

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

**APPLICATION NO. 162 OF 2021 (SZ)**

**BETWEEN**

SUO MOTU

... Applicant

**And**

UNION OF INDIA AND ORS.

... Respondents

**RESPONSE TO THE JOINT COMMITTEE REPORT FILED ON BEHALF  
OF THE 9<sup>TH</sup> AND 10<sup>TH</sup> RESPONDENT**

**M VIJAYA MEHANATH**

**COUNSEL FOR THE 9th and 10th RESPONDENT**

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**BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE  
ORIGINAL APPLICATION. 162 OF 2021**

**IN THE MATTER OF :**

Tribunal on its own motion- Suo-Motu based on the news item Published in the Times of India Newspaper, Chennai Edition dated 01.07.2021, under the caption "Another Pipeline leakage Ennore power plant".

... APPLICANT(S)

**Versus**

1. Union of India,  
Rep by its Secretary,  
Ministry of Environment of Forests and Climate Change,  
Indira Paryavaran Bhawan,  
Jorbagh Road, New Delhi – 110 003.
2. The Secretary to Government of Tamil Nadu,  
Govt Secretariat, Fort St. George,  
Chennai, Tamil Nadu- 600 009.
3. The Principal Secretary to Government,  
Public Works Department,  
Govt Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600 009.
4. The Secretary to Government of Tamil Nadu,  
Department of Environment, Climate Change & Forests,  
Govt Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600 009.
5. The Principal Secretary to Government,  
Department of Energy,  
Govt Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600 009.
6. Tamil Nadu Coastal Zone Management Authority,  
Rep by its Member Secretary,  
First Floor, Panagal Building,  
Saidapet, Chennai – 600 015.

*A. Manivel*  
CHIEF ENGINEER  
NORTH CHENNAI THERMAL POWER STATION  
TNEB, CHENNAI-600 120

7. The Chairman,  
Central Pollution Control Board,  
Parivesh Bhawan, East Arjun Nagar,  
New Delhi - 110 032.
8. The Chairman,  
Tamil Nadu Pollution Control Board,  
No.76, Anna Salai, Guindy,  
Chennai, Tamil Nadu - 600 032.
9. Tamil Nadu Generation and Distribution Corporation,  
Rep by its Chairman and Managing Director,  
6<sup>th</sup> Floor, TANTRANSKO Building,  
144, Anna Salai, Chennai - 600 002.
10. The North Chennai Thermal Power Station,  
Rep. by its Chief Engineer,  
Athipattu, Thiruvallur,  
Chennai - 600 120.
11. The District Collector,  
Tiruvallur District,  
First Floor, Collectorate,  
Tiruvallur - 602 001.
12. The Chief Engineer,  
Public Works Department, WRO,  
State Ground Water & Surface,  
Water Resources Data Center,  
Taramani, Chennai - 600 113.

... RESPONDENT(S)

**RESPONSE TO THE RECOMMENDATIONS OF THE  
JOINT COMMITTEE**

I, G. MANIMEKALAI, Daughter of V. Gopal, aged about 56 years residing at U1, Vallur Camp, North Chennai Thermal Power Station-I, Chennai-600 120, do hereby solemnly affirm and sincerely state as follows:

*G. Manimekalai*  
CHIEF ENGINEER  
NORTH CHENNAI THERMAL POWER STATION  
TNEB, CHENNAI-600 120

1. I state that I am the Chief Engineer of Tamil Nadu Generation and Distribution Corporation (TANGEDCO), North Chennai Thermal Power Station - I (NCTPS-I) representing the 10<sup>th</sup> Respondent herein and as such I am well acquainted with the facts of the case from the available records. I am authorized to file this counter affidavit on behalf of the Chairman - cum - Managing director, TANGEDCO, Respondent No.9 herein.
2. I submit that I am filing this Response on behalf of the TANGEDCO to the Recommendations of the Joint Committee made in its report dated 23.09.2021 submitted before this Hon'ble Tribunal. I carve leave of this Hon'ble Tribunal to treat the Reply of TANGEDCO filed in the above O.A as part and parcel of this Reply.

**RECOMMENDATION No.1:**

The TANGEDCO shall resume the activities pertaining to the NCTPS Stage III and Ennore SEZ Power Plants within the CRZ area in Kosasthalaiyar River/ Buckingham Canal/Backwaters only after obtaining amendment to the existing CRZ Clearance from MoEF&CC.

