

BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI

Original Application No.246 of 2025 (SZ)

IN THE MATTER OF:

Greater Visakhapatnam Citizen's Forum,  
Visakhapatnam.

...Applicant(s)

VERSUS

Andhra Pradesh Pollution Control Board,  
Visakhapatnam and Others.

...Respondent(s)

REPORT FILED BY  
ANDHRA PRADESH POLLUTION CONTROL BOARD  
RESPONDENT NO.1

Date: 24.03.2026



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ADVOCATE

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

**Original Application No.246 of 2025 (SZ)**

**IN THE MATTER OF:**

Greater Visakhapatnam Citizen's Forum,  
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Andhra Pradesh Pollution Control Board,  
Visakhapatnam & Ors

... Respondents

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**Date:23.03.2026**

  
**JOINT CHIEF ENVIRONMENTAL ENGINEER,  
APPCB, ZONAL OFFICE, VISAKHAPATNAM**

Joint Chief Environmental Engineer  
A.P. Pollution Control Board  
ZONAL OFFICE, Visakhapatnam

**Report on the Hon'ble NGT, Chennai order dated 09.12.2025 in O.A. No. 246 of 2025(SZ) filed by Greater Visakhapatnam Citizens Forum, Visakhapatnam**

It is to submit that O.A. No. 246 of 2026(SZ) was filed in Hon'ble NGT, Chennai by Greater Visakhapatnam Citizen's Forum, Visakhapatnam for the adoption of "veneering" - a chemical sealing process applied to coal stacks and wagons to contain coal dust more effectively.

The Hon'ble Tribunal heard the matter on 09.12.2025 and issued following order:

*"1. Let notice be issued to Respondents No.1 and 2 through the Tribunal as well as privately.*

*2. The learned counsel Mr. K. Ravindranath accepts notice on behalf of Respondents No.1 and 2.*

*3. Post the matter on 02.02. 2026."*

The copy of the Hon'ble Tribunal order dated 09.12.2025 is herewith enclosed as **Annexure-I.**

In compliance the Hon'ble NGT Order dated 09.12.2025, the following:

1. M/s. Visakhapatnam Port Authority is operating sea port facility in an area 1875 acre. The Port is having 21 Nos. of berths at Inner Harbor denoted as EQ1A to EQ 10 berths (11 berths), WQ 1-RE to WQ - 8 berths (9 berths), Green cargo berth – 1 No. The port is also having 6 Nos. of berths at Outer harbor denoted as Ore Berth - 1 & Ore Berth-2, VCTPL, G.C.B, OSTT and LPG berths. The port is handling cargos like Coal, CP Coke, Coking coal, steam coal (dusty cargos), Pig iron, Steel, Rice, Wheat, Alumina, Caustic soda. Palm Oil, Maize, Sulphur, Urea, Gypsum, Liquid Ammonia, LPG, Timber logs, Manganese Ore, Bitumen, Methanol, POL, Crude oil, Iron ore, Containers, toluene, Lime stone, etc.,
2. The APPCB issued Consent to Operate (CTO) to M/s. Visakhapatnam Port Authority vide order dated 13.04.2022 for handling cargo of 46.55 Million MT/ Annum including 1,00,000 TEU of containers, in inner harbour (EQ 1 to EQ 7 berths, WQ 1 to WQ 8 berths, OR 1 & OR 2 berths and fertilizer berth) and outer harbour (OSTT, NOM, LPG Berth and MPB) which is valid up to 31.12.2026.
3. As per the directions of the Hon'ble NGT from time to time the APPCB reviewing the status of VPA and issuing directions to VPA. The latest direction

was issued on 29.08.2024. copy of the directions dated 29.08.2024 is herewith submitted as **Annexure-II**.

4. The VPA was inspected on 27.01.2026 & the VPA has taken following measures to control the air pollution:
  - i. Wetting of cargo stacks by sprinkling of water with water tankers and with mechanical dust suppression system is being done continuously round the clock. Wetting of roads through water tankers continuously round the clock to prevent emission of dust during movement of vehicles.
  - ii. 4no.s Truck Mounted Mist Fogging Canons and 7 trolley mounted Fog cannons deployed to suppress the dust while loading / unloading cargo at berths.
  - iii. Regular sweeping of roads with Mechanical sweeping machines and with non-permanent workers for maintaining the roads clean.
  - iv. Constructed high-rise walls at city interface (of 7.5 mts + 4m height) for 4 KM long from convent junction to H8 Junction.
  - v. Constructed (4 Nos.) covered storage sheds for storage of dusty cargo like coal and other material.

Copy of the measures adopted by the VPA is submitted as **Annexure-III**.

