

**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

**REPLY STATEMENT FILED ON BEHALF OF THE 9<sup>TH</sup> AND 10<sup>TH</sup>  
RESPONDENT**

Dated at Chennai on this the 26th day of October, 2021.

E-Filing No. :

Date : 26.10.2021

**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.

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, TANTRANSCO 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)

**REPLY STATEMENT FILED ON BEHALF OF THE**  
**9<sup>th</sup>&10<sup>th</sup> RESPONDENT**

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:

1. I state that I am the Chief Engineer (i/c) of Tamil Nadu Generation and Distribution Corporation (TANGEDCO); North

*G. Manimekalai*  
CHIEF ENGINEER  
NORTH CHENNAI THERMAL POWER STATION  
TNEB, CHENNAI-600 120,  
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Thermal Power Project, Stage-III (NCTPP-III) 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. I am filing this counter affidavit for myself and on behalf of Respondent No.9.

2. I humbly submit that I have read the contents of the above application and at the outset I deny all the averments contained in this Application except those that are specifically admitted therein. I am filing this Reply Statement in my official capacity on behalf of the 9<sup>th</sup> and 10<sup>th</sup> Respondent and reserve the right to file additional reply statement by TANGEDCO at a later stage.
3. I humbly submit that the Tamil Nadu Electricity Board was formed on July 1, 1957 under section 54 of the Electricity (Supply) Act 1948 in the State of Tamil Nadu as a vertically integrated utility responsible for power generation, transmission and distribution. The electricity network has since been extended to all villages and towns throughout the State. TNEB was restructured on 01.11.2010 into TNEB Limited; Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and Tamil Nadu Transmission Corporation Limited (TANTRANSCO).
4. I humbly submit that the 9<sup>th</sup> Respondent herein, proposed to establish 1x800 MW, NCTPP Stage III Super Critical Thermal Power Plant which is only an expansion unit in the vacant land available within the existing North Chennai Thermal Power Station Complex at Ennore and Puzhuthivakkam Villages of Ponneri Taluk, Tiruvallur District.
5. I humbly submit that the on-going NCTPS Project Stage III project was conceived in 1989 itself as a Stage III project as the land had already been acquired for accommodating all the three stages of NCTPS and is developed to generate power using the existing features of NCTPS Stage I and Stage II within the industrial land of NCTPS complex, which is enclosed in a pucca

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compound wall constructed during 1990. The CMDA also declared the subject complex as "industrial land".

6. I humbly submit that based on the power demand and financial status of TNEB, these power plants are executed in a phased manner utilizing the public exchequer. The Stage I power plant of installed capacity of 3x210 MW is being operated from 1995 onwards and Stage II power plant of installed capacity of 2 X 600MW is generating power from 2014 onwards inside the NCTPS Complex.
7. I humbly submit that the on-going NCTPS Stage III Project is now being established to offset the power demand of Tamil Nadu using the existing facilities of NCTPS complex without acquisition of any other land from the public and the progress of work is in a good phase.
8. I humbly submit that the NCTPS Stage III project works are being executed through two EPC (Engineering, Procurement and Construction) Contractors M/s. BHEL, New Delhi, and M/s. BGR Energy System Limited, Chennai. They are engaging sub-contractors for procurement of construction materials, execution of works, etc..
9. I humbly submit that the public hearing meeting for the subject project was conducted on 05/03/2015 under the Chairmanship of the District Collector of Tiruvallur District along with the Public and Other Department officials. The proceedings of the public hearing were recorded.
10. I humbly submit that TANGEDCO had applied for the grant of Environmental Clearance as mandated under Environmental Impact Assessment (EIA) Notification 2006 to the Ministry of Environment, Forest and Climate Change, the 1<sup>st</sup> Respondent herein for the proposed project of the 4<sup>th</sup> Respondent.
11. I humbly submit that the Project presentation was made by TANGEDCO in the State level CZMA on 19/5/2015, wherein under the heading of Fly Ash Management, it had been informed that there will be no ash disposal in sea/river and 100% dry fly ash collection will be done in silos of one day (24 Hours) ash

*G. Manimolai*  
CHIEF ENGINEER

generation capacity of the proposed plant and also that bottom ash would be disposed through dry bottom ash handling system and in case of emergency, bottom ash will be disposed of in the Ash Dyke of NCTPS.

