

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH AT PUNE**

ORIGINAL APPLICATION NO. 62 OF 2021

In the matter of:

Krishi Vigyan Arogya Sanstha & Ors.

...Applicants

v/s

Maharashtra State Power Generation Company Ltd. & Ors.

... Respondents

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Place: Nagpur
Date: 08/11/2021


(Ashok Kare)
Regional officer
MPCB-Nagpur

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... Respondents

NOTARIAL REG.

ENTRY NO.

4431

DATE:

09/11/2021

**AFFIDAVIT IN REPLY ON BEHALF OF RESPONDENT
NO.4-MPCB**

I, Ashok M. Kare aged about 56 years, occupation -service, the Regional Officer of the Maharashtra Pollution Control Board at Nagpur having my office at Udyog Bhavan, 5th floor , Sales Tax Office, Civil Lines, Nagpur, do hereby state on solemn affirmation as under :-

I am filing this affidavit on behalf of Respondent No.4 in compliance of the order dated 14.09.2021 passed by this Hon'ble Tribunal, as under:

- 1) The Respondent Board submits that the Respondent No.1-M/s Maharashtra Power Generation Company (MAHAGENCO) is operating their coal-based power plant at Khasra No.188, 189, at Koradi, Tal : Koradi, Dist Nagpur, namely Koradi Thermal Power Plant. The said Thermal Power Plant having three units bearing Nos.8, 9 & 10 of capacity 660 MW each. Unit no.8 was commissioned on 16/12/2015, Unit Nos.9 & 10 were commissioned on 22/11/2016 and 17/01/2017 respectively.
- 2) The Respondent Board has granted renewal of Consent to Operate to Respondent No.1 vide letter dated 08/07/2020 which was valid up to



31/08/2021. The Respondent No.1 has applied for renewal of consent to operate which is under consideration of the Board. A copy of the renewal of Consent to operate dated 08/07/2020 is enclosed herewith and marked as an **Annexure-'I'**.

- 3) The Respondent No.1 has obtained Environmental Clearance for expansion of project by replacement of existing four units of 120 MW by 1 x 660 MW and addition of 2 X 660 MW from the MOEF & CC vide letter dated 04/01/2010, which was revalidated with additional conditions vide letter dated 27/03/2015 and 23/03/2017. Subsequently the Environmental Clearance was revalidated on 29/05/2018 for transportation of coal by closed pipe conveyor.
- 4) The Respondent-Board vide letter dated 19/06/2019 had issued directions u/s 31A of the Air (Prevention & Control of Pollution) Act, 1981 to Respondent No.1 and directed to achieve the standards prescribed under Notification dated 07/12/2015 issued by Ministry of Environment, Forest and Climate Change, Government of India, to submit time bound program for implementation of the directions issued by CPCB for installation of FGD, NOX reduction solutions, up gradation of retrofitting of ESP, time bound program for utilisation/ disposal of legacy pond ash, upload ash generation & utilisation data on ASHTRACK system, to achieve the designed station Heat Rate to reduce specific coal consumption, for reduction of pollution load, & other. A copy of directions dated 19.06.2019 is enclosed herewith and marked as an **Annexure-'II'**.
- 5) The Respondent-Board further issued directions under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 for action



plan for compliance of specific water consumption standards laid down by MoEF & CC, GOI within stipulated time period. A copy of Directions dated 29.07.2021 is enclosed herewith and marked as an **Annexure –‘III’**.

- 6) The officials of the Respondent-Board Visited to the site of Respondent No.1 on 26/10/2021 for checking the compliances of Consent conditions as well as Environment Clearance conditions and following main non compliances were observed.
- A. Huge Quantity of dust spread near Ash unloading point near silo Bunker.
 - B. Reading of OCEMS attached to stack of Unit NO.8 was showing SO₂ – 1412.18 at 18.40 p.m, connected to MPCB/CPCB server.
 - C. FGD is not provided as per consent condition NO.21 and as per EC Conditions.
 - D. MAHAGENCO has not submitted BG Sr.No.1 to 11 as per the Consent conditions.
 - E. HDPE/LDPE Lining not provided at Ash Bund site.

The copy of the Visit Report dated 26.10.2021 is enclosed herewith and marked as an **Annexure-‘IV’**.

- 7) The Respondent Board submits that Show cause Notice was issued to MAHAGENCO Koradi Plant on dt. 02.11.21 for Non compliances observed during the visit dt 26.10.21. A copy of Show Cause Notice dated 02/11/2021 is enclosed herewith and marked as an **Annexure-‘V’**
- 8) The Respondent-Board further submits that Respondent No.1- has provided air pollution control system Electrostatic Precipitator to each unit with tri-flue stacks of 275 meters. Efficiency of Electrostatic



Precipitator is 99.9 % for Particulate matter not more than 50 mg/Nm³. Online Continuous Emission Monitoring Systems (OCEMS) are provided for TPM, SO₂ & NO_x for each stack and are connected to the CPCB/MPCB servers. A copy of Stack monitoring result dated 26.10.2021 is enclosed herewith and marked as an **Annexure-‘VI’**.

- 9) In order to monitor Ground level concentration Respondent no. 1 has installed and commissioned Continuous Ambient Air Quality Monitoring Stations (CAAQMS) at following four location:-
- i) Koradi TPS Colony Club no.1,
 - ii) Swami Vivekanand Hospital, Koradi,
 - iii) Khasala AWR pump House
 - iv) Dalmiya Pump House near Bhawan’s School, Khaperkheda Road, Koradi.

The PM₁₀, PM_{2.5}, SO₂, NO₂, Co & O₃ are monitored and connected to CPCB/MPCB servers and displaying at their main gate through electronic display Board. A copy of Ambient Air Quality monitoring result is annexed herewith as **Annexure -‘VII’**.

- 10) The Respondent Board submits that to control fly ash concentration the respondent no. 1 has provided Silo for collection of Dry Fly ash having capacity of 1500 MT. Unused ash is disposed of by High concentration slurry disposal system in Khasara Ash Bund. Fly ash utilisation for the year 2015-16, 2016-17, 2017-18, 2018-19, 2019-20 & 2020-21 is 59.06 %, 28.79 %, 12.81 %, 29.33 %, 42.95 %, & 80.96 % respectively. Legacy ash dump in Koradi Ash Bund for a period up to 30-09-2021 is 14698634 MT whereas in Khasara Ash Bund is 16995826 Mt.