5. M/s. Visakhapatnam Port Authority (VPA) has submitted an application seeking permission for chemical spraying on coal stacks. The request of the VPA was discussed in the CTO Committee meeting held on 16.06.2020 and the committee observed that:
  - i. The VPA stated that, on a sample basis, the said liquid was applied to a portion of the coal stack (heap) in the presence of its internal Environmental Monitoring Committee, and the performance was found to be satisfactory. Further, The VPA has submitted the MSDS, wherein the chemical is classified as non-hazardous and can be stored at temperatures ranging from 1°C to 49°C. It is also mentioned that on heating, the chemical may generate monomer vapours.
  - ii. Whereas, the major issues anticipated from the application of the said chemical include possible contamination of storm water due to leachate formation and generation of odour in the surrounding areas.

  
Joint Chief Environmental Engineer  
A.P. POLLUTION CONTROL BOARD  
ZONAL OFFICE  
VISAKHAPATNAM

- iii. The samples of coal Samples of coal and coal sprayed with the said chemical were analysed at the Zonal Laboratory for pH and TCLP analysis of heavy metals. As per the analysis reports, the pH value of the coal was 6.42 prior to application of the chemical and 6.51 after application. The TCLP test results indicate a marginal increase in the concentration of Lead (Pb), Zinc (Zn), Arsenic (As), and Manganese (Mn) after application of the chemical liquid on the coal. However, all the analysed parameters were found to be within the prescribed permissible limits.
6. APPCB accorded permission to VPA on 10.07.2020 for one month i.e., upto 10.08.2020 to apply the liquid chemical on the coal stacks with the following conditions:
- M/s. VPA shall take all necessary environmental and safety measures while handling & utilization of liquid chemical.
  - M/s. VPA shall restrict the utilization of this liquid chemical in one yard only and the leachate/ storm water shall be collected & treated to meet the Board's discharge standards.
7. Further, VPA requested the Board on 27.05.2021 for permission to carry out chemical spraying on coal stacks. In response, the Board directed the facility on 14.06.2021 to submit stack gas emission monitoring reports for the parameters viz., SO<sub>2</sub>, NO<sub>x</sub>, PM, TOC, HF, HCl, CO, and metals (Cd, Th, Cu, Mn, Ni, Co, Cr, Pb, Sb) from industries utilizing chemically treated coal (SS-CC-801) as fuel in boilers and furnaces.
8. VPA, on 20.06.2022, submitted analysis reports of untreated and chemically treated coal samples carried out by EPTRI for the parameters viz., pH, flash point, reactivity, loss on ignition at 550 Deg C and 850 Deg C, moisture content, mercury, sulphates, fluorides, nitrates (NO<sub>3</sub>), phosphates, and nitrites.
9. VPA has not submitted the required stack gas emission monitoring reports for the parameters viz., SO<sub>2</sub>, NO<sub>x</sub>, PM, TOC, HF, HCl, CO, and metals (Cd, Th, Cu, Mn, Ni, Co, Cr, Pb, Sb).
10. APPCB, Regional Office, Visakhapatnam submitted reports to the Board Office on 27.12.2021, 18.06.2022, and 27.06.2022 for examination of the facility's representation and for issuance of necessary directions.

  
Joint Chief Environmental Engineer  
A.P. POLLUTION CONTROL BOARD  
ZONAL OFFICE  
VISAKHAPATNAM

11. The Board reviewed the representation dated 27.05.2021 and the RO report dated 16.02.2023 in the CTO Committee meeting held on 07.02.2023. After due deliberation, the Committee recommended to defer the issue and directed VPA to submit detailed study reports for examination of the issues associated with the use of liquid chemical on coal stacks, the nature of the co-polymer, and its impact on air quality and safety aspects. Accordingly, a letter was addressed to VPA communicating the decision of the Committee and directing the facility to submit the requisite information.
12. VPA submitted a representation dated 26.11.2024 requesting approval for the use of SS CC-801, supplied by M/s. Surface Solutions, Cuttack, for chemical spraying on coal stacks and wagons of VPA, as well as on railway wagons of East Coast Railways. The facility stated that the proposed chemical spraying would effectively suppress dust and control air pollution dispersion, and is proposed as an alternative to tarpaulin covering and water sprinkling methods.
- A. M/s. Surface Solutions submitted two samples to EPTRI viz., an untreated coal sample and a chemically treated coal sample. As per the analysis reports, no significant difference in chemical concentration was observed between the untreated and treated coal samples. The samples were analysed for carbon, hydrogen, nitrogen, sulphur, pH, flash point, reactivity, loss on ignition, moisture content, mercury, sulphates, fluorides, nitrates, phosphates, and nitrites.
- B. The agency also carried out stack emission monitoring at Indian Metals & Ferro Alloys Limited, Cuttack, Odisha, in the 120 MW power plant (Boiler-8) through the Centre for Envotech and Management Consultancy Private Limited.
- C. The agency also conducted bioassay tests to assess toxicity, using fish and earthworms. As per the test results, 100% survival was observed after 96 hours of exposure to the supplied chemical.
- D. VPA has requested the Board to permit chemical spraying on coal stacks and has undertaken to carry out stack gas emission monitoring for the parameters viz., SO<sub>2</sub>, NO<sub>x</sub>, PM, TOC, HF, HCl, CO, and metals (Cd, Th, Cu, Mn, Ni, Co, Cr, Pb, Sb) from industries utilizing chemically treated coal (SS-CC-801) as fuel in boilers and furnaces, and to submit the monitoring reports to the Board.

