

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

OA No.314 of 2024

In the matter of:

Tribunal on its own motion **SUO MOTU** based on the News Item in The Hindu dt: 04.11.2024 titled, "***Residents stage protest against pollution caused by Vijayawada Thermal Power Station***".

**REPLY OF RESPONDENT NO.5 TO THE APPCB REPORTS DATED 10.06.2025
AND 28.08.2024**

1. The present reply statement is being filed in response to the status reports dated 10.06.2025 ("**June 2025 Report**") and 28.08.2025 ("**August 2025 Report**") filed by the Andhra Pradesh Pollution Control Board ("**APPCB**"), before this Hon'ble Tribunal. The present reply to the aforesaid reports may be read in conjunction with the Reply dated 10.06.2025 of the Answering Respondent, filed in the captioned proceedings.
2. In compliance with the directions dated 10.01.2025 issued by the Monitoring (Task Force) Committee of the APPCB, the Answering Respondent has been undertaking measures to improve and upgrade its pollution control measures, as per a detailed **25-point action plan dated 27.01.2025** submitted to the APPCB. Thereafter, the status of the activities mentioned in the said action plan as on 01.06.2025 and 22.08.2025, have been submitted to the APPCB.
3. On the Answering Respondent's compliance status of the 25-point action plan, the APPCB in its July 2025 Report, has observed that the following action points have been complied with/rectified by the Answering Respondent (Pages 14-16):

S.No.	Observation	Compliance
3.	The flyash is disposing from the bottom hoppers of the Electrostatic Precipitators (" ESPs ") of the Units 5 & 6.	Complied
4.	Leakage of the fly ash was observed from the ESP of Unit-7 (500 MW). The ash is storing openly at ESP bottom area and the same is lifting into trucks by JCB. Fugitive	Complied.

	emissions were observed at fly ash handling at Unit-7.	
6.	There is no fly ash and bottom ash conveying system provided at Unit-8 (800 MW) Stage-V i.e., 800 MW power plant and the ash storing openly at the bottom of the ESP. Fugitive emissions were observed large scale at ash handling area.	Fly ash conveying system provided at Stage-V i.e., 800 MW power plant.
18.	The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural canals and the water joining in to agricultural fields.	No discharges were observed during inspection.
23.	The online Particulate Matter (PM) values of the Stack attached to the 500 MW Stage-IV (Unit-VII) is in between 90 to 110 mg/Nm ³ thereby exceeding prescribed standard of PM-50 mg/Nm ³ . The SO ₂ parameter recorded as 900 mg/Nm ³ to 1180 mg/Nm ³ as against the standard of 200 mg/Nm ³	The industry has improved ESP performance.

4. In so far as the other action points are concerned, the Answering Respondent has filed status reports as on 01.06.2025 and 22.08.2025 informing the APPCB of its progress. In addition to the compliances confirmed by the APPCB in its July 2025 Report, the Answering Respondent has taken corrective measures and addressed the following:

S.No.	Observation	Compliance
2.	Ambient air quality monitoring conducted different locations at the industry and the monitored value for the Suspended Particulate Matter (SPM) is 90 to 261 Wm ³ (against the standard of 100 m ³).	Complied. Ambient Air quality in the surrounding villages is within the permissible limits.
5.	Fly ash is loading into trucks through JCBS instead of using pneumatic system.	Complied. At present no ash being dumped at ESP hoppers. Ash is being conveyed to silo & hydrobins through pneumatic system only.
18.	The industry is discharging ash contaminated water from the Southern side of the industry to the agricultural canals and the water joining in to agricultural fields.	Ash water is let into regular storm water drain (South side) and discharged to outside drains through temporary sedimentation tanks and clear water is allowed after settling of ash in the tanks.
19.	Ash accumulation was observed in the agricultural canal and in some of the	Ash is being removed from the canal and agricultural fields

	agricultural lands	channel by APGENCO
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5. The other action points out of the 25-point action plan, primarily concern the following:
 - (i) Improvement of performance of ESPs and stack emissions from the boilers (Sl. Nos. 1, 7, 8, 21, 22, 24),
 - (ii) Spillage/deposit of ash (Sl. Nos. 9, 10, 12, 20) & provision of hydrobins and sedimentation tanks and cooling towers (Sl. Nos. 13, 14, 15 & 16)
 - (iii) Storage of coal and coal dust emissions (Sl. No. 11, 17).
 - (iv) Continuous Ambient Air Quality Monitoring System (CAAQMS) (Sl. No. 25)