- 11) The Respondent Board further submits that the source of water for the expansion unit is supply from the Pench project which comes under Irrigation Department, Govt of Maharashtra. The Nagpur Municipal Corporation has provided and commissioned two Sewage Treatment Plant of capacity of 130 MLD & 200 MLD. Project Authority has made MoU with Corporation authority for utilisation of treated sewage of Nagpur city through 130 MLD & 200 MLD vide dated 4th October 2008 & 20th November 2018 respectively.
- 12) The Respondent-Board submits that Effluent Treatment Plant of capacity of 12000 CMD for treatment of effluent is reused for ash handling process. Provided sewage treatment Plant of capacity of 25 KLD. Treated sewage water is used for gardening purpose.
- 13) The Respondent Board submits that as far as plantation aspect is concerned out of total area of project, 67.3% area is covered under plantation. The total number of trees planted till March 2021 is 584927 which is of various species i.e Umber, Sisam, Gulmohar, Pipal, Chinch, Kadunimb, Mango. Density of plantation is 2183 no plants/Hectare.
- 14) The Respondent Board further submits that in order to acquaint the operation of coal based thermal power plant a virtual review meeting was conducted of all thermal power plants of MAHAGENCO on 17/06/2021 under the Chairmanship of the Member Secretary of the Board and after due deliberations, hence the directions have been issued to carry out environmental flaws as per MoEF notification. A copy of Minutes of the Meeting communicated vide letter dated 08/10/2021 is enclosed herewith and marked as an **Annexure-‘VIII’**.



15) The Respondent Board submits that the Respondent Board has issued directions u/s 31 A of the Air (prevention & Control of Pollution) Act, 1981 to Respondent No.1 vide letter dated 01/10/2021. A copy of Directions dated 01/10/2021 is enclosed herewith and marked as an Annexure-'IX'.

16) The Respondent no. 1 in reply to letter dated 01/10/2021 submitted their say vide letter no.2931 dated 16/10/2021 that, Electrostatic Precipitator of efficiency of 99.94 % are provided to 3 X 660 units and outlet concentration is below 50 mg/Nm³. To control NOX emissions tangentially fired low NOX burners with over fire air are provided to each unit and are maintained within prescribed limits. Mercury emissions well within limit. Further submitted that the FGD will be provided, which is under tenderization process.

Hence this submission

Solemnly affirmed on 09/11/2021 at Nagpur.

SWORN/SOLEMNL AFFIRME
BY: Ashok M. Kare

WHO IS PERSONALLY/KNOWN
TO ME /IDENTIFIED BY: self

BEFORE ME THIS THE 09th
DAY OF Nov 2021 AT NAGPUR

Poon
PUNAM P MOON
NOTARY
NAGPUR DIST (M.S.)INDIA

For & on Behalf of Maharashtra
pollution Control Board

Ashok Kare
(Ashok Kare)

Regional officer-Nagpur



MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
 Fax: 24023516
 Website: <http://mpcb.gov.in>
 Email: cac-cell@mpcb.gov.in



Kalpataru Point, 2nd and
 4th floor, Opp. Cine Planet
 Cinema, Near Sion Circle,
 Sion (E), Mumbai-400022

RED/L.S.I (R48)

Date: 08/07/2020

No:- Format1.0/CAC/UAN No.0000076926/CR - 2007000590

To,

Koradi Thermal Power Plant. MAHAGENCO,
 3X660 MW, Unit No.8,9 & 10 (Coal Based Thermal Power Plant)
 KHASARA NO 188-189,Koradi,
 Tal-Kamptee,Dist-Nagpur.

Sub: Renewal of consent with increase in CI under RED category

- Ref:**
1. Earlier Consent granted by Board vide No.BO/CAC-CELL/UAN NO.30152/CAC1906000774 dated 17.06.2019 Valid up to 31.08.2019.
 2. Minutes of Consent Appraisal Committee Meeting held on 04.05.2020.

Your application No.MPCB-CONSENT-0000076926 Dated 16.07.2019

For: grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. The consent to renewal is granted for a period up to 31/08/2021
2. The capital investment of the project is Rs.14276.5872 Crs. (As per C.A Certificate submitted by industry Existing-Rs. 14042.64 Cr + Increase in C.I. - Rs. 233.94 Cr= Total CI-Rs. 14276.5872 Cr.)
3. Consent is valid for the manufacture of:

| Sr No | Product | Maximum Quantity | UOM |
|----------|--|------------------|-----|
| Products | | | |
| 1 | Electricity Generation (3x660 MW) Unit No.8,9 & 10 (Coal Based Thermal Power Plant) | 1980 | MW |

4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

| Sr No | Description | Permitted (in CMD) | Standards to | Disposal Path |
|-------|-------------------|--------------------|-------------------|---|
| 1. | Trade effluent | 10739 | As per Schedule-I | 100% recyle/reused for dust suppression,cooling tower,Ash Handling Plant etc. |
| 2. | Domestic effluent | 283 | As per Schedule-I | 100% recyle/reused for dust suppression,cooling tower,Ash Handling Plant etc. |

5. Conditions under Air (P& CP) Act, 1981 for air emissions:

| Sr No. | Stack No. | Description of stack / source | Number of Stack | Standards to be achieved |
|--------|-----------|-------------------------------|-----------------|--------------------------|
| 1 | 3 | BOILER | 3 | As per Schedule -II |

6. Non-Hazardous Wastes:

| Sr No | Type of Waste | Quantity | UoM | Treatment | Disposal |
|-------|---------------|----------|--------|-----------|--|
| 1 | FLY ASH | 10000 | MT/Day | Recycle | Shall be sent to Cement Manufacturing Plant, Brick Manufacturing Plant and dispose as per MoEF-CC, Gol Notification No.SO-763(E) dated 14.09.1999 and as amended time to time thereof. |
| 2 | BOTTOM ASH | 2400 | MT/Day | Recycle | Shall be sent to Cement Manufacturing Plant, Brick Manufacturing Plant and dispose as per MoEF-CC, Gol Notification No.SO-763(E) dated 14.09.1999 and as amended time to time thereof. |

7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for treatment and disposal of hazardous waste:

| Sr No | Category No./ Type | Quantity | UoM | Treatment | Disposal |
|-------|---------------------------------------|----------|------|--------------|--|
| 1 | 5.1 Used or spent oil | 10 | MT/M | Recycle | Send to Authorised Recycler/Re-processor |
| 2 | 5.2 Wastes or residues containing oil | 6 | MT/M | Incineration | CHWTSDF |
| 3 | Glass Wool | 8 | MT/M | Landfill | CHWTSDF |
| 4 | Waste Resin | 2 | MT/M | Landfill | CHWTSDF |