  
Joint Chief Environmental Engineer  
A.P. POLLUTION CONTROL BOARD  
ZONAL OFFICE  
VISAKHAPATNAM ..

E. The agency further submitted that the environmental perspective is as follows:

### **1. Non-Toxicity to Aquatic and Soil Ecosystems:**

- **Fish Bioassay:** The test report shows 100% survival of fish exposed to SS CC801-treated coal over 96 hours, indicating it is non-toxic to aquatic life.
- **Earthworm Bioassay:** Similar results were observed for earthworms, with 100% survival after 96 hours, suggesting it poses no threat to soil ecosystems.

### **2. Reduced Hazardous Emissions:**

- The **Toxicity Characteristic Leaching Procedure (TCLP)** evaluation indicates that the treated coal is classified as non-hazardous, highlighting its safer profile for waste management under hazardous waste management rules.

### **3. Emission Characteristics:**

- When coal is treated with SS CC801, a minor improvement is observed in particulate matter (PM) levels, reducing from **23.2 mg/Nm<sup>3</sup>** to **22.8 mg/Nm<sup>3</sup>**.
- **Nitrogen Oxides (NO<sub>x</sub>)** levels decrease significantly from **86.7 mg/Nm<sup>3</sup>** to **77.4 mg/Nm<sup>3</sup>**, showcasing enhanced performance in mitigating these emissions.
- **Sulphur Dioxide (SO<sub>2</sub>)** and **Carbon Dioxide (CO<sub>2</sub>)** levels remain relatively unchanged, suggesting SS CC801 does not substantially impact these specific emissions.

### **4. Operational Parameters:**

- The flue gas temperature and velocity remain nearly consistent, indicating that the copolymer treatment does not significantly affect the overall thermal and flow dynamics of the combustion system.

### **Inference**

#### **1. Environmental Safety:**

SS CC801 demonstrates excellent environmental safety, being non-toxic to critical bio-indicators (fish and earthworms) and significantly reducing the hazardous classification of treated coal.

## **2.Emission Control Performance:**

While the copolymer shows promising results in reducing NOx emissions, its impact on other gaseous pollutants is limited.

## **3.Practical Applicability:**

The results suggest SS CC801 is a viable solution for improving the environmental profile of coal usage in industries, for dust suppression and reducing NOx emissions without altering combustion characteristics.

13. Based on the request made by VPA, a detailed report was submitted to the Head Office, APPCB on 24.01.2026, seeking temporary permission for a period of 3–6 months. The said period is proposed for monitoring by the concerned agencies as well as the Board, in order to study and assess any potential impacts arising from the chemical spraying.
14. The report dated 24.01.2026 was placed before the Consent to Operate (CTO) committee meeting held on 10.02.2026 and the committee opined that the request of the VPA may be forwarded to CPCB for getting the information regarding any practices adopted by other states on chemical spraying on coal stacks for dust suppressions and also suggestions to conduct the study for technical evaluation and approval of such technology. Accordingly, APPCB addressed to CPCB to clarify whether (i) spraying chemical SS CC-801 can be used by M/s. Visakhapatnam Port Authority, Visakhapatnam for dust suppression on coal stack yards, so as to dispose the request of the VPA (ii) Whether any state has adopted the spraying of chemical on coal stack for dust suppression measures. Copy of the APPCB letter dated 12.03.2026 addressed to the CPCB is herewith submitted as **Annexure-IV**.

This report is submitted for kind consideration. The APPCB will abide by all such directions as the Hon'ble Tribunal may deem fit and appropriate.



**JOINT CHIEF ENVIRONMENTAL ENGINEER,  
APPCB, ZONAL OFFICE, VISAKHAPATNAM**

Joint Chief Environmental Engineer  
A.P. POLLUTION CONTROL BOARD  
ZONAL OFFICE  
VISAKHAPATNAM.

Item No.01:-

**BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

[Through Physical Hearing (Hybrid Option)]

**Original Application No.246 of 2025 (SZ)**

IN THE MATTER OF:

Greater Visakhapatnam Citizen's Forum,  
Visakhapatnam.

...Applicant(s)

*Versus*

Andhra Pradesh Pollution Control Board,  
Visakhapatnam and Ors.

...Respondent(s)



**Date of hearing: 09.12.2025.**

**CORAM:**

**HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER**

**HON'BLE DR. PRASHANT GARGAVA, EXPERT MEMBER**

For Applicant(s): M/s. Suhrith Parthasarathy, Arun Karthik  
Mohan, Amritha Sathyajith, Harshvardan.R &  
Gayathri.G.