**Action Taken:**

In respect of **NCTPP Stage-III** an application seeking amendment to the already issued EC and CRZ clearance has been filed with MoEF& CC on 15.11.21 by TANGEDCO HQ(CE/Projects-II), Chennai-2, vide Lr.No.SE/C/P&E/EE/EMC/AEE/C/F.NCTPS Stage-III/D.156/21 dt.9.11.2021 and uploaded in the MoEF& CC website on 15.11.2021 requesting to incorporate the provision for laying Ash slurry pipeline for the proposed NCTPS Stage-III, since it is an expansion project of NCTPS I & II and to comply the conditions of EC to reuse of supernatant water from ash dyke for slurry making and for disposal of ash in the form of ash slurry in case of emergency during operation of Power plant, as the construction of pipe lines are essentially required.

In so far as **Ennore SEZ** project is concerned amendment to MoEF& CC / CRZ clearance possibility of ECHS Routing for the Coal Conveyor at back water portion in the existing alignment and other alternate

alignment are under consideration / study. After finalization of feasible alignment necessary amendment to clearance will be arranged to be obtained from MoEF& CC / CRZ.

**RECOMMENDATION No.2:**

The TANGEDCO shall expedite removal of debris and dredged material from Kosathalaiyar river and restore natural flow within October 31,2021.

**Action Taken:**

In respect of **NCTPS Stage III** the construction debris pointed out by the Committee is being cleared and deposited along/ near ash slurry pipelines of NCTPS-III on northern side in NCTPS land for reuse and the work will be completed well before 30.11.21.

In respect of **EnnoreSEZProject** the following actions are taken:

- 1) The sand removal was started as per the Honb'le NGT (SZ) directions and 21283 out of 25000 cubic meter of sand removed. The balance sand removal could not be continued due to the presence of the RCC piles. Hence the RCC piles have to be cut upto the water body bed level and then balance Quantity of the sand have to be removed subsequently to restore normalcy.
- 2) It is submitted that the work of cutting of marine pile with permanent MS liners inside water is special nature of work and requires unconventional resources and methodologies which are locally not available. Very few agencies have the technology and resources to cut the Marine piles upto bed level of water body in under water condition.
- 3) Now, the work has been awarded to complete the balance removal works within 20 days.
- 4) It is submitted that despite all this constrains TANGEDCO expedites necessary conscious action to remove the balance quantity of filling sand and constructed pile at the earliest for the compliance of sensitive consideration of the direction of the Honb'le NGT (SZ).

**RECOMMENDATION No.3:**

The TANGEDCO shall strictly fulfill and comply with the conditions imposed in the Environmental Clearance under the EIA Notification as amended and CRZ Clearance under the CRZ Notification as amended without violations and deviations for NCTPS Stage III and Ennore SEZ Power Plants unlike the environmental damage already caused by the operation of NCTPS Stage-I & II Thermal Plants due to ash deposit in the water bodies and the air-borne fly ash in the nearby villages causing nuisance and air pollution.

**Action Taken:**

TANGEDCO shall abide strictly with the conditions imposed in the EC and CRZ Clearance with amendment (applied for) under the CRZ Notification is also aware of responsibility imposed on it. TANGEDCO shall abide with the rules and regulations and without any violations and deviations will commence activities for NCTPS Stage III and Ennore SEZ Power Plants.

It is necessary to point out that the pipe laying work for **NCTPS Stage-III** has been stopped on 09.07.2021 and NCTPS Stage III has submitted an application to MoEF& CC, seeking amendment to the already issued EC and CRZ clearance on 15.11.21 through TANGEDCO HQ(CE/Projects-II), Chennai-2, vide Lr.No.SE / C/ P&E / EE/EMC/AEE/C/ F.NCTPS Stage-III/ D.156/21 dt.9.11.2021 requesting to incorporate the provision for laying Ash slurry pipeline for the proposed NCTPS Stage-III.

In so far as **ENNORE SEZ** project is concerned, it has obtained all necessary approvals and as the Hon'ble High Court in W.P.No.16353 of 2021 had directed to remove the piles and other works done in the water body the same is being removed by TANGEDCO.