- 8 The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
- 9 This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 10 The applicant shall comply with the conditions of the Environmental Clearance granted by MoEF-CC, Gol vide letter No. J-13012/87/2007. IA.II (T) dtd. 04.01.2010.
- 11 Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .
- 12 The Energy source for lighting purpose shall preferably be LED based
- 13 The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant

- 14 Industry shall promote adoption of clean coal (with ash content less than 34%) and clean power generation technologies and comply with notifications issued by MoEF for utilization of fly ash from coal or lignite based thermal power plant dated 14th September, 1999 and as amended on 3rd November, 2009 & amendment dtd 2nd January 2014
- 15 The applicant shall comply with the recommendations of the task force for implementation of CREP recommendation for Thermal Power Plants.
- 16 The industry shall comply the standards stipulated by the Ministry of Environment, Forest and Climate Change vide Notification dtd 25.02.2016.
- 17 The sulphur and ash content in the coal to be used in the project shall not exceed 0.5% and 34% respectively
- 18 Industry shall comply MoEF office memorandum dated 26.08.2015 by protocol for sampling, analysis of coal and reporting of compliance in respect of implementation of the Gazette Notification on use & supply of raw or blended of beneficiated coal with ash content not exceeding 34% on quaterly average basis
- 19 Industry shall either make the agreement with coal washeries or shall provide own washeries to get the blended/ beneficiated coal with ash content less than 34% and submit the BG of Rs.10 lakhs towards compliance of the same
- 20 Industry shall install the Automatic real time monitoring system for coal ash analysis within six month period.
- 21 PP shall submit revised time bound program towards completion of ETP, up-gradation of air pollution control system so as to meet the revised standards dtd. 07.12.2015, Provision of FGD & provision of online real time coal ash analyzer within a month.
- 22 PP shall ensure usage of low ash content coal. PP shall comply with fly Ash Notification.
- 23 PP shall ensure the OCEM & CAAQMS connectivity to the Board server within a month.
- 24 The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.

For and on behalf of the
Maharashtra Pollution Control Board.

(E. Ravendiran IAS),
Member Secretary

Received Consent fee of -

| Sr.No | Amount(Rs.) | Transaction/DR.No. | Date | Transaction Type |
|-------|-------------|--------------------|------------|------------------|
| 1 | 28780045.00 | 5452316 | 21/08/2019 | RTGS |
| 2 | 28794185.00 | MPCB-DR-0573 | 24/06/2020 | RTGS |

Copy to:

1. Regional Officer, MPCB, Nagpur and Sub-Regional Officer, MPCB, Nagpur I
 - They are directed to ensure the compliance of the consent conditions.
 - They are directed to forfeit the bank guarantee of Rs.25.0 Lakh towards non-compliance of consent conditions, for JVS exceedance & for not using the coal with ash content less than 34% and obtain top up BG of Rs.50.0 Lakh from the industry.
2. Chief Accounts Officer, MPCB, Sion, Mumbai
3. CAC desk-for records and website updation purpose.

SCHEDULE-I**Terms & conditions for compliance of Water Pollution Control:**

1. A] As per your application, you have provided the Effluent Treatment Plant (ETP) with the design capacity of 12000 m³/day.
- B] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent:

| Sr.No | Parameters | Limiting concentration not to exceed in mg/l, except for pH |
|------------------------------------|-------------------------|---|
| For Condenser Cooling Water | | |
| (1) | pH | Between 6.5 to 8.5 |
| (2) | Temperature | Not to exceed 5°C than that of intake water temp. |
| (3) | Free available chlorine | Not to exceed 0.5 mg/l |
| (4) | pH | Between 6.5 to 8.5 |
| (5) | Temperature | Not to exceed 5°C than that of intake water temp. |
| (6) | Free available chlorine | Not to exceed 0.5 mg/l |
| Boiler Blow Down | | |
| (1) | Suspended Solids | Not to exceed 100 mg/l |
| (2) | Oil & Grease | Not to exceed 10 mg/l |
| (3) | Copper (Total) | Not to exceed 1 mg/l |
| (4) | Iron (Total) | Not to exceed 1 mg/l |
| Cooling Tower Blow Down | | |
| (1) | Free available chlorine | Not to exceed 0.5 mg/l |
| (2) | Zinc | Not to exceed 1 mg/l |
| (3) | Chromium (Total) | Not to exceed 0.2 mg/l |
| (4) | Phosphate | Not to exceed 5 mg/l |
| (5) | Phosphate | Not to exceed 5 mg/l |
| D.M. Plant Effluent | | |
| (1) | pH | 5.5 to 9 |
| (2) | Suspended Solids | Not to exceed 100 mg/l |
| (3) | Oil & Grease | Not to exceed 10 mg/l |
| (4) | BOD 3 days | Not to exceed 30 mg/l |
| (5) | COD | Not to exceed 250 mg/l |
| (6) | TDS | Not to exceed 2100 mg/l |

C] The Industry shall ensure connectivity online monitoring system to the MPCB server including separate energy meter for pollution control system.

D] The treated effluent shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise. In no case, effluent shall find its way to outside factory premises.

2. A) As per your application, you have provided Sewage Treatment Plant of designed capacity 35 CMD for the treatment of 283 CMD of sewage.
- B) The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

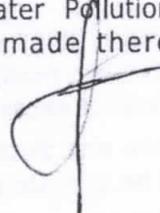
| | | | |
|---|------------------|---------------|----------|
| 1 | Suspended Solids | Not to exceed | 50 mg/l |
| 2 | BOD 3 days 27oC | Not to exceed | 30 mg/l |
| 3 | COD | Not to exceed | 100 mg/l |

C) The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise. In no case, sewage shall find its way to outside factory premises.

3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

| Sr. No. | Purpose for water consumed | Water consumption quantity (CMD) |
|---------|--|----------------------------------|
| 1. | Industrial Cooling, spraying in mine pits or boiler feed | 92501.00 |
| 2. | Domestic purpose | 942.59 |
| 3. | Processing whereby water gets polluted & pollutants are easily biodegradable | 0.00 |
| 4. | Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic | 0.00 |
| 5. | Gardening | 90 |

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.