6. In so far as these aspects are concerned, appropriate corrective measures, as feasible, are being undertaken by the Answering Respondent and the progress of the same is being closely monitored by the APPCB. The above mentioned aspects have also been highlighted by the APPCB in its July 2025 Report, pursuant to inspections conducted on 12.03.2025 and 13.03.2025.

7. The Answering Respondent, is setting out its response to these specific observations of the APPCB contained in the July Report 2025 (at Pages 13 and 14):
 - (i) **The industry has not improved the performance of the ESPs attached to the Unit- I to Unit-VI.**

8. The management of the Answering Respondent has sanctioned a total amount of Rs. 119 Crores under the Environment Protection & Flyash Fund (EP & FF) budgets, for improving the ash handling systems of all its Units as listed below:
 - a. Rs.10 Crores on 06.12.2023 – Purchase orders have been placed and executed for procurement of spares, pumps & ammonia gas cylinders for dry fly ash handling systems of Stages I to IV.
 - b. Rs.18 Crores on 01.04.2024 – Purchase orders have been placed and executed for procurement of spares, pulleys, pumps, valves, rollers, spares of ESP, emitting electrodes for dry fly ash handling systems of Stages I to IV.
 - c. Rs.31 Crores on 26.12.2024 – Purchase orders have been placed and executed for procurement of spares, compressors, rectification of ESP internals, ball bearing, scrapper conveyors of dry fly ash handling systems in Stages I to IV, including bottom ash handling system.

- d. The Answering Respondent has allocated renovation modernization (R&M) budget of Rs.60 Crores for renovation of ash handling system in Units 5 and 6. The work order has been placed on M/s Nagajurna Engineering Projects on 03.02.2025. The works are in progress and are estimated to be completed by 31.03.2026.
9. While the performance of ESPs attached to Units 1 to 6 have improved, for further improvement, renovation and modernization proposals for Units 5 and 6 have been sent to APGENCO for sanction.
 10. The works pertaining to Stage-I (Units 1 & 2) are completed. 45 % of the works pertaining to Stage-II (Units 3 & 4), are completed. 84% of the works pertaining to renovation and modernization of Stage- III (Units 5 & 6) are completed against the purchase orders placed with the above budget.
 11. The Respondent states that efforts are being made to further improve the performance of ESPs by closely monitoring round the clock and increasing the quality/washed coal utilization to limit PM values, within the prescribed limit.
- (ii) **The online stack monitoring system provided to boiler-1, 2, 3 & 6 are not showing the SPM values**
12. The online dust monitor of Unit-6 is in working condition and the data is being uploaded to the Continuous Emission Monitoring System ("CEMS"). The data from August 2025 to October 2025, are annexed herewith.
 13. The latest upgraded online dust monitors have become available for Units 1, 2 & 3. However, due to non-availability of chimney lift, these dust monitors could not be installed. A purchase order was placed on M/s. Alikraft Craft, for supply and installation of chimney lift and the contractor is being vigorously pursued for supply, erection and commissioning of the lift. Once the installation of lift is complete, online dust monitors will be installed.

(iii) The industry is disposing the 'Once Through Cooling' water to Budameru channel and not operating the cooling towers of Units 1 - 6.