**Recommendation No. 4:**

That the TANGEDCO shall procure and replace the existing ash slurry pipe lines 1,2,3,4,&5 pertaining to the NCTPS Stage-I with New cast basalt pipe before December 2021 as already committed to the

  
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Hon'ble National Green Tribunal in Applications No.8 of 2016,152 of 2016 & 198 of 2016.

**Action Taken:**

**ASDL No.1** - (5129 mtrs) - Administrative approval for procurement of New cast basalt pipe has been submitted to TANGEDCO Headquarters and it is under process and will be completed by June 2022.

**ASDL No.2** - (5511 mtrs ) - 1728 meters of new cast basalt pipe lines have been replaced with available 3498 metres pipes and work is being carried out on emergency basis and will be completed by December 2021.

**ASDL No.3** - (4942 mtrs) - New cast basalt pipe has been replaced successfully from ash dyke to NCTPS gate and there are no leaks developed in this pipeline.

7390 meters of pipes have been supplied and being replaced out of 10452 meters of ordered quantity for Line 2 & 3 for a value of Rs.8.36 Crores.

**ASDL No.4** - (4942 mtrs) - Tender for procurement of 4942m of new cast basalt pipes for a value of Rs. 4.32 Crores has been lodged due to non-acceptance of validity by the bidders, exorbitant steel price hike and non-acceptance of LD terms of TANGEDCO dated 06.01.2021. Fresh administrative approval has been accorded by TANGEDCO Headquarters for Rs.7.3 crores. Procurement action is under process with Board Level Tender Committee at TANGEDCO Headquarters and will be completed by May 2022.

**ASDL No.5** - (5511 mtrs) - Administrative approval for procurement of New cast basalt pipe has been submitted to TANGEDCO Headquarters and it is under process and will be completed on June 2022.

Due to Covid pandemic, Nationwide lock down has been imposed from March 2020 to September 2020 as per the guidelines of Government of India. Afterwards partial lockdown was continued. At that time all the manufacturer have stopped/restricted their manufacturing activities.

  
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**Recommendation No. 5:**

The TANGEDCO shall also procure and replace the retrieved pipes from ETPS utilized for Ash slurry pipe lines 1 & 5 pertaining to the NCTPS Stage-I with New cast basalt pipe to permanently resolve the slurry ash disposal into water bodies.

**Action Taken:**

The administrative approval for procurement of New cast basalt pipe has been submitted to TANGEDCO Headquarters and it will be completed by June 2022.

**Recommendation No.6:**

TANGEDCO is stopping the pumps soon after identifying leaks, followed by flushing with water and replacing the damaged portion of the pipe. However, the TANGEDCO is not taking any measures to clean up the area, where leak has taken place. The committee suggests that in addition to stop the pumps, repairing the pipes, the TANGEDCO shall also taken measures to clean up the area, where ash slurry has leaked and transfer the ash it into ash dyke.

**Action Taken:**

The work has been awarded for cleaning the area where ash leak occurs and to transport the ash to ash dyke. The following works were awarded for Ash cleaning work vide Order. No. 1) SE/MI/NCTPS-I/EA/AE/F.(ON)Dkt.120467/WCTNo.212/21-22Dt:09.09.21 2)SE/MI/NCTPS-I/ EA/AE/F.(ON)Dkt.120479/WCT No. 214/ 21-22 Dt:09.09.21.(Copy of order enclosed)

**Recommendation No.7:**

From the log books, the committee observed that, pipeline leaks due to pipe burst/rupture of joints due to ageing of pipes are very common and frequently (average frequency of one leak/week) taking place in old pipelines. Apart from the leaks due to pipeline bursts/rupture, pinhole leakage is taking place in all three old pipelines. The TANGEDCO is not taking measures to rectify pinhole leakages. If timely action is not taken to rectify these pinhole leakages, it may lead

to major leakage. The committee submits that the TANGEDCO shall immediately rectify the pinhole leakages in the pipelines that are noticed by the patrolling team.

**Action Taken:**

Whenever pinhole leakage occurs, timely action is being taken to stop the pump immediately as and when noticed and pinhole leakages are attended by providing patch plates.