SCHEDULE-II**Terms & conditions for compliance of Air Pollution Control:**

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

| Stack No. | Stack Attached To | APC System | Height in Mtrs. | Type of Fuel | Quantity & UoM | S% | SO ₂ (kg/day) |
|-----------|----------------------|------------|-----------------|--------------|----------------|------|--------------------------|
| 1 | BOILER of unit No.8 | ESP | 275 | COAL | 10000 MT/Day | 0.50 | 100000.00 |
| 2 | BOILER of unit No.9 | ESP | 275 | COAL | 10000 MT/Day | 0.50 | 100000.00 |
| 3 | BOILER of unit No.10 | ESP | 275 | COAL | 10000 MT/Day | 0.50 | 100000.00 |

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

| Parameters | Standards | |
|--------------------------------------|---------------|---|
| Total Particulate Matter | Not to exceed | 50 mg/ Nm ³ |
| Sulphur Dioxide(SO ₂) | Not to exceed | 200 mg/ Nm ³ (For the unit having 500 MW and above) |
| Oxides of Nitrogen(NO _x) | Not to exceed | 300 mg/ Nm ³ |
| Mercury | Not to exceed | 0.03 mg/ Nm ³ |

4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
6. The applicant shall operate four continuous automatic ambient air and micrometeorological monitoring station at location indicated by MPC Board to be setup and operate at its own cost for measurement of SO₂,NO_x and particulate matter. These CAAQMS shall also have necessary provisions of networking to the Air Quality Monitoring network of MPCB.
7. Control Equipment.
- Electrostatic Precipitator (ESP) of sufficient capacity provided to Boiler and any other sources of particulate matter shall be Operate and maintain so as to ensure that TPM emission doesnot exceed 100 mg/Nm³.
 - Dust collecting system and automatic water sprinkler system provided to Coal Handling Plants shall be operate and maintain continuously.
 - Dust collector of sufficient capacity provided to coal crusher and any other source of SPM shall operate and maintain continuously.
 - There shall not be any fugitive emission from coal storage yard.
 - The industry shall make necessary provisions for installing FGD with 90% efficiency in its design and layout ad sufficient floor space so that it can be installed in future, as & when directed by Board.

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SCHEDULE-III
Details of Bank Guarantees:

| Sr. No | Consent (C2E/C2O/C2R) | Amt of BG Imposed | Submission Period | Purpose of BG | Compliance Period | Validity Date |
|--------|-----------------------|-------------------|-------------------|---|-------------------|---------------|
| 1 | C2R | Rs. 70 Lakh | 15 days | Towards Operation and Maintenance of Air Pollution Control Devices to achieve emission standards. | Continuous | 31.12.2022 |
| 2 | C2R | Rs. 10 Lakh | 15 days | Installation of Real Coal Ash Analyser | 6 months | 31.12.2022 |
| 3 | C2R | Rs. 5 Lakh | 15 days | To switch over to 100 % usable dry fly ash collection and storage | 6 months | 31.12.2022 |
| 4 | C2R | Rs. 1 Lakh | 15 days | Towards utilization of fly ash as per fly ash notification 1999. | Continuous | 31.12.2022 |
| 5 | C2R | Rs. 1 Lakh | 15 days | Towards Mitigation of seepages from wet fly ash conveying system | 3 months | 31.12.2022 |
| 6 | C2R | Rs. 1 Lakh | 15 days | Towards Scientific operation of ash pond i.e. uniform distribution of wet slurry in the pond so as to have minimum depth of water | Continuous | 31.12.2022 |
| 7 | C2R | Rs. 1 Lakh | 15 days | Towards providing arrangement for reuse of 100% seepage water, arising from ash pond, for ash slurry | 3 months | 31.12.2022 |
| 8 | C2R | Rs. 5 Lakh | 15 days | Towards Scientific closure of abandoned ash pond with soil cover and plantation over it | 6 months | 31.12.2022 |
| 9 | C2R | Rs. 5 Lakh | 15 days | Towards Operation & maintenance of the Effluent Treatment Plant to achieve disposal standards | Continuous | 31.12.2022 |

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| Sr. No | Consent (C2E/C2O/C2R) | Amt of BG Imposed | Submission Period | Purpose of BG | Compliance Period | Validity Date |
|--------|-----------------------|-------------------|-------------------|--|-------------------|---------------|
| 10 | C2R | Rs. 25 Lakh | 15 days | Towards installation of FGD to unit No.9 | 6 months | 31.12.2022 |
| 11 | C2R | Rs. 10 Lakh | 15 days | Towards installation of STP of adequate capacity | 6 months | 31.12.2022 |

BG Forfeiture History

| Srno. | Consent (C2E/C2O/C2R) | Amount of BG Imposed | Submission Period | Purpose of BG | Amount of BG Forfeiture | Reason of BG Forfeiture |
|-------|-----------------------|----------------------|-------------------|---------------|-------------------------|-------------------------|
| NA | | | | | | |

BG Return details

| Srno. | Consent (C2E/C2O/C2R) | BG imposed | Purpose of BG | Amount of BG Returned |
|-------|-----------------------|------------|---------------|-----------------------|
| NA | | | | |

SCHEDULE-IV
General Conditions:

1. Conditions for D.G. Set
 - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
 - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
 - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
 - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
 - f) D.G. Set shall be operated only in case of power failure.
 - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
2. The applicant shall maintain good housekeeping.
3. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
4. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
5. The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
6. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can be downloaded from MPCB official site).
7. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
8. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
9. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
10. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

11. The PP shall provide personal protection equipment as per norms of Factory Act
12. Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
13. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
14. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
15. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
16. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
17. Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
18. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
19. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
20. The industry should not cause any nuisance in surrounding area.
21. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
22. The industry shall create the Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
23. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
24. The industry should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.

25. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
26. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
27. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
28. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
29. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
30. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
31. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.



सुधीर श्रीवास्तव भाषणे (से. नि.)
अध्यक्ष
Sudhir Shrivastava IAS (Rtd.)
CHAIRMAN



महाराष्ट्र प्रदूषण नियंत्रण मंडळ
MAHARASHTRA POLLUTION CONTROL BOARD

NO BO/JD(APC)/TPS/TB-2/Dir- 2130

Date: 19/06/2019

To

M/s.Koradi Thermal Power Station KTPS
Chhindwara Road Koradi Nagpur

Sub: Directions u/s 31A of the Air (Prevention & Control of Pollution) Act, 1981.