14. The feasibility and technical study for conversion from 'Once Through Cooling' system to closed cycle cooling system for Units 1 to 6 of the 5th Respondent was carried out by an external agency, TUV SUD South Asia Pvt Ltd., Mumbai and a report was submitted during November 2019. The report concluded that converting open cycle cooling system to closed cycle cooling system was not technically feasible in the existing project site. The same was informed to the Central Electricity Authority (CEA) with a detailed report, requesting for exemption *vide* letters dated 06.03.2021, 14.07.2021, 25.05.2022, 11.07.2022, 09.09.2022 and 06.06.2023. On 31.05.2023, a team of CEA Engineers visited the 5th Respondent's site in response to the request for exemption of closed cycle system. The letters dated 06.03.2021, 14.07.2021, 25.05.2022, 11.07.2022, 09.09.2022 and 06.06.2023, are annexed herewith.
15. The MoEF & CC issued an amendment notification dated 03.07.2025, regarding the installation of cooling towers, which states that the Ministry may, in consultation with the CEA and the Central Pollution Control Board (CPCB), for reasons to be recorded in writing, grant exemption to thermal power plants from installation of cooling towers. The MoEF Amendment Notification dated 03.07.2025 is annexed herewith.
16. Thereafter, letters dated 29.07.2025 were addressed by the Answering Respondent to the Secretary, MoEF & CC and Chairman, CEA with a request to consider an exemption from the installation of cooling towers for Stage I, II & III units as per the MoEF Amendment Notification. The final order from the CEA in this regard, is awaited. The letters dated 29.07.2025 are annexed herewith.

(iv) Ash dust spillages were observed along the National Highway from Jupudi area to Guntupalli and are causing fugitive emissions to the road travelers

17. The lorries at ash pond have been instructed to cover the body of the lorry fully with tarpaulins and they are being continuously supervised. Further instructions have been issued to the lorry drivers to avoid stopping the lorries on the National Highways. Photographs of the lorries are annexed herewith.

- (v) Open storage of crushed coal was observed without providing any fugitive dust containing measures such as covering the surface of coal stockpiles with tarpaulin sheets

18. A work order has been issued for construction of coal stock yard shed at the Answering Respondent's premises. A purchase order was placed on M/s. Saraswati Constructions, Secunderabad, for covering of crushed coal stock yard at Stage III & IV, with a shed. Further, soil testing at the proposed area of erection of shed has been completed and covering of coal at crushed stock yards with tarpaulins is under progress. After erection of the shed, the same will be done at other areas.

- (vi) Coal dust emissions observed at coal stocking yard, transit points and at nearby residential area around the coal stockyard

19. To avoid coal dust emissions at coal stock yard and transit points, the following measures have been undertaken:

- a. Pre-spray of water on wagons before tipping (Photograph annexed herewith);
- b. Grid spray at wagon tippers while tipping;
- c. Water sprinklers are used to sprinkle water on conveyors;
- d. Leakage arrested at transfer points.

20. Continuous spraying of water with fire monitors is being done at the coal stock yards to control coal dust emissions.

- (vii) The industry provided sedimentation tanks to the Units 1 to 6 and the overflow is joining into Budameru channel. Ash accumulation was observed in the Budameru drain at the discharge point

21. The industry has provided sedimentation tanks for Units 1 to 6. An agency M/s. SVS Suppliers, Guntupalli has been engaged for daily lifting of silt deposits from sedimentation tanks of Units 1 to 6 *vide* purchase order dated 18.08.2025. A copy of the purchase order dated 18.08.2025 is annexed herewith.

22. An exclusive Effluent Treatment Plant was proposed for treatment of effluents generated in Stage-I, II & III units with recycling arrangements in the main contract work of construction of Stage-V (1x800 MW) unit. The civil works and construction of clarifier for further treatment of power house along with construction of sumps for pumping arrangements for re-use and re-utilization of treated water are in progress and will be completed by the end of December 2025. The pumping of treated water from sedimentation tanks to ash pump house is being carried out without letting out into Budameru.

(viii) The industry provided sedimentation tanks to the Unit-7 and the overflowed water is discharging outside the industry premises.

The industry has not provided hydro bins for Stage I, II & III for bottom ash disposal and has not provided cooling tower for Stage-I to III as per consent conditions of CTO order dated 24.04.2023. The artificial cooling provided are utilized during summer season.