**Recommendation No.8:**

The TANGEDCO is replacing the portion of the old damaged pipeline with pipe retrieved from Ennore Thermal Power Plant to arrest leakage. After replacement the damaged pipelines are laying at the place of leak itself. The Committee submits that TANGEDCO shall take measures to remove all the old damaged pipelines laying in the ground and keep it in stores and subsequently dispose it.

**Action Taken:**

All the old damaged pipes after replacement and scattered pipes have been devoluted to stores.

**Recommendation No.9:**

The TANGEDCO shall carry out patrolling of ash slurry disposal pipe lines round the clock to notice and avert the leakages of pipe lines, so as to prevent the disposal of ash into Kosasthalaiyar River, Buckingham canal etc. Till the replacement of existing pipe lines.

**Action Taken:**

The separate gang (15 Nos.) with Jeep for Patrolling of Ash slurry disposal line to a stretch of 5.5 KM is being carried out round the clock to avert leakage of pipe lines, so as to prevent the leakage of ash slurry to the Kosasthalaiyar River and Buckingham canal.

**Recommendation No.10:**

During inspection, the committee observed that the ash previously removed from Kosasthalaiyar River and Buckingham canal was stored near the point of excavation. During rainfall, the ash will get into the river & canal again. The committee submits that the TANGEDCO and

PWD shall ensure that the removed ash shall be transferred to Ash Dyke.

**Action Taken:**

**Kosasthalaiyarriver:**The PWD had desilted 4.35 lakhs m<sup>3</sup> of ash/silt from the Kosasthalaiyar river and dumped the silt on the banks and this work was completed during the end of December 2020. Out of which 2.5 lakhs m<sup>3</sup> have already been removed by M/s.TPIPL. The removal of balance 1.85 lakhs m<sup>3</sup> is under progress. The above removal work will be arranged to be completed before March 2022.

**Buckingham Canal:**The PWD has desilted the Buckingham canal and dumped the silt on the banks and this work was completed during the end of March 2021. The total quantity desilted by PWD in Buckingham canal is about 89,600 m<sup>3</sup>.Out of which 70,000 m<sup>3</sup> have already been removed by M/s.TPIPL. The removal of balance 19,600 m<sup>3</sup> is under progress. The above removal work will be arranged to be completed before March 2022.

**Kosasthalaiyar river [NCTPS-I main gate (Ch.20.00) to KPL main gate(Ch.22.40)]**

Quantity of ash present in the river as assessed by the previous committee in OA 8/2016	Quantity of ash due to leakage post committee inspection	Total ash present in river	Quantity of ash desilted/dredged	Storage of dredged material	Start & Stop date of desiltation	Balance quantity to be removed from Banks of Kosasthalaiyar river	Ultimate utilization of desilted materials
3.25 lakhs m <sup>3</sup>	1.10 lakhs m <sup>3</sup> (assessed by committee)	4.35 lakhs m <sup>3</sup>	4.35 lakhs m <sup>3</sup>	4.35 lakhs m <sup>3</sup>	15.06.2020 to Dec'2	Out of 4.35 lakhs m <sup>3</sup> ash 2.50 lakhs m <sup>3</sup> ash lifted by	Used for land filling by TPIPL

	PWD)	m <sup>3</sup> (ass ess ed by PW D)		0	M/s.TPIPL. Balance 1.85 lakhs m <sup>3</sup> ash lifting work is under progress.	near NCTPS-I ash dyke
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**Buckingham canal [NCTPS-I main gate (Ch.20.00) to KPL  
maingate(Ch.22.40)]**

Quantity of ash present in the river as assessed by the previous committee in OA 8/2016	Quantity of ash due to leakage post committee inspection	Total ash present in river	Quantity of ash desilted/dredged	Storage of desilted material	Start & Stop date of desiltation	Balance quantity to be removed / desilted from Banks	Ultimate utilization of desilted materials
77,331 m <sup>3</sup> (from Ch.20.00 to 22.40)	56,669 m <sup>3</sup> (assessed by PWD) (From Ch.20.0	1,34,000 m <sup>3</sup> (assessed by PWD)	89,600 m <sup>3</sup> (From Ch.20.80 to 22.40 Km)	89,600 m <sup>3</sup>	Nov'20 to Mar'21	Out of 89,600 m <sup>3</sup> ash 70,000 m <sup>3</sup> ash lifted by M/s.TPIP	Used for land filling by TPIPL near

Km)	0 to 22.40 Km)	(Fro m Ch.20 .00 to 22.40 Km)				LBalance 19,600 m <sup>3</sup> ash lifting work is under progress.	NCTP S-I ash dyke
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Further, the work of desilting and removal of ash from the Buckingham canal to a length of 200m at pipeline crossing location is being carried out by NCTPS-II based on the letter received from the District Collector, Thiruvallur dated 09.10.2021.