- 12.** I humbly submit that the Director of Environment, Chennai, has sent the copy of the proposal with the reports, details, HTL map and Minutes of the 83<sup>rd</sup> meeting of TNSCZMA held on 19/5/2015. In line with the recommendations of TNSCZMA, Government of Tamil Nadu recommended the proposal of TANGEDCO to the Chairman/National CZMA and MOEF &CC. In the Lr. No. 10173/EC.3/2015-1 dated 16/6/2015 of the Principal Secretary to Government also, it has been mentioned that TANGEDCO has informed that the proposed project would be taken within the existing NCTPS complex as an expansion unit.
- 13.** I humbly submit that the Project presentation and Additional Information was submitted TANGEDCO before the EAC of GOI on 27/11/2015. Under Sl. no. II - Revised Layout of NCTPS complex prepared by the Institute of Remote Sensing, Anna University, Chennai various units viz., Stage I (3x210 MW), Stage II (2x600 MW) and facilities viz., Coal conveyor, Cooling water inlet/outlet and Bottom Ash disposal line to the Ash Dyke of NCTPS along with the Demarcation of HTL/LTL and CRZ Delineation for NCTPS Stage III (1x800 MW) at Ennore Village, Ponneri Taluk, Tiruvallur District are depicted and under Sl. No. X - Explore various avenues for utilisation of bottom ash, wherein it has been mentioned that the bottom ash of the proposed plant would be collected through dry bottom handling system and used for brick manufacturing and road laying purposes and excess, if any, disposed in to the existing ash dyke of NCTPS. I submit that in the presentations submitted, ash pipe line for the Project using the ash dyke of NCTPS was submitted to MOEF & CC.
- 14.** I humbly submit that the Rapid Environment Impact Assessment (EIA) study for the Project was made by NABET accredited Environment Consultant, M/s. Ramky Enviro Engineers Ltd.,

*A. Anand*

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Hyderabad, and submitted by TANGEDCO to the MOEF & CC, GOI for obtaining EC and CRZ clearances.

15. I humbly submit that considering all the above including the Environment Impact Assessment report, MOEF had issued Environmental Clearance and CRZ Clearance for the above said project on 20.01.2016 with various conditions.
16. From the above details, it could be seen that the power plant (NCTPS Stage III Project Plant) is developed to generate power using the existing facilities of NCTPS Stage I and II including Ash Dyke of NCTPS and it has been mentioned as "Expansion by addition of 1x 800 MW (Stage III) North Chennai TPP" in the EC itself.
17. I humbly submit that there is no deviation/alteration from those details already submitted to the MOEF & CC for the proposed project with respect to ash transportation system pipelines also.
18. I humbly submit that the TANGEDCO had also informed the public through Paper Publications dated 03.02.2016 in English and Tamil and the local authorities concerned that the Clearances were granted for the proposed project.
19. I humbly submit that the Consent to Establish from Tamil Nadu Pollution Control Board with various conditions vide Consent Order No. 170124499798 dated 13.04.2017 under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 and Consent Order No. 170124499798 dated 13.04.2017 under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987.
20. The EC and CRZ clearance for the Project has been issued by the MOEF & CC after considering the documents, clarifications and explanations furnished. The requirement/purpose for laying of pipeline for discharge/disposal of ash slurry across the Kosasthalaiyar River has been shown in the CRZ map of Anna University/ Chennai, which is also mentioned in the Rapid EIA report.
21. The CRZ map of Institute of Remote Sensing, Anna University/ Chennai - 'Demarcation of HTL/LTL and CRZ delineation for

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NCTPP Stage-III (1 X 800 MW) Project' - shows the Ash Line corridor of NCTPS Stage 1, 2 and 3 crossing the water bodies coming within CRZ I B zone Buckingham Canal and Kosasthalaiyar River up to the existing Ash Dyke of NCTPS for the disposal of ash through pipelines as being done at present in the other two phases of NCTPS Stage 1 and 2.