For Respondent(s): Mr. K. Ravindranath for R1 & R2.

**ORDER**

1. Let notice be issued to Respondents No.1 and 2 through the Tribunal as well as privately.
2. The learned counsel Mr. K. Ravindranath accepts notice on behalf of Respondents No.1 and 2.
3. Post the matter on **02.02.2026**.

**Sd/-**

**Smt. Justice Pushpa Sathyanarayana, JM**

**Sd/-**

**Dr. Prashant Gargava, EM**



O.A. No.246/2025 (SZ)  
09<sup>th</sup> December, 2025. AD.



**ANDHRA PRADESH POLLUTION CONTROL BOARD**  
 Dr. YSR Paryavaran Bhavan, APIIC Colony Road,  
 Gurunanak Colony, Autonagar, Vijayawada- 520007  
 Phone. No.0866-2463200, Website : <https://pcb.ap.gov.in/>



**Order No.724/APPCB/HO/ECS/VSP/2021-**

**Date:29/08/2024.**

### **DIRECTIONS**

Sub:APPCB – HO - ECS - **M/s. Visakhapatnam Port Trust**, Port Area, Visakhapatnam – Non-compliance of the CTO conditions and standard – Monitoring committee (TF) meeting held on 09.08.2024 - **Directions** - Issued - Reg.

Ref: 1. CTO & HWA order dt. 13.04.2022 valid up to 31.12.2026.  
 2. Order No.724/APPCB/HO/ERM/OA571/VSP/2021, Dt: 27.04.2023.  
 3. Zonal Office, Visakhapatnam report dt: 23.05.2024 and Regional Office, Visakhapatnam report dt: 24.07.2024.  
 4. Monitoring (Task Force) Committee meeting held on 09.08.2024.

\*\*\*

**WHEREAS** you are operating the port facility in the name of M/s. Visakhapatnam Port Authority and operating the sea port facility in an area 1875 acres. The Port is having 21 Nos. of berths at Inner Harbor denoted as EQ1A to EQ 10 berths (11 berths), WQ 1-RE to WQ - 8 berths (9 berths), Green cargo berth – 1 No. The port is also having 6 Nos. of berths at Outer harbor denoted as Ore Berth - 1 & Ore Berth-2, VCTPL, G.C.B, OSTT and LPG berths.

**WHEREAS** the port is handling cargos like Coal, CP Coke, Coking coal, steam coal (*dusty cargos*), Pig iron, Steel, Rice, Wheat, Alumina, Caustic soda. Palm Oil, Maize, Sulphur, Urea, Gypsum, Liquid Ammonia, LPG, Timber logs, Manganese Ore, Bitumen, Methanol, POL, Crude oil, Iron ore, Containers, toluene, Lime stone, etc.,

**WHEREAS** the Board vide ref. 1<sup>st</sup> cited, issued Consent to Operate (CTO) to M/s. Visakhapatnam Port Authority for handling cargo of 46.55 Million MT/ Annum including 1,00,000 TEU of containers, in inner harbour (*EQ 1 to EQ 7 berths, WQ 1 to WQ 8 berths, OR 1 & OR 2 berths and fertilizer berth*) and outer harbour (*OSTT, NOM, LPG Berth and MPB*).

**WHEREAS** the Board Officials inspected your facility on 18.06.2024 and observed the compliance status of the conditions stipulated in the CTO & HWA Order and Task Force directions, and submitted report vide ref. 3<sup>rd</sup> cited along with the following observations and remarks are as follows:

1. The facility has provided MDSS at i) WOB area, ii) S-4 area, iii) L-17 area, iv) R2 – R5 area, v) TINA godown area, vi) North-West Corner at WOB, vii) NH yard area, viii) old FCI Godown. M/s.VPT is storing the dusty cargo i.e., coal cargo near to city interface at A,B at TM Office. There is no MDSS at A, B yards at TM Office. The facility is carrying out wetting through mobile water tankers at A, B at TM Office.
2. VPA completed 3 storage sheds at R-11 area (Shed-1 & Shed-2) and at R -2 (Shed-4) out of 4 sheds. The construction of shed -3 at R10 is under progress. During inspection it was observed that the VPA has started storage of dusty cargo in R11 – Shed-1 & 2. Not started storage of dusty cargo in shed-4.
3. The VPA collected an amount of Rs.1.10 Crores from stevedores and PPP operators

for not covering the dusty cargo stacks with tarpaulin for the period from Oct-2023 to Mar-2024.