- Ref :
1. Notification dated 07/12/2015 issued by Ministry of Environment, Forest and Climate Change, Govt. of India.
 2. Directions u/s 5 of the Environment (Protection) Act, 1986 issued By Central Pollution Control Board vide letter dated 11/12/2017.
 3. Minutes of the Meeting held on 27/03/2018, 15/04/2019 & 25/4/2019
 4. Polluter Pays Principle' laid down by the Hon'ble NGT in its Order dated 13/07/2017 in Original Application No.200/2014 filed by M.C. Mehta v/s Union of India
 5. Orders dated 20/09/2018 & 19/12/2018 passed by the Hon'ble National Green Tribunal, Principal Bench, New Delhi in Original Application No.727/2018 in the News Item dated 17/09/2018 in 'The Hindu' authored by Shri Jacob Koshy under the heading "More River Stretches are now critically polluted".
 6. Order dated 13/12/2018 passed by the Hon'ble National Green Tribunal, Principal Bench, New Delhi in the Original Application No.1038/2018 – in the matter of News Item published in "The Asian Age" authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution levels"

WHEREAS, the Ministry of Environment and Forests, Govt. of India has published a Notification dated 07/12/2015 for emission limit for particulate matters and notified new limits for Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Mercury emissions and water consumption limit for coal /lignite based Thermal Power Plants. As per the said Notification, the Thermal Power Plants are required to achieve the notified limits within 2 years from the date of the Notification.

AND WHEREAS, the Central Pollution Control Board has issued directions u/s 5 of the Environment (Protection) Act, 1986 vide letter dated 11/12/2017 and given stipulated time period for upgradation of existing ESP, installation of FGD and installation of low NO_x burners, providing over fire air (OFA) etc. and also achieve progressive reduction, so as to comply NO_x emission limit.

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AND WHEREAS, a Meeting was conducted on 27/03/2018 regarding compliances / non-compliances made by Coal Fired Thermal Power Plants above 100 MW located in the State of Maharashtra.

AND WHEREAS, a Review Meeting was conducted on 15/04/2019 & 25/04/2019, regarding compliances made by various Coal Based Thermal Power Plants in the State of Maharashtra. During the meeting, it was observed that the Thermal Power Plants are not complying with the standards of SO₂, NO_x and TPM prescribed in the Notification dated 7/12/2015. It was further observed that huge quantity of legacy pond ash lying in the ash ponds of Thermal Power Plants and you have failed to submit time bound program for utilization/disposal of legacy pond ash.

AND WHEREAS, vide orders referred at Sr.Nos.4, 5 & 6, the Hon'ble NGT has directed the State Pollution Control Board to apply the 'Polluters Pay' Principles for environmental compensation in case of any breach of Environmental Norms / Rules and Regulations.

NOW THEREFORE, in view of the above, you are hereby directed to comply with the following directions :

1. You shall achieve the standards prescribed under the Notification dated 07/12/2015 issued MoEF & CC, Gol.
2. You shall submit a Time Bound Program for implementation of the directions issued by CPCB, regarding installation of FGD, NO_x reduction solutions and upgradation/ retro-fitment of ESP within a period of 15 days from the date of receipt of these directions.
3. You shall submit Time Bound Program for utilization / disposal of legacy pond ash within a period of 15 days from the date of receipt of these directions.
4. You shall upload Ash Generation and Utilization Data on "ASHTRACK" system every month and submit the same to MPCB on or before 5th day of every month.
5. You shall submit phasing out of old unit (more than 25 years or not achieving prescribed standards)

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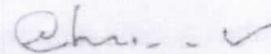
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6. You shall achieve the designed Station Heat Rate to reduce specific coal consumption, for reduction of pollution load.
7. You shall provide Online Monitoring System for stack of each unit and connect to MPCB server within one month.
8. You shall provide continuous Ambient Air Quality Monitoring Stations as per consent condition within 3 months from the date of receipt of these directions.
9. You shall submit Monthly Emission Inventory Report with respect to type of coal, specific coal consumption and load based emissions of SO₂, NO_x and TPM to MPCB.
10. You shall submit a bank guarantee of Rs.10.0 Lakhs.(Rs. Ten Lakhs only) towards installation of FGD, which shall be valid till the commissioning of FGD unit in favour of Regional Officer- *Nagpur*, MPCB, within a period of 15 days from the date of receipt of these directions. After installation and fully commissioning of FGD, 50% of the Bank Guarantee of Rs.5.0 Lakhs out of Rs.10 Lakhs will be released. Remaining 50% of the Bank Guarantee of Rs.5.0 lakhs will be retained for operation & maintenance of FGD Plant.
11. You shall submit a bank guarantee of Rs.5.0/- Lakhs (Rs. Five Lakhs only) towards installation of NO_x control equipments, which shall be valid till the installation of NO_x control equipments in favour of Regional Officer- *Nagpur*, MPCB within a period of 15 days from the date of receipt of these directions. After installation and fully commissioning of NO_x control equipment, 50% of the Bank Guarantee of Rs.2.5 Lakhs out of Rs.5 Lakhs will be released. Remaining 50% of the Bank Guarantee of Rs.2.5 lakhs will be retained for operation & maintenance of NO_x control equipments .
12. You shall submit a bank guarantee of Rs.5.0/- Lakhs (Rs. Five Lakhs only) towards utilization / disposal of legacy pond ash, which shall be valid for one year in favor of Regional Officer- *Nagpur*, MPCB, within a period of 15 days from the date of receipt of these directions. After complete utilization/disposal of legacy pond ash, the Bank Guarantee of Rs.5 Lakhs will be released.

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13. You shall submit a bank guarantee of Rs.5.0/- Lakhs (Five Lakhs only) towards achieving specific water consumption standards laid down by MoEF & CC, Gol, which shall be valid for one year in favour of Regional Officer- *Nagpur*, MPCB, within a period of 15 days from the date of receipt of these directions.

In case, you fail to comply with the aforesaid directions, the Board will have no option than to issue appropriate legal action against you, which please note.



(Sudhir Shrivastava)
Chairman
Maharashtra Pollution Control Board

Copy for information to: The Member Secretary, MPCB, Mumbai.

Copy to:

1. Joint Director(APC)/Law Officer, (P&L Div), MPCB, Mumbai-for information.
2. Regional Officer,...../Sub Regional Officer- for information necessary follow up. *Nagpur* *Nagpur-1*

MAHARASHTRA POLLUTION CONTROL BOARD

Tel.: 24010437/24020781/24014701
 Fax : 24024068 / 24044531
 Website : www.mpcb.gov.in
 E-mail : jdair@mpcb.gov.in



Kalpataru Point, 2nd - 4th Floor,
 Opp. PVR Cinema,
 Near Sion Circle, Sion (E),
 Mumbai - 400 022.