22. The Rapid EIA report and the aforesaid CRZ map also shows and mentions about the place allotted for the existing Ash Pond of NCTPS and the disposal of ash through pipeline as being done at present for the other two existing Power Plants. It has also been mentioned under para 9.5.2(Page 267/583) of Rapid EIA report that it is proposed to utilize the Ash Dyke of NCTPS for bottom ash disposal in case of emergency.
23. The CRZ map of Institute of Remote Sensing, Anna University/ Chennai and the Rapid EIA report are the required documents submitted to the State level CZMA and then the documents are submitted to the MOEF & CC for issuance of the EC and CRZ clearance, the work of laying of pipeline for discharge of ash slurry across the Buckingham Canal and Kosasthalaiyar River has been very well depicted while applying for the EC and CRZ clearance itself.
24. The EC mentions that Ash pond water will be collected, treated and reused for slurry making. In this connection, it is submitted that a Recovery Water Pump House located near Ash Dyke of NCTPS with 1 number recovery water pipe line will be established. The decanted ash water is collected in the Recovery Water Pump House and pumped into the ash water Sump located inside the power plant through recovery water pipe line of length about 2.8 km as shown in the EIA report and CRZ delineation map of Anna University referred earlier.
25. In the Table 4.8.2- Fly Ash Utilization of the Rapid EIA report, Fly Ash utilisation will be met at 50% within target date of one year from the date of commissioning, 70% within target date of two years from the date of commissioning, 90% within target date of three years from the date of commissioning and 100% within

*A. Manimata*

target date of four years from the date of commissioning. From the above Rapid EIA report, it could be seen that for disposal of Fly Ash during initial years of operation, Fly ash disposal system is required for wet disposal to ash pond in slurry form for which pipeline is essentially required. The Rapid EIA report mentions that Fly ash disposal system will also contain a provision for wet disposal to ash pond in slurry form.

26. From the above, it is evident that the EIA report shows the pipelines and all the project details had been disclosed to the MOEF &CC and discussed in the public hearing held on 05/03/2015. It has also been mentioned in the Rapid EIA report that Fly ash disposal system will also contain a provision for wet disposal to ash pond in slurry form [to the existing Ash Dyke of NCTPS for disposal during initial years of operation of the plant and for disposal of fly ash in the time of emergency (if the dry collection system fails due to some issues) since the plant has to be operated for 24 hours to maintain the power grid stability.
27. In the EIA report, it is stated that the Fly ash disposal system will also contain a provision for wet disposal to ash pond in slurry form and the Ashpond will be provided to meet the MOEF guidelines. That in this connection, the following are submitted:-
- a. That as the capacity of fly ash storage silos are of one day capacity (24 Hours) only and during contingency of truckers strike, etc. disposal of fly ash including bottom ash has to be disposed to the existing Ash Dyke of NCTPS through pipelines only for which the proposed construction of ash pipelines is required.
  - b. Further, it has been mentioned in the Rapid EIA report that Fly ash disposal system will also contain a provision for wet disposal to ash pond in slurry form (to the existing Ash Dyke of NCTPS for disposal during initial years of operation of the plant).

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**28. With respect to the question of whether there was any deviation of the proposed alignment of the pipe as permitted under the clearances, it is submitted that:**