4. The facility maintaining CAAQMS at three locations viz., near GCB area, Near GVMC Municipal Stadium & near R&D yard which are not in working condition.
5. The APPCB has carried out ambient air quality monitoring at General Cargo Berth (GCB) area and Municipal Stadium during the period from 06.04.2024 to 10.04.2024. As per the analysis results, it was observed that PM<sub>10</sub> concentrations at all the locations on all the days of monitoring except at R&D yard (from 6<sup>th</sup> to 9<sup>th</sup> April 2024), have far exceeded the NAAQ standards of 24 Hrs average i.e., 100 µg/m<sup>3</sup>. The PM<sub>2.5</sub> values have also exceeded NAAQM standards of 24 Hrs average i.e., 60 µg/m<sup>3</sup>.

**WHEREAS** a hearing was conducted before the Monitoring (Task Force) Committee Meeting of A.P. Pollution Control Board held on 09.08.2024. The representatives of the Visakhapatnam Port Authority (VPA) attended the meeting in person. The JCEE, ZO & EE, RO, Visakhapatnam attended the meeting through VC and informed that VPA has provided MDSS at dusty cargo handling & storage at R-2, R-4 & R-5, A, B yards in 2023; coal stock files are stacked more than 6 m height; construction of shed-3 is under progress at R-10; 5.65 Lakhs plantation in 1125 acres completed; dry fog mist cannon provided etc. Further informed that the 3 online CAAQM stations provided by VPA are improperly functioning since long time. Manual monitoring conducted by the Board at GCB area & Municipal stadium during 06.04.2024 to 09.04.2024 indicated that PM<sub>10</sub> & PM<sub>2.5</sub> concentrations far exceeded the NAAQM standards (24 hours avg.) and reported the progress on CTO conditions & TF directions. The representatives of VPA informed that the analyzers in online CAAQM stations were damaged & purchase order was issued to replace the same and informed to place the online CAAQM stations into operation by September, 2024. At present gravimetric method is used to analyze the samples to compute concentration of PM<sub>10</sub> & PM<sub>2.5</sub>. Further informed that agreement executed to complete mechanization of EQ6 berth by May, 2025. With regard to cargo handling capacity, it was informed that 5 No. of PPP operators (namely Vedanta, Essar Vizag Terminals Limited (EVTL), Vizag Seaport Pvt Limited (VSPL), Vizag General Cargo Berth Private Limited (VCBPL) & EQ – 8) obtained separate consent from the Board for handling cargo through dedicated berths, which are not included in the berths consented to operate by VPA and cargo handling capacity.

After detailed review, the Committee recommended to issue directions to M/s. Visakhapatnam Port Trust, Visakhapatnam to rectify the non-compliances within 2 months and to issue SCN to levy Environmental Compensation for non-compliance of the standards Accordingly, the Board hereby issues following directions to your facility under Sec.33(A) of the Water (Prevention & Control of Pollution) Act, 1974 and under Sec.31(A) of the Air (Prevention & Control of Pollution) Act, 1981 and amendments thereof -

1. ***VPA shall ensure all the dusty cargo stored under covers. SoP shall be prepared for each type of dusty cargo being handled at VPA for suppression/containment of fugitive dust emissions while handling and transit storage. Implementation of the action plan in accordance with SoP shall be commenced within a month.***
2. ***VPA shall expeditiously complete mechanization of EQ-6 berth by May, 2025 as reported during the MC (TF) review meeting. The implementation progress shall be reported to Board 5<sup>th</sup> of every month.***
3. ***VPA shall rectify the online CAAQM station installed for continuous monitoring of AAQ for different pollutants by September, 2024 and shall keep uploading online data to APPCB website.***