23. The overflow of water from hydrobin recycle sump areas will be reused for bottom ash and other operations. Hence, there will not be any discharges outside the plant premises. The ash settled in the sedimentation tank is being cleaned regularly and only clean water is being discharged.
24. The Answering Respondent conducted a feasibility study for provision of hydrobins, for Stages I to III, through Indure Pvt. Ltd, New Delhi and a draft feasibility report has been received. Hydro bins are not feasible for Stage I as Units 1 and 2 are older than 45 years. Hydrobins are also not feasible for Stage II Units 3 and 4 due to space constraints and since the bottom ashing is done through scraper conveyor system.
25. The feasibility study for construction of hydrobins for Units 5 & 6 has been completed and finalization of Detailed Project Report for providing Hydrobins for the said Units, is under progress.

- (ix) The online particulate matter parameter is not working for the Boilers 1, 2 & 3. The online particulate matter for Boilers 4, 5 & 6 are exceeding the stipulated standards of 100 mg/Nm³.
26. These aspects have been addressed under response to points (i) and (ii), above.
- (x) The online SO₂ values of Boilers 1 to 6 are exceeding the stipulated standard of 600mg/Nms.
27. The MoEF & CC, *vide* notification dated 30.12.2024 has extended the time line to comply with the SO₂ parameter, till 31.12.2027. The Answering Respondent undertakes to comply with the standards within the said time period.
- (xi) The online particulate matter values of the stack attached to the 500 MW Stage-IV (Unit-VII) is between 70 to 90 mg/Nm, thereby exceeding prescribed standard of PM- 50 mg/Nm.
28. The SPM values tabulated from the CEMS data from 01.11.2025 to 23.11.2025, are annexed herewith. The values are within a 2% variation from the standard.
29. Further, to maintain the PM values within the standards, each ESP shall be by-passed, intervals of thirty (30) days, to inspect and rectify any disturbance in the distances to be maintained between the collecting and emitting electrodes, to clear any ash build-ups inside the hoppers and to address any other issues in the evacuation system.
- (xii) The SO₂ parameter recorded as 700 mg/Nm to 1000mg/Nm as against standard of 200 mg/Nm
30. Engineering consultancy services for installation of wet limestone based Flue Gas desulphurization (FGD) systems for Stage-IV Unit-7 has been awarded to M/s. STEAG Energy Services India Pvt Limited. The amended purchase order dated 23.10.2025 is annexed herewith. The said system will aid in bringing down the SO₂ parameter. As mentioned above, the timeline for taking measures for controlling SO₂ emissions has been revised to 31.12.2027, vide MoEF & CC, Notification G.S.R. 787(E) dated

30.12.2024 and the Answering Respondent is taking measures to comply with this timeline.

(xiii) The industry has not connected the Stage V boiler online stack monitoring data to the APPCB server.

31. Erection of the lift has been completed. A tender has been floated by BHEL and finalisation of the contractor is under progress. Upon award of work, erection of the online stack monitoring equipment at 40m and 121m levels, will be completed by the end of March 2026.

(xiv) The Two CAAQM stations provided at B-Colony and towards railway wagon workshops are not in operation and are not updating any data.

32. The Answering Respondent has established Continuous Ambient Air Quality Monitoring System (CAAQMS) stations at three (3) locations viz., (1) near Accounts Office, (2) B-Colony and (3) near Railway Wagon Workshop. The CAAQMS provided at B-colony, Kondapalli is currently working and the data is being uploaded to the web portal of APPCB. The railway wagon workshop CAAQMS is partially working and uploading some parameters. It will be rectified at the earliest since certain spare parts are being procured from the United States.