- a. That after detailed surveys and geo-technical conditions of the site, the Coal Conveyor route was finalized by proposing to cross the water bodies and land portions encountered in the alignment in the shortest route crossing the water bodies.
- b. That while so, there was a development took place whereby M/s. Chettinad Coal Yard and connected infrastructure facilities were being developed by the said private body which was fouling in the vicinity of the Ennore SEZ project's Coal Conveyor site route of the TANGEDCO. Hence, the TANGEDCO was constrained to act accordingly.
- c. That earlier, TANGEDCO proposed to erect Closed Type belt Coal Conveyor. However, the Pipe Conveyor System is subsequently preferred to avoid spillage of coal.
- d. That the Closed Pipe Conveyor system has to be erected in a smooth curved line and as such the routing of pipe conveyor was designed suitably in a curvilinear manner as per the technical requirement to erect Pipe conveyor to avoid spillage of coal dust for environmental friendly approach.
- e. That the total length of conveyor from Ennore Port Limited to Project site is 4500 meters; the length of conveyor under execution is only 4328 meters.
- f. That in this condition, the General Public from Kattukuppam Village agitated and conducted dharna on 19.07.21. After the talks with the people and to avoid law and order problem, the Thasildar, Ponneri after discussions with the Revenue Divisional Officer/Ponneri, requested TANGEDCO to suspend the works temporarily until the peace meeting which was proposed to be held on 23.07.2021. After the Peace meeting, work was resumed on 24.07.21.
- g. That based on the request made by Revenue officials, the work has been temporarily stopped on 27.07.21 and the

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removal of filling sand has been commenced on 04.08.2021 and completed from Pier No.12 to Pier No.19 (172.5 meters removed out of total 230.3 meters).

- h. That the removal of the filling sand in the balance area (about 57.8 meters) is under progress and will be completed on or before 31.10.2021.

**29. With respect to the question of whether there was any leakage of ash pipe resulting in spillage of fly ash, it is submitted as follows:-**

- a. That the reported leakage occurred on 29.06.2021 at 7.20 hrs in NCTPS-I, Ash slurry disposal line No.5 near cheppakkam location. Ash slurry disposal pumping was stopped immediately and the pipeline flushed with sea water to clear the ash to avoid ash settling in the pipeline. The pipeline puncture was arrested by welding and the line was put in to use at 12.25 pm on that day itself.
- b. That the size of the puncture is very small and leakage of ash slurry through this puncture is very less quantity.

**30.** It is further submitted that the ash is discharged in wet slurry form through the pipelines from NCTPS-I Ash Handling Pump House to the ash dyke. No air pollution is caused due to the above leak and spillage of ash slurry quantity is very less. Hence, there cannot be contamination of water.

**31. With respect to the question of whether there was unlawful dumping of fly ash in nearby water bodies, it is submitted as follows :-**

- a. That the ash in the form of slurry is disposed to Ash dyke through 5 pipelines. No unlawful dumping of ash is happening in the nearby water bodies. However, spillage of ashes that occur due to unforeseen pipe leaks and for the same subject Tamil

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Nadu Pollution Control Board in its proceedings No T2/TNPCB /NGT/ F.31005/RL/2019-2 dated 25.11.2019 have levied 16.461 crores as Environmental compensation for ash pollution to the water bodies and surroundings area. 1,94,543 m<sup>3</sup> Ash settled around the ash pipelines have been removed. TANGEDCO paid an amount of Rs. 28.50 crores for dredging of Ash in Kosasthalaiyar River and Rs. 66.23 lakhs for dredging of Ash in Buckingham Canal to PWD on DCW basis. PWD has dredged about approximately 4,35,000 m<sup>3</sup> of ash in the Kosasthalaiyar River and 89,600 m<sup>3</sup> in the Buckingham Canal.

**32. With respect to the recommendations of the Joint Committee, based on its report, it is humbly submitted as follows:-**

**RECOMMENDATIONS 1 and 3 of the JOINT COMMITTEE :**

- *The TANGEDCO shall resume the activities pertaining 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. (Recommendation 1)*
- *The TANGEDCO shall strictly fulfil 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 nearby villages causing nuisance and air pollution. (Recommendation 3)*