NO.BO/JD(APC)/TPS/TB-2/Dir- 0193

Date: 29/07/2021

To
 Chief Engineer (O & M)
 M/s. Maharashtra State Power Generation Co. Ltd.
 Koradi Theremal Power Station,
 Koradi, Nagpur-441111.

Sub: Directions under section 33 A of Water (Prevention & Control of Pollution) Act, 1974 & under section 31A of the Air (Prevention & Control of Pollution) Act, 1981.

- Ref :
1. Notification No. S.O.3305 (E) dtd. 7th December,2015 issued by Ministry of Environment, Forest and Climate Change, Govt. of India.
 2. Amended vide notification No. G.S.R.593 (E) dtd. 28th June, 2018 issued by Ministry of Environment, Forest and Climate Change, Govt. of India.
 3. Direction issued by M.P.C.Board vide No. BO/JD(APC)/TPS/DTB-2/Dir-2131 dtd. 19/06/2019.
 4. CPCB letter No. B-33014/7/2019/IPC-II/TPP/5812 dtd. 25/02/2021.

WHEREAS vide No. S.O.3305 (E) dtd. 7th December,2015 the Ministry of Environment and Forests, Govt.of India has published a Notification for new source emission limit for parameter particulate matters , Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) & Mercury emissions and specific water consumption per MWh limit for coal /lignite based Thermal Power Plants and same was amended vide notification No. G.S.R.593 (E) dtd. 28th June, 2018. As per the said Notification,

- I. All the existing CT-based the Thermal Power Plants reduce specific water consumption upto maximum of 3.5 m³/MWh within a period of two years from the date of the Notification.
- II. New Plant to be installed after 1st January 2017 shall have to meet specific water consumption upto maximum of 2.5 m³/MWh and achieve zero liquid discharge.

AND WHEREAS, the Board has conducted various meeting regarding compliances / non-compliances made by Coal Fired Thermal Power Plants above 100 MW located in the State of Maharashtra.

AND WHEREAS, vide ref. no. 3 above the Board has already issued direction towards achieving specific water consumption standards laid down by MoEF & CC, Gol, and imposed bank guarantee of Rs.5.0/- Lakhs (Five Lakhs only) for compliance.

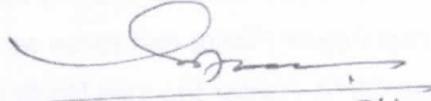
AND WHEREAS, vide ref. No. 4 above Central Pollution Control Board has communicated analysis of specific Water consumption of five quarter i.e Oct- Dec-2018 to Oct-Dec-2019 of your Thermal Power plant submitted by you and your TPP still remain non-compliant in respect of specific Water consumption.

AND WHEREAS, as per quarterly data submitted by you for specific water consumption for the period from Jan-2020 to March-2021 found remain non-compliant in respect of specific Water consumption for all five quarters.

AND WHEREAS, from above non compliances it is noted that you have fails to address the issue which shows your negligent attitude towards Environment Protections.

NOW THEREFORE, you are directed under provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981. You are hereby directed to submit your reply with proposed action plan for compliance of specific Water consumption standards laid down by MoEF & CC, Gol within seven days from the date of receipt of this letter under a copy to Regional Officer, Nagpur and Sub-Regional Officer-Nagpur-1. Failure to this, it will be assumed that you have nothing to say and further stringent action will be initiated against your industry, which may please be noted.

In case, you fail to comply with the aforesaid directions, the Board will have no option than to issue appropriate legal action against you, which please note.



(Dr. V. M. Motghare) 29/1/2024

Joint Director (Air Pollution Control)

Copy Forwarded for information to:

1. Member Secretary, M.P.C.Board, Sion, Mumbai.
2. Shri. Nazimuddin, Divisional Head-IPC-II, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.

Copy to:

1. Law Officer, (P&L Div), MPCB, Mumbai-for information.
2. Regional Officer, Nagpur/Sub Regional Officer, Nagpur-1 for information necessarily follow up.

Koradi TPS, 3X660 MW

Visit Report

Dated:- 26.10.2021

Name of the Industry :- M/s Koradi Thermal Power station,
3X660 MW, Unit No. 8, 9 & 10 (Coal
Based Thermal Power Plant),
Khasara No. 188-189, Koradi,
Tal-Kamptee, Dist-Nagpur

Date Of Visit : 26.10.2021

Thermal Power Station Representative :- Smt. Arpita Bahale,
(Sr. Chemist)
Environment department ,Koradi Thermal Power
Plant. Email.-

chemicaldivision660KTPS@mahhagenco.in

Mobile-8408880047

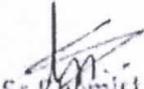
Inspected by :- Pramod Lone ,(Field Officer),Sub-Regional Office
Nagpur-1

- 1) **Consent Details** :- Board has granted consent to Operate under RED/LSI category vide no.1.0/CAC/UAN No.000076926/CR-2007000590 dated-08.7.2020 for the manufacturing of Electricity Generation (3X660) unit 8,9,10 (Coal based Thermal Plant) qty-1980 MW. I.E- 10739.0 CMD(100% recycle /reused for dust suppression, cooling tower ,Ash Handling plant. D.E- 283.0 CMD (100% recycle/reused for dust suppression, cooling tower , Ash handling plant etc. Now applied for C to R vide UAN No.0000116947.
- 2) **Environmental Clearance** :- A) Govt.of India had issued EC vide 04.01.2010,
b) Extension of validity of EC for 3x660 MW expansion of coal based power plant vide dated-27.5.2015.
c) Govt of India had issued amendment of EC vide dated-23.3.2017.
d) Govt of India had issued amendment of EC vide dated-29.5.2018.
- 3) During the visit it is observed Electricity generation coal based Thermal power station activity found in operation.
- 4) **STP** :- Authority has provided STP having capacity 25 KLD for domestic waste consisting Collection tank cum Neutralisation tank, MBBR technology, Settling tank, Dual media filter, Activated carbon filter, Treated effluent storage tank, treated effluent reuse in gardening purpose. During the visit STP found in operation . STP outlet JVS sample collected & sealed in presence of industry representative.
- 5) **ETP** :- PP has generated industrial effluent Boiler Blowdown , NDCT (Natural Draft Cooling tower) ,NeutraPit,CHP site drain , OWSDT (Oil water separator drain tank. PP has provided ETP consisting Collection tank- 02, CMB A & B (Central monitoring Basin) & each capacity 7000 cu. m, Clarifier-03 nos each capacity- 750 m³/hr. During the visit treated /untreated effluent there is no discharge in outside factory premises.

