

Item No.15 to 17:

BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Original Application No.08 of 2016 (SZ)

With

Original Application No.152 of 2016 (SZ)

With

Original Application No.198 of 2016 (SZ)

(Through Video Conference)

IN THE MATTER OF:

R. Ravimaran S/o. Ramachandran
No.42, Beach Road, Thazhankuppam,
Ennore, Chennai.

...Applicant(s)

Versus

Union of India,
Represented by its Secretary,
The Ministry of Environment, Forests and Climate Change,
Jorbagh, New Delhi and Ors.

...Respondent(s)

With

Meenava Thanthai
K.R. Selvaraj Kumar
Meenavar Nala Sangam
Rep. by its President M.R. Thiyagarajan
Royapuram, Chennai

...Applicant(s)

Versus

The Chief Secretary,
Government of Tamil Nadu,
Secretariat, Chennai & Ors.

...Respondent(s)

With

Meenava Thanthai
K.R. Selvaraj Kumar
Meenavar Nala Sangam

Rep. by its President M.R. Thiyagarajan
Royapuram, Chennai

...Applicant(s)

Versus

The State of Tamil Nadu,
Rep. by its Chief Secretary to Govt.
Secretariat, Fort St. George,
Chennai & Ors.

...Respondent(s)

Date of hearing: 30.11.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER

O.A. No.08/2016 (SZ):

For Applicant(s):

Mr. A. Yogeshwaran.

For Respondent(s):

Mr. G.M. Syed Nurullah Sheriff for R1.
Mr. Vijay Mehanath for R2, R3.
Mr. M.T. Arunan for R4.
Mr. S. Sai Sathya Jith for R5, R6.
Dr. D. Shanmuganathan for R7, R8.

O.A. No.152/2016 (SZ):

For Applicant(s):

Mr. K. Mageswaran.

For Respondent(s):

Dr. D. Shanmuganathan for R1, R2, R4.
Mr. S. Sai Sathya Jith for R3, R5.
Mr. M.T. Arunan for R6.
Mr. R. Thirunavukarasu for R7.

O.A. No.198/2016 (SZ):

For Applicant(s):

Mr. K. Mageswaran.

For Respondent(s):

Dr. D. Shanmuganathan for R1 to R7, R9.
Mr. S. Sai Sathya Jith for R8, R10.
Mr. Vijay Mehanath for R11, R12.

ORDER

1. As per order dated 22.11.2021, this Tribunal had considered the reply statement filed by the TANGEDCO in O.A. No.162/2021 (SZ) regarding the implementation of recommendations in Para 32 which was extracted in Para (7) of the order and further, we have considered the reply submitted by the TANGEDCO in O.A. No.122/2021 (SZ) and also considered the order passed in O.A. No.122/2021 (SZ) on the last hearing date which was extracted in Para (10) of the order and also considered the reply statement submitted by the TANGEDCO and Para 41 of their reply was extracted in Para (11) of the order and also considered the report submitted by the Tamil Nadu Pollution Control Board in O.A. No.122/2021 (SZ) signed by the officer on 02.11.2021 and e-filed on 03.11.2021 which was extracted in Para (13) of the order and then, passed the following order:-

"14. In this report also they have reiterated the deficiencies in respect of maintenance of the pipelines of the existing thermal power plants owned by TANGEDCO and certain environmental compensation was imposed and that was deposited by them as well.

15. Learned Counsel appearing for the applicant Mr. A. Yogeshwaran submitted that these incidents are recurring resulting in large scale environmental damage. Whenever, such things are brought to the notice of the Tribunal, they are only taking steps to remove the fly ash slurry deposited on account of the breach and that will not remedy the situation in toto. Some study will have to be conducted regarding the remediation process of damage caused on account of the same as has been suggested by

the Joint Committee appointed by the Tribunal in 2017 itself. Thereafter no such study has been conducted by TANGEDCO for the purpose of taking remediation process. That also will have to be considered for the purpose of permanently resolving the issue in that area.

16. We are also not satisfied with the manner in which the replacements of damaged pipes are being carried out by TANGEDCO. Further, it is also seen from some of the reports filed by them that they are going to replace the same with old pipes which they have removed from their own decommissioned units but that will not help the purpose as we do not know the conditions of those pipes and also how long it can withstand the process and if old pipes of de-commissioned units are used, the possibility of breach being recurring regularly cannot be ruled out and that will be a continuing nuisance for the people in the locality besides damage to the environment. So, it is high time for them to replace the same with new pipes and suggest as to what is the timeline required by them for that purpose and that too they are not expected to take long time as already the people in the area are suffering and environment is adversely affected due to their negligent act for the past 5 to 6 years at least, though it may be for a much longer period, if it is traced to its origin.

