

BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE, CHENNAI

O.A.NO.256 OF 2020 (SZ)

IN THE MATTER OF

Tribunal on its own motion suo motu
Based on the News Item in News Desk
Magazine dated 11.11.2020, Air Pollution
And Industries, These six industries in North
Chennai are polluting the air for more than
half the year, the North Chennai Thermal Power
Station along Ennore Port

With

Union of India and others : Respondents

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It is certified that the above documents are copies of the Original.

Dated at Chennai this the 21st day of September 2025.


Counsel for Respondent No. 11

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**COMPLIANCE REPORT OF THE RESPONDENT NO.11 FOR AIR POLLUTION
CONTROL MEASURES**

I, K.Muthukrishnan, son of Kandhan , aged about 59 years, having office at Chief Engineer, North Chennai Thermal Power Station -1, Chennai - 600 120, do hereby solemnly affirms and sincerely states as follows:-

1. I submit that I am the Chief Engineer of Tamil Nadu Power Generation Corporation Limited (TNPGL - Erst while TANGEDCO), North Chennai Thermal Power Station -1, representing the 11th respondent herein and as such I am well acquainted with the facts of the case from the records and I am authorized to file this action plan on behalf of the 11th respondent.


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2. I submit that in order to control air pollution following measures taken by us.

Sl.No	Direction of the Hon'ble Tribunal	Action Taken by TANGEDCO
1.	The Tamil Nadu Pollution Control Board should constitute a dedicated team to monitor the OCEMS data. The industries should also create an internal mechanism to closely monitor the functioning of OCEMS as well as critically analyse the data for immediate corrections and shall submit a monthly analysis report to the Tamil Nadu Pollution Control Board. Senior Officers of TNPCB shall conduct a monthly review with designated officers of major industries in different industrial parks.	In NCTPS-I, OCEMS data have been already extended to Care Air Centre, IEMS /TNPCB and the data is being communicated.
2.	The CPCB should constitute a committee which may also include experts in the field of air pollution as well as water pollution to examine the existing CPCB Protocols for OCEMS and submit revised Protocols to the Tribunal within a period of 3 (Three) months.	This direction is pertaining to CPCB
3.	The Committee may also suggest the periodicity at which the said sensor / equipment need to be calibrated. Once the periodicity is fixed, a mechanism may be put in place to check whether the calibration of sensors /equipment is being undertaken by the industries as per the timeline fixed, failing which, necessary action may be taken including the imposition of environmental compensation.	This direction is pertaining to CPCB
4.	The CPCB may constitute a new committee or revive the earlier committee constituted based on directions issued in Original Application No.195 of 2016 (SZ) [Tandur Citizens Welfare Society Vs. Government of Telangana and Ors.] dated 24.08.2021 to once again examine the issue of interlocking/ alerting / alarm systems, considering the advancements in Machine learning and Artificial Intelligence, that will ensure fool proof operations of the OCEMS system.	This direction is pertaining to CPCB


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<p>5.</p>	<p>The TNPCB is directed to verify the list of industries which are yet to install the OCEMS system. In case, some of the units have not yet been mandated to install the OCEMS system, the TNPCB is directed to issue instructions to all the units to install the OCEMS system within the shortest possible time, failing which, appropriate action should be taken. The TNPCB is directed to report the reasons for not directing or exempting certain industries from establishing the OCEMS. Failure by TNPCB also would attract fine plus compensation.</p>	<p>OCEMS has been already installed at all the Stacks of NCTPS-I and data connectivity has been established to Care Air Centre/IEMS / TNPCB and the data is being communicated.</p>
<p>6.</p>	<p>Industries should switchover completely to cleaner fuels including conversion of usage of liquid fuel into gaseous fuels within a stipulated period of time. During the interregnum, the industries may be directed to use low sulphur fuels till the conversion to gaseous fuels is completed.</p>	<p>The Boilers at NCTPS-I are specifically designed for firing Sub - Bituminous Coal as the primary fuel. Their design, combustion system, and auxiliary equipment are optimized for this fuel type. Due to technical limitations, alternative fuels such as natural gas, biomass pellets, or bio fuels cannot be utilized without extensive retrofitting, which would compromise operational safety, efficiency, and reliability. Hence, the existing system necessitates continued usage of sub-Bituminous Coal as the primary energy source.</p>
<p>7.</p>	<p>Industries shall install Flue Gas Desulfurization (FGD) systems wherever it is applicable without fail before the time line fixed by MoEF&CC without seeking extension of time. All the units having Electrostatic Precipitator (ESP) should upgrade to the latest generation of ESP available today within a reasonable period of time. For the up-gradation, CPCB may provide necessary guidelines.</p>	<p><u>Installation of FGD :</u> A Tender was floated on 21.02.2021 for installation of semi dry Flue Gas De-sulphurization (FGD) system. Pre bid meeting was also conducted and while the clarifications on the pre bid meeting queries were being uploaded, the Board level Tender Committee of TNPGCL has directed that the tender may be lodged till the clarity of the policy of implementing FGD envisaged by NITI Aayog and recommended the same before the Board of TNPGCL for approval and hence, the Tender was lodged on 20.03.2025 (as per 6th Board meeting of TNPGCL held on 21.02.25 (Agenda No. PG-06 B-01).</p>