**Action Taken/Present Status on Recommendation 1 & 3:**

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CHIEF ENGINEER  
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- I. That submissions were made to the Committee during site inspection on 23.08.2021 and in subsequent discussions had in the District Collectorate, Thiruvallur District, held on 24.08.2021 under the Chairmanship of the District Collector, Thiruvallur District.
- II. That the report states - "TANGEDCO submitted to the committee that laying of new ash pipeline corridor was informed during public hearing and during presentations made to MoEF & CC but records for the same were not made available". In this connection, it is informed that the public hearing meeting for NCTPS Stage-III project was conducted on 05.03.2015 under the Chairmanship of the District Collector of Tiruvallur, along with the public and other Department officials. The proceedings of the public hearing were recorded. Wherein among other things, it has been very well intimated that in case of emergency the bottom ash would be disposed in the existing ash pond of NCTPS page No.3 of the recorded minutes of public hearing meeting - which is now submitted to the Committee.
- III. That the State level CZMA had very well been appraised about disposal of dry bottom ash in the Ash dyke of NCTPS in case of emergency- refer para.4 - (iv) of the report.
- IV. That the project presentation and additional details was made by the TNEB before EAC of GOI on 27.10.2015 and appraised of the route of the proposed bottom ash disposal line of NCTPS Stage-III project in addition to ash slurry pipelines of NCTPP Stage-1 and 2 crossing the Buckingham canal and backwater of Ennore creek to existing Ash dyke of NCTPS thro the CRZ delineation map prepared by Institute of Remote Sensing, Anna University/Chennai, showing ash pipe corridor in CRZ Zone IV- Refer para.4-X(Vi) of the report.Hence it is submitted that TNCZMA and MoEF& CC had been appraised with details and made available.
- V. That the CRZ map of Institute of Remote Sensing, Anna University/ Chennai, named 'Demarcation of HTL/LTL and CRZ

*A. Manimela*

CHIEF ENGINEER

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delineation for NCTPP Stage-III (1 X 800 MW) Project' showing revised layout showing all the units of NCTPS and its facilities of the Ash Line corridor of NCTPS Stage 1, 2 and 3 crossing the water bodies coming within CRZ-IB zone Buckingham Canal and Kosasthalaiyar River up to the existing Ash Dyke of NCTPS for the disposal of ash through pipelines as being done at present in the other two phases of NCTPS Stage 1 and 2, has also been submitted then.

- VI. That as mentioned the Rapid EIA report, Fly Ash utilisation will be met at 50% within target date of one year from the date of commissioning, 70% within target date of two years from the date of commissioning, 90% within target date of three years from the date of commissioning and 100% within target date of four years from the date of commissioning. From the above Rapid EIA report, it could be seen that for disposal of Fly Ash during initial years of operation, Fly ash disposal system is required for wet disposal to ash pond in slurry form for which pipeline is essentially required. This has also been furnished in the Rapid EIA report which mentions that Fly ash disposal system will also contain a provision for wet disposal to ash pond in slurry form.
- VII. That the capacity of fly ash storage silos are of one day capacity (24 Hours) only and during contingency of truckers strike, etc. disposal of fly ash including bottom ash has to be disposed to the existing Ash Dyke of NCTPS through pipelines only for which the proposed construction of ash pipelines is required.
- VIII. That the Rapid EIA report and the aforesaid CRZ map also shows and mentions about the place allotted for the existing Ash Pond of NCTPS and the disposal of ash through pipeline as being done at present for the other two existing Power Plants. It has also been mentioned in the Rapid EIA report that it is proposed to utilize the Ash Dyke of NCTPS for bottom ash disposal in case of emergency.
- IX. That for disposal of Fly ash during initial years of operation, disposal through pipeline is essentially required.