17. So, we feel that short time can be given to TANGEDCO to come with an action plan with shorter time line for replacing the pipes and stating the difficulties they are facing for the purpose of procuring funds and administrative sanction, then necessary direction can be given to the higher level officials to deal with the same and remedy the situation. They are also directed to come with the report regarding study if any, conducted by TANGEDCO themselves for the purpose of implementing the remediation process through an independent agency as recommended by the Joint Committee in the year 2017. They are directed to submit these reports and action plan on or before 30.11.2021. If they did not come with a proper action plan to the satisfaction of this Tribunal, then this Tribunal will be compelled to pass some coercive orders to implement the same with shorter time line and also appoint an independent committee to go into these aspects and submit a report at the expense of TANGEDCO.

18.The Registry is directed to communicate this order to the official respondents including the Chairman, TANGEDCO for their information and compliance of the direction.”

2. The case was posted to today for consideration of further action taken report and also report as directed by this Tribunal and also considering the question regarding study in respect of remediation process (if any) undertaken.

3. Respondents No.9 & 10 have filed a report in O.A. No.162/2021 in the form of an undertaking dated 29.11.2021, which was not e-filed, but hardcopy has been handed over to us for our perusal with an undertaking that he will e-file the same immediately which reads as follows:-

“UNDERTAKING FILED ON BEHALF OF THE 10th RESPONDENT

I, R.Ramkumar, son of Ramdas, aged about 58 years residing at A2 Power Apartment 25, Zackaria Colony Main Road Choolaimedu, Chennai 600 094 , do hereby solemnly affirm and sincerely state as follows:

1. I state that I am the Chief Engineer, representing the 10th Respondent herein and as such I am well acquainted with the facts of the case from the available records. I am filing this undertaking for myself and on behalf of Respondent No.9.

2. I state that this Hon'ble Tribunal on 22.11.2021 was pleased to pass the following order:

"17.So, we feel that short time can be given to TANGEDCO to come with an action plan with shorter time line for replacing the pipes and stating the difficulties they are facing for the purpose of procuring funds and administrative sanction, then necessary direction can be given to the higher level officials to deal with the same and remedy the situation. They are also directed to come with the report regarding study if any, conducted by

TANGEDCO themselves for the purpose of implementing the remediation process through an independent agency as recommended by the Joint Committee in the year 2017. They are directed to submit these reports and action plan on or before 30.11.2021. If they did not come with a proper action plan to the satisfaction of this Tribunal, then this Tribunal will be compelled to pass some coercive orders to implement the same with shorter time line and also appoint an independent committee to go into these aspects and submit a report at the expense of TANGEDCO."

3. I state that pursuant to the said order and in compliance of the directions therein, the following present status/action taken report is submitted as hereunder.

4. I state that In North Chennai Thermal Power Station-I, 60% of Ash generated is disposed as fly ash to Cement Companies through open tender. Rest of the Ash being handled as wet Ash and the same is disposed as Ash Slurry into the Ash Dyke. The wet Ash is also shipped to some extent for ground filling such as Road filling etc., utmost care is taken to dispose the Ash to maximum extent securely.

5. I state that in North Chennai Thermal Power Station-I (NCTPS-I), 5 Nos. Ash Slurry Disposal Lines (ASDL) were erected in the year 1994, for conveying Ash slurry from NCTPS-1 into Ash Dyke for about 5 km each.

6. I state that the above pipelines are being exposed in saline atmosphere and carrying Ash slurry which is in abrasive nature. Hence the above pipelines tend to get corrosion & erosion. The most damaged pipelines were identified and replaced in piecemeal manner. All the above five pipelines have fully corroded since they have served its full lifetime.

The present status of action taken on replacement of eroded ASDL Pipelines:

ASDL No.1 & 5 - (5129 mtrs each) - Administrative approval is under process and the replacement of entire length of both pipelines will be completed by June 2022. Meanwhile both the above pipelines have been replaced by using the released pipes from ETPS and it disposes Ash slurry reasonably.

ASDL No. 2 - (5511 mtrs) - 1728 meters of new cast basalt pipe lines have already 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.

ASDL No.4 - (4942 mtrs) - Tender for procurement of 4942m of new cast basalt Pipes is under process and will be completed by May 2022.

7. I state that due to Covid-19 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 and hence the supply & erection works in ASDL 2 & 3 are getting delayed.

8. I state that the Ash deposits of about 4.35 Lakh Cum in the Kosasthalaiyar River for a length of 2.4 kms from NCTPS main Gate to KPL main Gate has been desilted at a cost of Rs. 28.5 Crore through PWD during the period from June to Dec' 2020.

9. I state that similarly Ash deposits of about 134 Lakh Cum in the Buckingham Canal for a length of 2.4 Kms NCTPS main Gate to KPL main Gate has been desilted at a cost of Rs. 66.23 Lakhs through PWD during the period from June to Dec' 2020.

10. I state that as per the direction of District Collector Thiruvallur, Ash deposits of about 8813 Cum in the Buckingham Canal on the northern and southern sides of the Ash Slurry Pipelines of NCTPS-I & II has been desilted for a length of about 200 mtrs at an expenditure of 17.7 Lakhs during the period from 24.10.2021 to 15.11.2021.

11. I state that ash dyke Bund and ASDL Bund strengthening works are being taken up continuously. Also ASDL supplying sleepers are replaced / repaired then and there to improve ASDL system.