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Now, the Implementation of FGD is again initiated and in progress as per the MoEF & CC Gazette Notification dated 11.07.2025.

Electrostatic Precipitator (ESP):

R&M of ESPs are proposed and technical offer has been received from the OEM M/s. BHEL and evaluation is in progress.

However, In order to maintain performance of ESP the following rectification works have been carried out during the year 2023-2024 and 2024-2025.

During the year 2023-2024, in Unit-I 480 Nos. of Collecting Electrodes and 1620 Nos. of Emitting Electrodes have been replaced with new one in 3 Nos ESP fields.

In Unit -II, 640 Nos. of Collecting Electrodes and 2160 Nos. of Emitting Electrodes have been replaced with new one in 4 Nos. of ESP Fields.

Total Expenditure incurred :
Rs. 2,22,18,659/-

During the year 2024-2025, Complete replacement of 3 Nos. of ESP Fields in Unit-I and 12 Nos. of ESP Fields in Unit -III have been carried out as follows,

UNIT-I: 480 Nos. of Collecting Electrodes and 1980 Nos. of Emitting Electrodes have been replaced with new one.

UNIT-III: 1950 Nos. of Collecting Electrodes and 17280 Nos. of Emitting Electrodes have been replaced with new one.

Total Expenditure incurred :
Rs.5,90,57,950/-



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		<p>During the forthcoming Overhaul for the year 2025-26 (scheduled from 05.08.2025 to 14.01.2026) , it is also proposed to replace 14 Nos. of ESP fields (out of 24 Nos.) in Unit -I, 12 Nos. of ESP fields (out of 24 Nos.) in Unit -II and 8 Nos. of ESP fields (out of 24 Nos.) in Unit -III.</p> <p>Also a proposal for Modification / Up gradation of ESP is initiated and is in progress.</p>
8.	Industries shall install latest pollution control measures for reduction of NOx emissions, such as Selective Catalytic Reduction system / Selective Non-Catalytic Reduction system / low NOx burners with Over Fire Air (OFA) system to achieve the NOx emission standards.	In NCTPS-I, NOx Emission is well within the norms. Hence No system in respect of reduction of NOx emission is required and hence not proposed.
9.	All the industries discharging effluents may be directed by TNPCB to switch over to the ZLD system by granting a reasonable time frame. Only if ZLD systems are not technically feasible, ETPs/CETPs can continue.	ETP is available in NCTPS-II and is functioning. After neutralizing the effluent of DM plant in neutralizing pit, Effluent is sent to Common ETP available at NCTPS-II. Treated effluent is utilized for sprinkling water in coal yard to Control fugitive emission.
10.	A committee of experts in CPCB may meet periodically (preferably once in a quarter) to evaluate the advancements in pollution control equipment, especially those relating to the capture of Particulate Matter (PM),SO2, NO2 and other toxic air pollutants. In respect of existing industries, reasonable time may be granted to the industries, taking into account the cost involved and also the compliance status of the industries.	This direction is pertaining to CPCB
11.	The committee should also examine the technological advancements which are in place in other countries like installing air purifiers centrally in industrial areas as well as in urban pockets with heavy vehicular populations to reduce the pollution load.	This direction is pertaining to CPCB