(xv) The Board officials have conducted stack monitoring on 12.03.2025 and the SPM values submitted below exceed the Board standards:

SPM-Stage-II-Boiler (210 MW) of Unit-4-1355.0 mg/Nm

SPM-Stage-III-Boiler (210 MW) of Unit-5-953.0 mg/Nm

SPM-Stage-III-Boiler (210 MW) of Unit-6-924.0 mg/Nm

SPM-Stage-IV-Boiler (500 MW) of Unit-7-589.0 mg/Nm

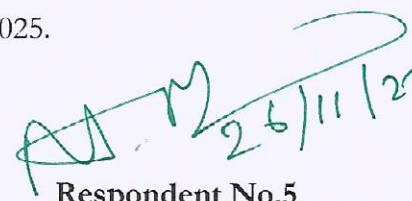
33. As mentioned above, continuous efforts are being taken to improve the performance of the ESPs of all the Units for reduction of SPM in the stack emissions. Annual overhaul works for Unit 4 will commence shortly. During this period, all ESP fields will be thoroughly inspected to ensure optimal stack emission performance.

34. The July 2025 Report contains a Complaint filed by Sri A. Punna Rao, D.No.59-2-1, 1st Lane, Ashok Nagar, Vijayawada, NTR District through Public Grievance Redressal System (PGRS) on 25.03.2025 (Refer Pages 17 and 19 to 24). The contents of the same are vague, certain sweeping allegations have been made without any basis whatsoever. While Units I and II are more than 40 years old, they are being operated to meet the power demands for the State. Further, the CEA, has directed not to retire old thermal units up to 2030 in view of the power shortage anticipated in the coming years. The Answering Respondent is one of the State's critical power plants and contributes to about 45% of the power demand. The Answering Respondent has taken significant measures to enhance and improve its pollution control mechanisms and continues to comply with the directions of the APPCB.
35. In so far as the complaint filed by Sri E. Yesu Babu, Kondapalli (V), Ibrahimpatnam (M), NTR District through Public Grievance Redressal System (PGRS) on 30.01.2025, vide Grievance No. NTR20250130412 regarding illegal ash transportation, contained in July 2025 Report (Page 31 to 39), is concerned, the Answering Respondent states that it has been resolved. The Answering Respondent had issued notices to certain stock yards along the Vijayawada-Hyderabad National Highway in Ibrahimpatnam Mandal for illegally stockpiling ash. The Station House Officer was also requested to depute police personnel for inspection along the Vijayawada-Hyderabad National Highway in Ibrahimpatnam Mandal. Ash is now being issued only subject to an undertaking from the ash lorry owners that the ash issued to them, is utilized for the purpose as mentioned in their representations and not to be supplied to any stocking yards.
36. The subsequent August 2025 Report filed by the APPCB, records the status of compliances of the Answering Respondent as on 28.08.2025 and the progress is being closely monitored by the APPCB.
37. The Answering Respondent has been taking diligent efforts to comply with all the directions issued by the Monitoring Committee (Task Force) of the APPCB. While the Answering Respondent has already complied with several directions of the Monitoring Committee, the corrective measures in relation to improvement of performance of ESPs and stack emissions from the boilers, spillage of ash & provision of hydrobins and sedimentation tanks are still underway and the Answering Respondent requires further

time, as indicated in the compliance status, in order to fully comply with directions of the Monitoring Committee.

For the reasons stated above, it is prayed that the Hon'ble National Green Tribunal, Southern Bench, Chennai may be pleased to take on record the Answering Respondent's response to the aforesaid Reports and pass such orders as it may deemed fit, in circumstances of case.

Dated at 26th on this the Day of November, 2025.

 26/11/25

Respondent No.5

Chief Engineer
O&M/Dr. N.T.T.P.S.
Ibrahimpattam-521 456.

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

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by Vijayawada Thermal Power Station”.***

And

Andhra Pradesh Pollution Control Board and Ors.
...Respondents

**REPLY STATEMENT ON BEHALF OF
RESPONDENT NO. 5 TO APPCB
REPORTS**

**M/s. Janani Shankar [MS 3192/2014]
Tanushree Arvind [MS 4116/2018]
Simran Srinivasan [MS 673/2020]**

COUNSEL FOR RESPONDENT NO. 5

Ph: 98841 59219 / +91 89399 04257

Email: janani.shankar@outlook.com