*A. Manimoles*

- X. That laying off Ash Slurry pipeline for the project has also been informed to the MoEF& CC also as detailed below.
- XI. That the project presentation and additional information was made by TANGEDCO before the Expert Appraisal Committee of GOI on 27.10.2015 along with combined Layout of NCTPS complex prepared by the Institute of Remote Sensing, Anna University, Chennai, depicting various units of NCTPS Stage I, II and III which clearly shows the Ash pipe corridor containing Ash disposal slurry pipe line of Stage I, II and III crossing B'Canal, back water leading to existing NCTPS Ash dyke.
- XII. That to explore various avenues for utilization of Bottom ash, it has also been submitted that ash would be issued to brick manufacturing units and during emergency fly ash/Bottom ash would be pumped in the form of slurry to the existing Ash dyke of NCTPS.
- XIII. That in the presentation submitted to MoEF& CC on 27.10.2015, the Ash slurry disposal pipelines crossing B'Canal and Back waters in CRZ zone IV leading to Ash dyke has been clearly depicted.
- XIV. That from the foregoing, it is stated that the CRZ map and EIA report shows the pipelines and all the project details had been disclosed to the MoEF& CC and discussed in the public hearing held on 05.03.2015.
- XV. That as the CRZ map of Institute of Remote Sensing, Anna University/ Chennai and the Rapid EIA report are the required documents submitted to the State level CZMA and then the documents are submitted to the MoEF& CC for issuance of the EC and CRZ clearance, the work of laying of pipeline for discharge of ash slurry across the Buckingham Canal and Kosasthalaiyar River has been very well depicted while applying for the EC and CRZ clearance itself.
- XVI. That considering all the above MoEF& CC had issued combined Environmental Clearance and CRZ Clearance for the above NCTPP Stage-III project (Expansion unit of NCTPS) on 20.01.2016 with various conditions.

G. Manimolob

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- XVII. That as per the EIA Report - "Ash water shall be collected, treated and reused for ash slurry making and 100% fly ash utilization will be met after 4<sup>th</sup> year of commissioning of the Unit".
- XVIII. That in the Environmental Impact Assessment report submitted to the District and State Coastal Zone Management Authority and MoEF& CC, it has already been informed that NCTPS Stage-III is only an expansion unit of NCTPS and existing ash dyke of NCTPS will be utilized for Stage-III for disposal of dry bottom Ash and fly ash during emergency condition. 100% Fly Ash utilization will be met only after 4<sup>th</sup> year of commissioning of unit. During first, second and third year of operation only 50%, 75 % and 90% of fly ash will be utilized and balance will be disposed to the Ash dyke of NCTPS. Hence Ash Slurry pipe lines are to be laid for collecting Ash water and reuse and to dispose Ash during initial years of operation and during emergency/ contingency situations arises during Truckers strike due to non- lifting of Fly Ash by off takers which will lead to stopping of the Power plant and in turn loss of generation since the power plant will be operated 24 hours to maintain the power grid.
- XIX. That the following paragraph was submitted to the committee -

*"As per CRZ 2011 rules under para.4(i) (a), water front and foreshore facility only requires specific CRZ clearance and the above ash slurry pipeline coming in CRZ zone IV is a permitted activity and not a water front/foreshore facility".*

Hence it is submitted that for those projects which are listed under this notification and also attract EIA notification 2006 for such projects clearance under EIA notification only shall be required subject to being recommended by the concerned state CZMA. On this score, EC itself is sufficient which covers both CRZ and Environmental clearance of Thermal power project since Ash slurry pipeline and Ash dyke are integral part of Thermal power plant.

G. Mani Mohan

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- XX. That all the necessary, permission of State PWD (Authority of Inland water body) has been obtained before commencing the mandatory ash pipe line work of NCTPS Stage III in the existing ash corridor along the other side of patrolling road for the convenience of maintenance work.
- XXI. That with respect to the report of the Joint Committee, it is submitted that the finding of the committee that CRZ clearance was not obtained for the laying of pipelines for the transport of ash slurry is erroneous and unsustainable for the reason that the said construction of the pipeline is an allied activity related to the establishment of the approved NCTPS Stage-III project, for which the EC and CRZ clearances and approvals have already been accorded. In reference to the same, it is submitted that the MoEF & CC vide Notification No.19-31/2015-IA-III dated 27.02.2015, has observed that activities which are allied to the establishment of the approved project **including the construction of temporary bridges etc, will not amount to deviation from clearance that was granted.** Hence, it is submitted that the said construction of the pipeline is well within the norm.
- XXII. That since the Committee has recommended to resume the activity only after obtaining amendment to the existing CRZ clearance from a MoEF& CC, further action will be taken only after requesting a necessary clarification from MoEF in this regard and ensuring the amendment to the EC if necessary.
- XXIII. That the ash pipeline is an incidental / ancillary activity necessary for the operation of the thermal power plant and the same is permissible under the CRZ areas as per the notification of the MoEF& CC and CRZ clearance has been issued for the project.
- XXIV. That the project is an approved project and there is no deviation and as there is no deviation from the approved project

*A. Manimol*

the erection of pipelines is not an illegal act. I further submit that 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.