4. ***VPA shall implement and maintain adequate measures to ensure compliance to prescribed AAQ standards.***
5. ***VPA shall ensure that the height of the coal stock files shall not be more than 6 meters.***
6. ***All the dry bulk cargo handling activities potential to generate dust emissions shall be handled through mechanization at all new/modified/upgraded berths. Time bound action plan along with details of measures to implement for mechanization and budget allocation shall be furnished to the Board within a month.***
7. ***VPA shall ensure continuous operation of MDSS at all the dust cargo storage & handling areas. The consolidated daily records on energy and water consumption of MDSS shall be furnished to Board for every 3 months.***
8. ***VPA shall expedite completion of Shed - 3 at R-10 within a month. The shed- 4 at R-2 shall be placed into operation immediately to house the dusty cargo.***
9. ***VPA shall undertake periodical monitoring of environmental parameters at berths EQ-2 to EQ-5 dedicated for handling of dust free cargo like fertilizers, food grains and bagged cargo, steel, granite etc. Detailed solid waste management plan for these dedicated berths shall be kept in place and implementation progress shall be submitted to the Board within 2 months.***
10. ***VPA shall expedite to furnish plan of action to minimize the solid waste generation at source. The segregated waste shall be disposed in accordance with the provisions of MSW Rules and HoWM Rules.***
11. ***VPA shall prepare SoP to provide cover over all dusty cargo carrying trucks/ wagons with tarpaulin and spillage containment measures during transportation of dusty cargo material to destined locations. Implementation of the action plan in accordance with SoP shall be commenced within a month.***
12. ***VPA shall prepare plan of action to minimize the vehicle moment duly computing the present and future requirements of the port activities.***
13. ***VPA shall immediately obtain PLI policy including Environmental relief fund (ERF) and to furnish the details to the Board within a month.***
14. ***All the spillages of chemicals/ cargo waste shall be contained at source and shall be cleaned regularly. SoP to deal with such spillages shall be kept in place within a month along with contingency plan of action to handle the spillages at port area. Under any circumstances, the spillages shall not be allowed to mix with run-off to prevent any wastes discharges into drains.***
15. ***All the storm water drains shall be regularly desilted and shall be maintained free from contamination of chemical spillages/ other wastes potential to cause contamination and shall maintain good housekeeping. The desilted material shall be evaluated for detailed characteristics and shall be disposed in accordance with provisions of HoWM Rules.***
16. ***VPA shall augment the Truck Tyre washing facilities to cater requirement for both out going and internal moment of the trucks.***
17. ***VPA shall provide and maintain Electro Magnetic flow meters with totalizer at raw water intake, quantity consumed for each purpose and effluent generation for stream wise. The consolidated daily records shall be furnished to Board for every 3 months.***
18. ***VPA shall complete installation of online continuous effluent monitoring system (CEMS) for continuous monitoring of pollutants at outlet of STP of 10 MLD capacity by end of September, 2024.***
19. ***VPA shall ensure that there shall not be any pollution problems in the surroundings.***
20. ***VPA shall pay the Environmental Compensation levied by Board for non-compliance to prescribed standards.***

You are hereby directed to note that, should you violate any of the directions mentioned above, action will be initiated under Sec.41(2) of Water (Prevention & Control of Pollution) Amendment Act, 1988 and Sec.37 of the Air (Prevention & Control of Pollution) Amendment Act, 1987 without any further notice, in the interest of safe guarding Public Health and Environment.

***This Order comes into effect from today i.e.,29/08/2024.***

**B Sreedhar Ias  
MEMBER SECRETARY**

**To  
The Occupier,  
M/s. Visakhapatnam Port Authority,  
Port Area,  
Visakhapatnam.**

**Copy to:**

1. The JCEE, ZO, Visakhapatnam for information and necessary action.
2. The EE, RO, Visakhapatnam for information and necessary action.

**POLLUTION CONTROL MEASURE TAKEN BY VISAKHAPATNAM PORT AUTHORITY**

<b>S.No</b>	<b>Control Measures taken by VPA</b>	<b>Photograph</b>
1	All stack yards were provided with mechanical dust suppression system covering an area of 4,75,000 m <sup>2</sup> and water sprinkling is carryout regularly to reduce dust emissions.	
2	<p>Wetting of cargo stacks by sprinkling of water with water tankers and with mechanical dust suppression system is being done continuously round the clock.</p> <p>Wetting of roads through water tankers continuously round the clock to prevent emission of dust during movement of vehicles. A total of 200 trips of water (about 4.0 MLD) is being sprinkled every day through tankers and 3.0 MLD is being Sprinkled in stacking areas through Mechanical Dust Suppression System.</p>	
3	4no.s Truck Mounted Mist Fogging Canons and 7 trolley mounted Fog cannons deployed to suppress the dust while loading / unloading cargo at berths.	
4	Regular sweeping of roads with Mechanical sweeping machines and with non-permanent workers for maintaining the roads clean.	

5	<p>The stack heights are limited to 6 mtrs.</p> <p>Control measures like dust suppression system, high-rise enclosures, screens have been taken up.</p>	
6	<p>Covering of trucks and wagons with tarpaulins.</p>	
7	<p>Constructed high-rise walls at city interface (of 7.5 mts + 4m height) for 4 KM long from convent junction to H8 Junction.</p>	
8	<p>Mechanization of Coal and Iron ore cargo handling through PPP mode at General Cargo berth, M/s. Arcellor Mittal Nippon Steel India Ltd at Outer harbour</p>	
9	<p>Constructed 1000m long dust barrier opposite M/s. Arcellor Mittal Nippon Steel India Ltd</p>	

10	Covering of bulk cargo (Coal) stacks and trucks with tarpaulins which is a continuous activity.	
11	<p>Sprinkling of water by 10no.s of trucks on dusty roads and bulk cargo (Coal) stacks to control dust emissions and Mechanical dust suppression system (MDSS) arranged for dusty cargo transferring through belt conveyor, unloading of dusty cargoes in hopper, Closed Conveyor system with water spraying on conveyor belt which is a continuous activity.</p> <p>PLC Based MDSS with 218 + 200 (PPP/BOT Operators Provided) sprinklers at dusty stack yards and berths.</p>	
12	Mechanical truck tyre cleaning facilities at B ramp (June 2016) and ESSAR junction (October 2018) are installed .	
13	Green Belt was developed around the stack yards. Plantation programme is being pursued by VPT on a continuous basis for the last 3 decades for continual improvement and addition of Green Belt in and around Port area. Since 1990s, a total of 6,05,500 plantation has been taken up covering an area of 1327 Acs at different areas including Port operational areas.	