12. I state that necessary steps are being taken by planting Bamboo Saplings for greening throughout the area of Ash Slurry Disposal Lines from North Chennai Thermal Power Stations (NCTPS-I & II), up to Ash Dyke through Social Forestry Scheme by outsourcing the works to Forest Department.

Hence, it is humbly prayed that this Hon'ble Tribunal may be pleased to take the present undertaking on record and thus render justice."

4. It is seen from the undertaking that they have undertaken to replace the damaged pipes with new pipes, instead of replacing the same with the old pipes available from their decommissioned unit, as mentioned by them in the earlier report.
5. So, we make it clear that all the pipes which are damaged have to be replaced by new pipes within the time line mentioned by them in the present undertaking, at the most by June- 2022 and they will have to file a periodical compliance report before this Tribunal regarding the same.
6. While the work of replacing the damaged pipelines, the TANGEDCO is directed to use only the fully completed replaced pipeline alone (ASDL-3) for carrying the fly ash slurry to the ash pond till the other pipeline work is completed.
7. In the meantime, if they have replaced any of the lines by new pipeline, then the TANGEDCO is at liberty to approach this Tribunal for modification of this order to use that pipeline as well for that purpose.
8. The learned counsel appearing for the applicant in O.A. No.08/2016 (SZ) submitted that earlier an Expert Committee was appointed with certain experts on this field who have suggested some remediation

measures and on that basis, no work has been undertaken even now. Merely because, fly ash that has been deposited in the river basin is removed alone will not be sufficient and impact caused on account of the same and the remediation process also will have to be studied and also will have to be undertaken by the TANGEDCO for the purpose of complete restoration of the damage caused to the environment.

9. The learned counsel has suggested the names of **(i)** Santha Sheela Nair, I.A.S (Retd). Former Vice-Chairperson, State Planning Commission. Former Secretary, Municipal Administration and Water Supply, Government of Tamil Nadu. Former CMD, Metrowater, **(ii)** Dr. Balaji Narasimhan, Head, Environment and Water Resources Engineering, Dept. of Civil Engineering, IIT-Madras. (Water Resources Expert), **(iii)** Dr. Indumathi Nambi, Professor, Environment and Water Resources Engineering, Department of Civil Engineering, IIT-Madras, (Remediation Expert), **(iv)** Prof. D. Narasiman, Retired HOD, Department of Botany, Madras Christian College, Member, Tamil Nadu Biodiversity Authority and **(v)** Dr. Jayshree Venkatesan, Care Earth, Restoration Ecologist. Former member, Tamil Nadu Coastal Zone Management Authority.

10. Considering the circumstances, we feel it appropriate to constitute a Joint Expert Committee comprising of the above said persons and one Marine Biologist whose name will have to be furnished by the Tamil Nadu Pollution Control Board as suggested by us and official representatives of the Tamil Nadu Pollution Control Board and the Integrated Regional Office, Central Pollution Control Board, Chennai will also be part of the committee along with the Director, Department of Environment, State of Tamil Nadu.

11. The Joint Expert Committee is directed to look into the issues namely,
- whether any damage has been caused to the soil, water and associated flora and fauna on account of deposit of fly ash in the Kosasthalaiyar River Basin in Ennore Back water complex,
 - If there is any damage caused to the soil, what is the nature of remediation to be undertaken by the TANGEDCO to restore the damage caused to the environment,
 - Assess environmental compensation payable for such damage caused and its impact on the marine biology,
 - Suggest the possibility of providing green belt of such nature which can be possible to protect the riverine ecology in that area, so as to avoid further encroachment and further deterioration being caused on account of such unauthorized activities.

12. Mrs. Santha Sheela Nair, I.A.S (Retd.) will be the Chairperson and the Director, Department of Environment, State of Tamil Nadu will be the Member Secretary for the Joint Expert Committee and the Director, Department of Environment is directed to co-ordinate and provide necessary logistics for inspection and submission of the report. After finalizing the remediation methods, the Director, Department of Environment is directed to prepare the Detailed Project Report (DPR) for carrying out the remediation process with time lines.

13. The expenses for conducting such studies will have to be met by the TANGEDCO.

14. The Joint Expert Committee is directed to prepare the report including the preparation of Detailed Project Report (DPR) for remediation process within a period of **4 (Four) months** and submit the same before this Tribunal on or before **18.04.2022** by e-filing in the form of Searchable PDF/OCR Supportable PDF and not in the form of Image PDF along with necessary hardcopies to be produced as per Rules.

15. The Registry is directed to communicate this order to the members of the Joint Expert Committee, Chairman, TANGEDCO, Chief Secretary, State of Tamil Nadu, Principal Secretary for Environment and Principal Secretary for Energy by e-mail immediately for their information and compliance of the direction.

16.For consideration of further reports and compliance report, post on
18.04.2022.

Sd/-

.....J.M.
(Justice K. Ramakrishnan)

Sd/-

.....E.M.
(Dr. Satyagopal Korlapati)

O.A. No.08/2016,
O.A. No.152/2016,
O.A.No.198/2016,
30th November, 2021. Mn.