- XXV. That, though there is no specific mention of CRZ clearance for ash slurry pipe lines of Stage-III project, there is no violation on the execution of ash slurry pipe lines of NCTPS Stage-III in the existing ash line corridor of NCTPS.

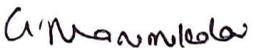
**Recommendation – 2 of the Joint Committee**

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

**Action Taken/Present Status on Recommendation -2:**

- a. That the ECHS works in the water body area has been temporarily stopped on 27.07.21. As requested by Revenue officials, EPC contractor, M/s.BHEL has been informed to remove the filling sand with immediate effect. Removal of filling sand has been started on 04.08.2021 and removal completed from Pier No.12 to Pier No.19 (19500/25000 cum) and removal of the filling sand in the balance area are under progress.
- b. That in order to comply the directions issued by the Hon'able NGT (SZ) committee, M/s. BHEL have been informed to take necessary action on war footing basis to cut the already cast piles located in the water body upto the river bed level including removal of dumped sand within October'31, 2021.

**Recommendation – 4 of the Joint Committee :**

  
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 TNEB, CHENNAI-600 120.

*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 Hon'ble National Green Tribunal in Applications No.8 of 201,152 of 2016 & 198 of 2016.*

**II. Action Taken/Present Status on Recommendation - 4:**

- I. **That in 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.
- II. **That in ASDL No.2** - (5511 mtrs ) - 1160 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.
- III. **That in 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.
- IV. That 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 .Supply of pipes has been delayed due to Covid-19& lock down.
- V. **That in 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 Head quarters 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.
- VI. **That in 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.

*G. Manimolai*

- VII. That 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.
- VIII. That since procurement process got delayed and consequently works are also getting delayed.

**Recommendation - 5 of the Joint Committee**

*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/Present Status on Recommendation - 5:**

- i. That 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 - 6 of the Joint Committee**

*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/Present Status on Recommendation - 6:**

- i. That work has been awarded for cleaning the area where ash leak occurs and to transport the ash to ash dyke.

*G. Manimolalar*

**Recommendation - 7 of the Joint Committee**

*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/Present Status on Recommendation 7:**

That 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.

**Committee Recommendation - 8 of the Joint Committee**

*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/Present Status on Recommendation 8:**

That the old damaged pipe after replacement are being devoluted to NCTPS Store and in addition steps have been taken to devolute all the old damaged scattered pipe to NCTPS stores. More than 95% of the retrieved pipes have been devoluted to stores. Balance 5% will be completed within two days.

**Recommendation - 9 of the Joint Committee**

*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*

*A. Manimolai*

as to prevent the disposal of ash into Kosasthalaiyar River, Buckingham canal etc. Till the replacement of existing pipe lines.

**Action Taken/Present Status on Recommendation - 9:**

That 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.

**Committee Recommendation - 10 of the Joint Committee**

*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/Present Status on Recommendation - 10:**

- i. **Kosasthalaiyar river:** That 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. 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 Mar'22.
- ii. **Buckingham Canal:** That PWD has desilted the Buckingham canal and dumped the silt on the banks. 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 Mar'22.

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

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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 PWD)	4.35 lakhs m <sup>3</sup> (assessed by PWD)	4.35 lakhs m <sup>3</sup>	4.35 lakhs m <sup>3</sup>	15.06 .2020 to Dec'20	Out of 4.35 lakhs m <sup>3</sup> ash 2.50 lakhs m <sup>3</sup> ash lifted by M/s.TPIPL. Balance 1.85 lakhs m <sup>3</sup> ash lifting work is under progress.	Used for land filling by TPIPL near NCTPS-I ash dyke

**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	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
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*G. Manimela*

previous committee in OA 8/2016							
77,331 m <sup>3</sup> (from Ch.20.00 to 22.40 Km)	56,669 m <sup>3</sup> (assessed by PWD) (From Ch.20.00 to 22.40 Km)	1,34,000 m <sup>3</sup> (assessed by PWD) (From Ch.20.00 to 22.40 Km)	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 L. Balance 19,600 m <sup>3</sup> ash lifting work is under progress.	Used for land filling by TPIPL near NCTP S-I ash dyke

iii. That, further an estimate has been evolved to remove the ash deposited in Buckingham canal for 200 m length at pipeline crossing by NCTPS-II based on the letter received from the District Collector, Thiruvallur.