14	Constructed (4 Nos.) covered storage sheds for storage of dusty cargo like coal and other material.	
15	Continuous online Ambient Air quality monitoring stations were provided at 3 locations of VPA for monitoring of Air quality.	
16	10 MLD STP (Sewage treatment Plant) is under operation to treat the city sewage and the treated water is utilized for dust suppression system in Port area.	
17	Proposed for fully mechanization of existing 6 berths i.e EQ-1, EQ-1A, EQ-6, EQ-7, WQ-6 and WQ-7 & WQ-8 in Port area.	
18	VPA is having 10MW + 770KW Solar Power Plants. The power generation was started in the year of 2016. VPA is being operated on solar powers supply.	

19

VPA has initiated One Million plantation in phased manner for the next 3 years (2024-2025,2025-2026,2026-2027) and started plantation on the eve of world Environment Day 2024.



## Annexure-IV



**ANDHRA PRADESH POLLUTION CONTROL BOARD**  
**Paryavaran Bhavan, APIIC Colony Road,**  
**Gurunanak Colony, Autonagar, Vijayawada- 520007**  
 Website: <https://pcb.ap.gov.in/>



**Lr. No: 580845/APPCB/VSP/VSP/110/HO/CTO/2026 Dt: 12-03-2026**

To  
 The Member Secretary  
 Central Pollution Control Board (CPCB),  
 Parivesh Bhawan,  
 East Arjun Nagar, Delhi – 110032.

Sir,

Sub: APPCB – HO, Vijayawada– Air Section– **M/s. Visakhapatnam Port Authority (VPA), Visakhapatnam – Original Application No. 246/2025 before the Hon'ble NGT, Chennai filed by Greater Visakhapatnam Citizens Forum** – Request for permission for chemical spraying on coal stacks - Reg.

Ref: 1. CTO & HWA Order No: APPCB/VSP/VSP/45/CFO/HO/1933 dated 13.04.2022 which is valid upto 31.12.2026.  
 2. VPA Representation dated 26.11.2024 & 20.01.2025.

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1. It is to submit that, M/s. Visakhapatnam Port Authority (VPA) Visakhapatnam is operating sea port facility. The Port is having 21 Nos. of berths at Inner Harbor denoted as EQ1A to EQ 10 berths (11 berths), WQ 1-RE to WQ - 8 berths (9 berths), Green cargo berth – 1 No. The port is also having 6 Nos. of berths at Outer harbor denoted as Ore Berth - 1 & Ore Berth-2, VCTPL, G.C.B, OSTT and LPG berths. The port is handling cargos like Coal, CP Coke, Coking coal, steam coal (dusty cargos), Pig iron, Steel, Rice, Wheat, Alumina, Caustic soda, Palm Oil, Maize, Sulphur, Urea, Gypsum, Liquid Ammonia, LPG, Timber logs, Manganese Ore, Bitumen, Methanol, POL, Crude oil, Iron ore, Containers, toluene, Lime stone, etc.
2. The APPCB issued Consent to Operate & Hazardous Waste Authorisation order to M/s. Visakhapatnam Port Authority vide order dated 13.04.2022 for handling cargo of 46.55 Million MT/ Annum including 1,00,000 TEU of containers, in inner harbor (EQ 1 to EQ 7 berths, WQ 1 to WQ 8 berths, OR 1 & OR 2 berths and fertilizer berth) and outer harbor (OSTT, NOM, LPG Berth and MPB) which is valid up to 31.12.2026.
3. **M/s. Visakhapatnam Port Authority (VPA)** has submitted an application

seeking permission for chemical spraying on coal stacks. VPA informed that, based on information obtained from **M/s. Surface Solutions, Bhubaneswar**, the chemical proposed for coal stack spraying is **SS CC-801** which is a **water-soluble, hydrocarbon-based co-polymer** with the following advantages and benefits:

- a. Provides **effective dust control for almost all types of minerals**, and helps in preventing **self-ignition and oxidation of coal**. The chemical is stated to **maintain or enhance the calorific value of coal**, as it is a hydrocarbon-based water-soluble inert co-polymer. Further, SS CC-801 **does not alter the physical or chemical properties of minerals** It **evaporates under ambient atmospheric temperature and pressure conditions** and subsequently **assimilates with the soil**, with minimal soil mobility limited to a depth of **approximately 6 mm to 10 mm only**. Copy of the same is enclosed.
- b. Physical properties of SS-CC801 are as follows:
  - Appearance – Milk White.
  - Solid content – 56+/-1%
  - pH Value – 5-8
  - MFFT – 0 Deg C
  - Particle size (nm) – ca 200