Sr. Chemist
3x660 MW, KTPS,
MSPGCL, Koradi. 1/3

Koradi TPS, 3X660 MW

- 6) During the visit it is observed Clarifier found in use for settling purpose. Needs ETP O & M of clarifier. During the visit Boiler Blow down, Cooling Tower Blow Down, D.M plant effluent & ETP outlet storage tank JVS sample collected. Treated effluent reuse in Ash handling purpose.
- 7) **Non-Hazardous Waste:-** PP has generated Fly Ash & Bottom Ash PP representative informed sent to brick manufacture & cement industry.
- 8) **Fly Ash:-** Fly Ash collected in Silo disposed through Bulklers to cement industry & Slurry Fly Ash disposed to near Ash Bund. Legacy pond Ash disposed to Cement industry/Brick manufacturer & bund raising. Ash water recovery generate from Ash Bund reuse in Ash Handling plant for Ash disposal.
- 9) **H.W:-** Authority has sent HW i.e. Glass wool qty-5.170 MT on 13.10.2021 to CHWTSD (MEPL). B) Category 35.2 Resin qty-3.490 MT sent to CHWTSD (MEPL) on 20.7.2021 as per on line manifest record.
- 10) Form no-4 submitted on 05.05.2021 for the year 2020 to 2021.
- 11) **Coal Unloading section :-** During the visit it is observed Thermal power station authority has provided fogging system for coal container unloading section.
- 12) **CHP:-** Coal handling plant PP has provided full covered tin for coal conveyer belt.
- 13) **Sprinkler System:-** PP has provided one place vertical sprinkler system for coal handling conveyer belt. Also Transfer point -(TP 3) sprinkler system provided.
- 14) **APC:-** Ash handling plant, PP has provided ESP followed by silo-03 nos with bag filter. 03 intermediate fly ash storage tank having capacity 1100 MT each. During the visit it is observed fly ash unloading point of bunkers huge quantity dust spread in surrounding area during unloading time due to not in operation properly Silo.
- 15) **OCEMS Stack online :-** PP has provided Boiler stack followed by ESP -03 nos. using Coal as a fuel. PP has provide online stack monitoring system attached to Boiler stack having height 275meters unit no 8,9,10 & during the visit reading shown as evening time 18.40 p.m. Unit No -8 - So2 -1412.18 connected to MPCB & CPCB server.
- 16) **CAAQMS- PP has provided CAQMS -04 locations i.e. 1) koradi TPS colony Club number-01 2) Swami Vivekanand Hospital at Koradi 3) Khasala AWR pump house 4) Dalmiya Pump house near Bhavan School Khaparkheda Road, Koradi & during the visit evening time reading shown as PM10- 52.76, PM 2.5- 29.51, So2-29.20 & No2- 41.07. Connected to MPCB server. CPCB server Connectivity is in progress.**
- 17) **FGD:-** PP has not provided FGD as per consent condition number 21 & EC condition.
- 18) **BG:-** PP has not submitted BG Sr. No.1 to 11 as per consent condition schedule no-III. PP representative informed that BG will be submitted by 10 days.
- 19) **Form No- 5** submitted on -24.6.2021.
- 20) During the visit it is observed near Fly Ash handling area dust spread on road. Needs to dust suppression.
- 21) Koradi TPS has provided separate environment cell.
- 22) Govt of India had issued EC vide 04.01.2010 Sr.no.1 FGD- During the visit it is observed PP has not installed FGD. Thermal power station representative informed tender under process & published on 4.11.2020, tenderisation process has been completed and LoA is put for Board approval.
- b) SR.No.2 - PP has carried out parodically through MoEF approved laboratory.
- c) EC Sr.No.3 :- PP informed are not altered any natural drainage for Koradi TPS activity.


Sr. Chemist
3x660 MW, KTPS,
MSPGCL, Koradi.

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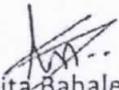
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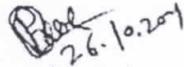
Koradi TPS, 3X660 MW

- d) EC Sr.No.4 :- One stack with 03 flue can of 275Mtrs height is provided .OCEMS provided &PP informed periodically monitored MoEF approved laboratories. ESP design 99% efficiency is provided.
- e) EC No. 9: HDP/LDP lining not provided as informed by PP representative, as bund is live, however, HDP liner is proposed for newly constructed Nadgaon bund and empty portion of Koradi bund.
- f) EC SR. No.14 :- Rain water Harvesting :- PP has informed rain water harvesting- 03 Nos location are identified, work of one location. Is completed while work for 2 location is in progress.
- f) EC point No-18:- PP has informed total trees planation is 5,86,307/ nos as on 31.7.2021. Total plantation area covered 67.3 % till 31.7.2021.
- g) EC point no-24 CSR :- Various CSR activities taken by MahaGenco with capital cost 20.0 cores (Copy is enclosed).
- 22) EC issued amendment vide dated – 23.3. 2017 point no-46 : PP informed use of beneficiated coal with Ash % around 31% is started.
- 23) EC issued amendment vide dated – 29.5.2018 EC point no- 48 :-Coal conveyer system work found in progress .PP informed 80% work completed.

Board has granted C to E for expansion .e Construction of close pipe conveyer system vide consent no. Format1.0/BO/CAC-Cell/UAN No.0000054679/CAC-1908000444 dated-16.6.2019.

During the visit it is found that Bhandewadi sewage treatment plant treated sewage effluent reuse in Koradi TPS for cooling purpose. Koradi TPS maintained daily water consumption record for 130 MLD Bhandewadi STP.


 (Smt. Arpita Bahale)
 Environment Dept.
 Koradi TPS Sr. Chemist
 3x660 MW, KTPS,
 MSPGCL, Koradi.


 (Pramod Lone)
 Field Officer,
 Maharashtra Pollution Control Board,
 Sub-Regional Office, Nagpur-1

3/3

MAHARASHTRA POLLUTION CONTROL BOARD

Website : mpcb.gov.in.
 e-mail : ronagpur@mpcb.gov.in
 Fax : 2560851
 Phone : 2565308, 2560139



Regional Office,
 5th Floor, Udyog Bhawan,
 Civil lines,
 Nagpur - 440001.