**Recommendation No. 11:**

The NCTPS Stage-I shall remit the environmental compensation of Rs. 4, 12,20,000/- (Rupees Four Crore Twelve Lakhs & Twenty Thousand only) assessed by the committee for continuing the disposal of ash slurry in water bodies.

**Action Taken:**

Arrangement is being made.

**Recommendation No.12:**

The unit shall provide dust nets/mesh towards seppakkaam village to minimize the impact of fly ash dust and Stack Emissions.

**Action Taken:**

The work of providing dust net/mesh of size 2mm X 2mm near Cheppakkam Village to a length of 324 m and height of 3 m will be carried out shortly and completed before Nov-2021.

**Recommendation No.13:**

The unit shall augment the air pollution control devices installed in stage-I & II and ensure that stack emissions are complying with notified standards. The units shall ensure that OCEMS installed in stage-I & II are working properly and real time actual data is transmitted to CPCB and TNPCB servers.

  
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**Action Taken:**

In **NCTPS-1**, Maximum number of ESP fields are kept in service in all the three units so as to maintain the emission within the standard norms by close monitoring of ESP fields.

Every year the ESP internals are being overhauled. Renewal/rectification works are carried out for damaged /worn out spares during AOH and during available shutdown periods. Hence the stack emissions are being maintained within the notified new standards most of the time.

It is ensured that, the online continuous emission monitoring system (OCEMS) installed in Stage I is working properly, since, it has been reported by the TNPCB/CPCB whenever the exceedance of emission norms.

Further, the following are taken up **NCPTS stage II**

- i) Renewal of 42 nos. field internals in Electrostatic Precipitators (Unit I & II) is under progress and will be completed by May 2022.
- ii) Tender for installation of FGD to control Sulphur emission is under process. Tender opening is scheduled on 29.12.2021.

**Recommendation No. 14:**

The unit shall strengthen the earthen bund laid towards Seppakkam village and ensure that runoff from ash dyke or ash depositions are not carried to villages. The unit shall provide a drain before the bund so that runoff water is collected in drains and can be lifted back to ash dyke.

**Action Taken:**

The temporary bund has already been formed adjacent to Seppakkam Village to prevent the entry of water into the Village. For strengthening the earthen bund and forming toe drain, IIT Madras have been appointed as Consultant. The report was received on October 2021 and the work will be carried out by Ennore SEZ Project/TANGEDCO.

I humbly submit that as such there is no violation and there is no construction of illegal structures to carry pipelines to transport coal ash across the backwaters and main channel of the Kosasthalaiyar River and TANGEDCO is committed to comply with the all rules and regulations in place.

Further, I humbly submit that this Hon'ble Tribunal may be pleased to dismiss the above application on merits and pass such further or other orders as this Hon'ble Tribunal may deem fit and proper in circumstance of the case and thus render justice.

Dated at Chennai on this 20<sup>th</sup> day of November, 2021.

*A. Manimekalai*  
**9<sup>th</sup> RESPONDENT**

**&for 10<sup>h</sup> RESPONDENT**

**VERIFICATION**

CHIEF ENGINEER  
NORTH CHENNAI THERMAL POWER STATION  
TNEB, CHENNAI 600 120.

I, G. MANIMEKALAI, Daughter of V. Gopal, aged about 56 years residing at U1, Vallur Camp, North Chennai Thermal Power Station-I, Chennai 600 120 do hereby verify that the contents of paras 1 to 32 are true to the best of my knowledge and I have not suppressed any material fact.

Verified at Chennai on this 20<sup>th</sup> day of November, 2021.

*A. Manimekalai*  
**9<sup>th</sup> RESPONDENT**

**&for 10<sup>h</sup> RESPONDENT**

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