**Recommendation - 11 of the Joint Committee**

*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/Present Status on Recommendation - 11:**

*C. M. N. M. S. S.*

That the leakages through Ash slurry disposal lines have been minimized now and the leakages of ash slurry in water bodies have been averted to the maximum extent. It is submitted that as all we know, **TANGEDCO is a service oriented organisation which provides free power supply to agriculture services, weavers, huts, and also provides power supply to domestic consumers at subsidiary rates. Moreover TANGEDCO is now facing severe financial crunch. Hence, it is prayed and submitted that the assessment by the committee to remit the environmental compensation of Rs. 4,12,20,000/-(Rupees four crore twelve lakhs & twenty thousand only) is very huge and a burden to TANGEDCO.** Hence it is requested that NGT committee may please reconsider and recommend to waive off the Environmental compensation. It is also submitted that already TANGEDCO have remitted an environmental compensation of Rs.16.461 Crores for NGT OA No. 8 of 2016 for the same cause.

**Committee Recommendation - 12 of the Joint Committee**

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

**Action Taken/Present Status on Recommendation - 12:**

That the work was awarded for providing dust net/mesh of size 2mm X 2mm near Cheppakkam Village to a length of 324 m and height of 3 m over bund already formed has been issued to the contractor and the work will be completed before Nov-2021.

**Recommendation - 13 of the Joint Committee**

*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.*

*G. Manimolala*

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

**Action Taken/Present Status on Recommendation - 13:**

- i. That for NCTPS-1, Maximum number of ESP fields is kept in service in all the three units so as to maintain the emission within the standard norms by close monitoring of ESP fields.
- ii. That every year the ESP internals have been overhauled and Renewal/rectification works are carried out if any damaged /worn out spares during AOH and available shutdown period. Hence the stack emissions are being maintained with notified new standards most of the time.
- iii. It is ensured that, the online continuous emission monitoring system (OCEMS) installed in stage I & II are working properly, since, it has been reported by the TNPCB/CPCB whenever the exceedance of emission norms.
- iv. That for NCTPS-2, Renewal of field internals of 42 Nos. (Unit 1&2) is under progress and will be completed by May 2022. Tender for FGD is under process.

**Committee Recommendation - 14 of the Joint Committee**

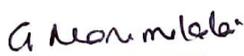
*The unit shall strengthen the earthen bund laid towards Seppakkam village and ensure that runoff from ash dyke or ash depositions are not carried to villages. The unit shall provide a drain before the bund so that runoff water is collected in drains and can be lifted back to ash dyke.*

**Action Taken/Present Status on Recommendation - 14:**

i. That a temporary bund has already been formed adjacent to Cheppakkam Village to prevent the entry of water into the Village. For strengthening the earthen bund and forming toe drain, IIT Chennai have been appointed as Consultant. The report is received 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.

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

  
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 NORTH CHENNAI THERMAL POWER STATION  
 TNEB, CHENNAI-600 120.

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 26<sup>th</sup> day of October, 2021.

*G. Manimekalai*  
**9<sup>th</sup> RESPONDENT**  
**& for 10<sup>h</sup> RESPONDENT**  
CHIEF ENGINEER  
NORTH CHENNAI THERMAL POWER STATION  
TNEB, CHENNAI-600 120.

**VERIFICATION**

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 26<sup>th</sup> day of October, 2021.

*G. Manimekalai*  
**9<sup>th</sup> RESPONDENT**  
**& for 10<sup>h</sup> RESPONDENT**  
CHIEF ENGINEER  
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