeding and catch

- iii. The district administration may necessary take steps by arranging interface session between fishing community and PSU of Ennore coast to review the environmental issues at frequent intervals.
- iv. One of the headmistress of a nearby school suggested that vocational training can also be imparted to the school children, to compete in the job market in future.
- v. Most of the respondents of the non fishing area expressed their views that infrastructure up gradation may be addressed on priority basis to enable them to have a quality living and reduce risk factors related to socio economic and environmental degradation.
- vi. To ensure drinking water supply and maintain quantity and quality in all the study areas.
- vii. To impart skill training courses in all the study areas through coordinating with various Government Departments, Educational institutions and Non-Governmental Organizations.
- viii. To create awareness about conservation of water and also the importance of rain water harvesting among the community.
- ix. It is also suggested that TANGEDCO may establish a special out sourced cell to conduct Pre Funding appraisals, stakeholders' involvement in CSR interventions, monitor the CSR initiatives, and act as a link between the community and TANGEDCO for fulfilling the objectives of CSR initiatives. This proposed CSR cell would help the interventions and enhance the branding of TANGEDCOs CSR interventions.
- x. Ennore and its neighbourhood areas are surrounded by several of Public Sector Undertakings and Private Industrial Units. PSUs like NTPL, NPCL, KPL, IOC

(bottling unit), Balmier & Laurie and CPCL, have been initiating CSR activities by assessing community needs and implementing CSR interventions under various sectors such as water and sanitation, infrastructure to the Educational Institution and community, Women's Empowerment Environment /Green Cover Development and Sustainable Livelihood by spending huge funds.

- xi. Ashok Leyland, a private industrial unit also initiated CSR projects in Ennore neighbourhood. In spite of the above CSR interventions, fishing community in and around Ennore is affected severely due to increased release of effluents resulted in the depletion of fish resource. Hence they are forced for to look for alternative source of livelihood. They also felt that steps may be taken to protect the environment at Ennore by regulating industrial pollution and control, infrastructure development for sustainable livelihood of fishermen, which has been followed for generation as a traditional occupation.
- xii. TANGEDCO through the commissioning of the power project must address the water issue in Ennore. TANGEDCO may also take steps to protect the environment in the Ennore coast by prioritising greenery initiatives. One of the major grievances of the inhabitants of Ennore coast is that TANGEDCO may consider sustainable development goals which will have a visible impact in the sectors of Water, Sanitation, Environment Protection and Livelihood support.

Hence, it is respectfully submitted that TNPCB opined that as suggested by the Madras School of Social Work, Chennai, the TANGEDCO shall render its assistance to ensure the

compliance of the suggestions & conclusions of the Madras School of Social Work.

VI. TANGEDCO:

TANGEDCO has reported that, about 7232 cum of soil (used for formation of the temporary approach road) was removed in totality during November 2017 from the Ennore Creek and filled in the low lying areas inside North Chennai Thermal Power Station. Also the entire temporary approach road formed across the Buckingham Canal was removed during October 2016.

Hence, it is respectfully submitted that the study conducted by the Department of Ocean Engineering, Indian Institute of Technology Madras reveals that the flow of water and the ecosystem in the Ennore Creek and in the Buckingham Canal area are not affected due to the existence of traced minor remnants of impediments, TNPCB opined that further study may not be necessary at this juncture

Recommendation of TNPCB based on the above reports filed by the TANGEDCO

It is respectfully submitted that by considering the above study reports, the the TANGEDCO may be directed to ensure the followings.

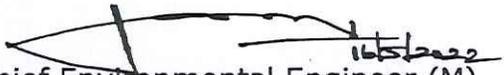
- As suggested by the the Department of Ocean Engineering, Indian Institute of Technology Madras, the TANGEDCO shall ensure that the flow of water and the eco-system in the Ennore Creek and in the Buckingham Canal area shall not be affected due its activities under any circumstances.
- The TANGEDCO shall ensure that the existing mangrove' in the vicinity shall not be affected due its activities under any circumstances.
- As reported by the IRS, Anna University, the project site of M/S. TANGEDCO Limited, a part of project site falling within CRZ-II (100m from creek/River)i.e., 100m from HTL of

Buckingham Canal, the TANGEDCO shall obtain necessary clearances from the competent authority before starting any activity.

- As suggested by the Madras School of Social Work, Chennai, the TANGEDCO shall render its assistance to ensure the followings.
 - ✓ Specialized agencies such as CMFRI, CIFNET, MSSRF and Department of Fisheries may collaborate to have special plans for enhancing the livelihood of fishing community in the Ennore coast by implementing innovative self employment schemes and to cope up with the latest technology (Deep sea fishing, usage of electronic gadgets etc.)
 - ✓ To install artificial reef in Ennore coast to increase fish breeding and catch
 - ✓ The district administration may necessary take steps by arranging interface session between fishing community and PSU of Ennore coast to review the environmental issues at frequent intervals.
 - ✓ One of the headmistress of a nearby school suggested that vocational training can also be imparted to the school children, to compete in the job market in future.
 - ✓ Most of the respondents of the non fishing area expressed their views that infrastructure up gradation may be addressed on priority basis to enable them to have a quality living and reduce risk factors related to socio economic and environmental degradation.
 - ✓ To ensure drinking water supply and maintain quantity and quality in all the study areas.
 - ✓ To impart skill training courses in all the study areas through coordinating with various Government

Departments, Educational institutions and Non-Governmental Organizations.

- ✓ To create awareness about conservation of water and also the importance of rain water harvesting among the community.
- ✓ It is also suggested that TANGEDCO may establish a special out sourced cell to conduct Pre Funding appraisals, stakeholders' involvement in CSR interventions, monitor the CSR initiatives, and act as a link between the community and TANGEDCO for fulfilling the objectives of CSR initiatives. This proposed CSR cell would help the interventions and enhance the branding of TANGEDCOs CSR interventions.
- ✓ TANGEDCO through the commissioning of the power project must address the water issue in Ennore.
- ✓ TANGEDCO may also take steps to protect the environment in the Ennore coast by prioritising greenery initiatives.
- ✓ One of the major grievances of the inhabitants of Ennore coast is that TANGEDCO may consider sustainable development goals which will have a visible impact in the sectors of Water, Sanitation, Environment Protection and Livelihood support.


Joint Chief Environmental Engineer (M),
Tamil Nadu Pollution Control Board,
Chennai Zone.


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**INDIVIDUAL REPORT OF THE
TAMIL NADU POLLUTION
CONTROL BOARD IN NGT
O.A.NO.01 OF 2017.**

**Advocate for Respondent No.
Thiru. S. Sai Sathya Jith,
Advocate, Chennai.**

Date:16.05.2022.

Date of hearing on:17.05.2022