As per the GHS Norms SS-CC801 is being declared as Non-hazardous

- It is AEPO Free (Alkyl Phenol Ethoxylates)
- Hazardous Chemical groups like Formaldehyde, Lead, Nickel, Cadmium Mercury, Hexavalent, Chromium, Antimony, Respirable Crystalline Silica, Sulphur, Waste oil, Chloride, Phenol, etc., are not added to this compound.
- Non-Toxic.
- Bio-degradable.
- Approved for portable drinking water compatibility.

c. **The VPA** has informed that as per the **MSDS**, the chemical is classified as **non-hazardous** and can be stored at temperatures ranging from **1°C to 49°C**. It is also mentioned that **on heating, the chemical may generate monomer vapors**.

d. **The environmental perspective** is as follows:

**1. Non-Toxicity to Aquatic and Soil Ecosystems:**

- **Fish Bioassay:** The test report shows 100% survival of fish

exposed to SS CC801-treated coal over 96 hours, indicating it is non-toxic to aquatic life.

- **Earthworm Bioassay:** Similar results were observed for earthworms, with 100% survival after 96 hours, suggesting it poses no threat to soil ecosystems.

## 2. Reduced Hazardous Emissions:

- The Toxicity Characteristic Leaching Procedure (TCLP) evaluation indicates that the treated coal is classified as non-hazardous, highlighting its safer profile for waste management under hazardous waste management rules.

## 3. Emission Characteristics:

- When coal is treated with SS CC801, a minor improvement is observed in particulate matter (PM) levels, reducing from **23.2 mg/Nm<sup>3</sup>** to **22.8 mg/Nm<sup>3</sup>**.
- **Nitrogen Oxides (NO<sub>x</sub>)** levels decrease significantly from **86.7 mg/Nm<sup>3</sup>** to **77.4 mg/Nm<sup>3</sup>**, showcasing enhanced performance in mitigating these emissions.
- **Sulphur Dioxide (SO<sub>2</sub>)** and **Carbon Dioxide (CO<sub>2</sub>)** levels remain relatively unchanged, suggesting SS CC801 does not substantially impact these specific emissions.

## 4. Operational Parameters:

- The flue gas temperature and velocity remain nearly consistent, indicating that the copolymer treatment does not significantly affect the overall thermal and flow dynamics of the combustion system.

## Inference

### 1. Environmental Safety:

SS CC801 demonstrates excellent environmental safety, being non-toxic to critical bio-indicators (fish and earthworms) and significantly reducing the hazardous classification of treated coal.

### 2. Emission Control Performance:

While the copolymer shows promising results in reducing NO<sub>x</sub> emissions, its impact on other gaseous pollutants is limited.

### 3. Practical Applicability:

The results suggest SS CC801 is a viable solution for improving the environmental profile of coal usage in industries, for dust suppression and reducing NO<sub>x</sub> emissions without altering combustion characteristics.

4. Greater Visakhapatnam Citizens Forum and Chaitanya Sravanthi-NGOs, Visakhapatnam, have also been requested to accord permission to VPA for chemical spraying on coal stacks stating that this measure will help improve air quality in the surrounding areas of the facility.
5. A letter was also received from the DRM, Railway Department, Visakhapatnam, requesting permission to carry out chemical spraying on wagons as an alternative to tarpaulin covering for a period of three months.
6. The industry requested to issue temporary permission for a period of 3-6 months to monitor by the individual agencies, as well as the Board, to study and assess any potential impacts of the chemical spraying.
7. A case was filed before the Hon'ble NGT, Chennai on 09.12.2025 in O.A. No. 246 of 2025(SZ) filed by Greater Visakhapatnam Citizens Forum, Visakhapatnam with one of the prayer that APPCB to accord permission for spraying of the chemical on coal stacks and coal carrying wagons.
8. The issue was placed in the Consent Management (CTO) Committee meeting held on 10.02.2026 at Andhra Pradesh Pollution Control Board, Head office, Vijayawada. The committee recommended that a clarification may be obtained from CPCB.
9. In view of the above, it is requested to clarify whether (i) spraying chemical **SS CC-801** can be used by M/s. Visakhapatnam Port Authority, Visakhapatnam for dust suppression on coal stack yards, so as to dispose the request of the VPA (ii) Whether any state has adopted the spraying of chemical on coal stack for dust suppression measures.

Yours faithfully,

**S SRISARAVANAN, I.F.S**

**MEMBER SECRETARY**

**Copy to:**

1. The Chairman, APPCB, Vijayawada for information.
2. The Regional Director, South Zone, CPCB, Chennai for information.
3. The JCEE, Zonal Office, Visakhapatnam for information and necessary action.
4. The EE, Regional Office, Visakhapatnam for information and necessary action.