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12.	<p>The Expert Committee of CPCB to come out with stricter pollution norms for the industries to be established areas earmarked for Industries as against the general norms for the establishment of industries in areas without or with only one or two industries in an area about the size of industrial parks. In respect of new Parks to be established the CPCB may also prescribe a buffer zone around the Industrial Area/Park. The CPCB and the SPCBs should work out special norms in industrial areas factoring in vehicular pollution, fugitive emissions, flare gas emissions and also a need for having higher stack height even for non-thermal power plants.</p>	<p>This direction is pertaining to CPCB</p>
13.	<p>The CPCB should re-examine the norms for the stack height for all point sources of emissions whether significant or not to ensure that they are designed according to the Good International Industry Practice (GIIP). The stack height should be established with due consideration to emissions from all other project sources both point and fugitive. Projects which have potentially significant fugitive sources of emissions can be directed to have special measures to reduce the same.</p>	<p>This direction is pertaining to CPCB Height of chimney is 275 meters in NCTPS-I which is as per the conditions stipulated by Minister of Environment and Forest Vide Lr.No.14/13/81/DN.2/1A.30.04.1987</p>
14.	<p>We also notice from the reports of the Joint Committee and Tamil Nadu Pollution Control Board that there are certain gaps in the pollution control measures adopted by the six industries and certain directions were issued by the Tamil Nadu Pollution Control Board to the respective Industries along with certain suggestions for improvement. We do not wish to repeat those directions and suggestions, except to state that the Tamil Nadu Pollution Control Board should fix a specific deadline for compliance with the directions and adoption of the suggestions. The Tamil Nadu Pollution Control Board should file a periodical compliance report once in 6 (Six) months before this Tribunal.</p>	<p>This direction is pertaining to TNPCB</p>


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15.	The environmental compensation imposed following due process should be collected and utilized by the Tamil Nadu Pollution Control Board for the conversion of the existing roads in the Manali Industrial areas into concrete roads to minimize the dust emissions from the vehicular population.	This direction is pertaining to TNPCB
16.	We are of the view that in areas where multiple industries are established, the CPCB may consider increasing the requirement of greenbelt area and increasing the density of tree population. In case of constraints of land, the Industries may be permitted to create greenbelt in the areas adjacent to the industries including in private lands. However, it should be made mandatory that the periphery of the industries have a thick green cover with the tallest growing native trees.	<p>The total area of the plant - 549 acres. Green belt area already developed - 161 acres. Balance to be developed - 20 acres. Balance 20 acres will be developed during this year 2025-26.</p> <p>It is submitted that, 27,865 Nos. of trees have been planted in NCTPS-I premises and being maintained which is nearer to the norms of 29,200 Nos.</p> <p>In addition, 3,000 Nos. Of tree saplings have been planted in ash dyke and being maintained.</p>
17.	We also direct that TNPCB/CPCB should also mandate that industrial parks/areas shall have only concrete roads with three to four rows of tree plantations to act as a buffer for trapping air pollutants.	This direction is pertaining to TNPCB
18.	It is recommended to create a corpus fund which shall consist of deposit of minimum 01% of the annual turnover from all the companies located in the Manali complex for the restoration of any affected area after the orders passed by the Tribunal. The said corpus fund shall be operated jointly by the Chief Secretary, Government of Tamil Nadu and the Additional Chief Secretary, Department of Environment, Forest and Climate Change and shall utilise for restoration of the environment and for constructing RCC roads in the entire affected area as per the decision taken by the said Committee. The said fund may be called as "Manali Environmental Relief Fund".	A Writ petition was filed before HIGH COURT OF JUDICATURE AT MADRAS to quash this direction and the above direction was quashed by the Hon'ble HIGH COURT OF JUDICATURE AT MADRAS vide its order dated 14.03.2024



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In view of above, steps and expenses are being made towards controlling pollution, it is most humbly pray that this Hon'ble Tribunal may be pleased to accept the compliance report and pass such or other orders as this Hon'ble Tribunal may be deem fit and proper in the circumstances of the case and thus render justice.

Solemnly affirmed at Chennai

This the 21st day of September 2025

And signed her name in my presence

~~BEFORE ME~~

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~~Advocate - Chennai~~



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Before me,

G. S. Ahluwalia

(1745/11)

Advocate, Chennai.