Regd.AD/Fax/Hand delivery

No. MPCB/SCN/2111020001

Date: - 02/11/2021.

To,
M/s Koradi Thermal Power Plant (MAHAGENCO),
3 x 660 MW, Unit No. 8,9 & 10 (Coal Based Thermal Power Plant),
Kh. No. 188-189, Koradi,
Tq. Kamptee Dist. Nagpur.

Sub: - Show Cause Notice.

Ref: - 1. The Board vide Consent no CAC/UAN No. 000076926/
 CR-2007000590 dtd 08/07/2020.
 2. Board official visit to industry on 26/10/2021.
 3. Sub-Regional Office, Nagpur-I submitted for legal action through
 legal module on 29/10/2021.

WHEREAS, you are operating your industry in Water Pollution Control area and Air Pollution Control Area declared under the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 & Authorization under Rule 5 of the Hazardous & Other Wastes (M & T M) Rules 2016 & amendment 2019 respectively.

AND WHEREA, it is mandatory on your part to comply with the consent condition and to operate and maintain comprehensive pollution control system to avoid any type of pollution in the nearby area, so as to achieve the consented standards.

AND WHEREAS, Board official visited to your unit for checking the compliance of consent conditions. Accordingly, Sub-Regional Office, Nagpur-I submitted following non-compliances as per ref. no. 2 & 3.

1. You have failed to achieve 100% fly ash utilization.
2. You have not maintained fly ash unloading point of bunker properly due to which huge quantity of dust spread nearby the area.
3. You are emitting excessive SO₂ emissions from Stack attached to unit no.8 SO₂-1412.18 as per the OCEMS connected to MPCB/CPCB Server.

(2)

4. You have not submitted Bank Guarantee as per Schedule-III in the consent conditions.
5. You have not provided adequate dust extraction system at fly ash handling area.
6. You have not provided HDPE/LDPE lining at ash bund area.

AND WHEREAS, above non-compliances show your negative attitude towards implementation of Environmental Laws and violating the provisions of Water (P&CP) Act 1974, Air (P and CP) Act 1981, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendment thereof.

AND WHEREAS, it seems that, you are knowingly and willingly causing the damages to the Environment by creating pollution in the nearby area.

In view of above, you are hereby directed to show cause as to **why stringent action shall not be taken against you for above lapses under the provision of the Water (P and C.P.) Act and 1974 and Air (P and C.P.) Act, 1981.** Your reply if any shall reach this office within 07 days positively else further legal action may be initiated against your unit please, note.


(A.M. Kare)

**Regional Officer,
M.P.C. Board, Nagpur.**

Copy submitted to: The Joint Director (APC), M.P.C. Board, Mumbai.

Copy to: - Sub-Regional Officer, M.P.C. Board, Nagpur-I - for necessary action and follow up

Analysis Results of M/s. Koradi Thermal Power Station (660X3 MW)
Stack

| Sr. No. | Date | Unit | Total Particulate Matter (TPM) (NTE 50 mg/Nm ³) | Sulphur Dioxide (SO ₂) (NTE 200 mg/Nm ³) | Remarks |
|---------|------------|-------------|---|--|---|
| 1 | 05/02/2020 | Unit No. 8 | <u>155.45</u> | <u>1644.74</u> | Underlined values are Exceeding the standards |
| 2 | 05/02/2020 | Unit No. 9 | <u>154.42</u> | <u>763.19</u> | Underlined values are Exceeding the standards |
| 3 | 05/02/2020 | Unit No. 10 | <u>162.04</u> | <u>1442.46</u> | Underlined values are Exceeding the standards |
| 4 | 15/12/2020 | Unit No. 8 | <u>54.38</u> | 72.96 | Underlined values are Exceeding the standards |
| 5 | 15/12/2020 | Unit No. 9 | <u>80.21</u> | 123.42 | Underlined values are Exceeding the standards |
| 6 | 26/10/2021 | Unit No. 8 | 42 | <u>631</u> | Underlined values are Exceeding the standards |
| 7 | 26/10/2021 | Unit No. 9 | 46 | <u>650</u> | Underlined values are Exceeding the standards |
| 8 | 26/10/2021 | Unit No. 10 | 49 | <u>630</u> | Underlined values are Exceeding the standards |

Ambient Air Quality Monitoring Results of M/s. Koradi Thermal Power Station

| Date | Location | Particulate Matter (Size less than 10 µm) RSPM µg/M ³ | Ava Value | Sulphur Dioxide (SO ₂) 80 µg/M ³ | Ava Value | Nitrogen Dioxide (NO ₂) 80 µg/M ³ | Ava Value | Remark |
|-----------------------------------|-------------------------------|--|---------------|---|-----------|--|-----------|-------------------------------------|
| 26/10/2021 to 27/10/2021 (24 Hrs) | Location 1 Arya Nagar | 166 | <u>141.33</u> | 9 | 8 | 21 | 20 | Underlined parameters are exceeding |
| | | 138 | | 8 | | 20 | | |
| | | 120 | | 7 | | 19 | | |
| 26/10/2021 to 27/10/2021 (24 Hrs) | Location 2 Bokhara Village | 150 | <u>150.33</u> | 7 | 6.67 | 24 | 23 | Underlined parameters are exceeding |
| | | 150 | | 7 | | 21 | | |
| | | 151 | | 6 | | 21 | | |
| 26/10/2021 to 27/10/2021 (24 Hrs) | Location 3 Khasala Village | 135 | <u>137</u> | 7 | 7 | 24 | 22 | Underlined parameters are exceeding |
| | | 125 | | 7 | | 22 | | |
| | | 151 | | 7 | | 20 | | |

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24014701/24020781
Fax : 24024068/24023516
Website: <http://mpcb.gov.in>
E-Mail: jdair@mpcb.gov.in



KALPATARU POINT, 3rd Floor,
Sion-Matunga Scheme Rd. No.8,
Opp. Sion Circle, Sion (East),
Mumbai-400 022.

No:BO/JD(APC)/CEPI/TB-2/B-0205

Date: 08/10/2021

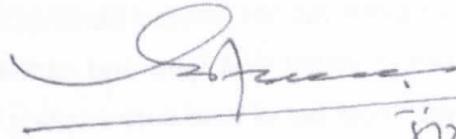
To,
The Director (Operation)
Maharashtra State Power Generation Co. Ltd.,
Prakashgad, Bhandra (East)
Mumbai-400051

Sub : Minutes of virtual meeting of MAHAGENCO TPPs held on 17/06/2021

Ref: Meeting of MAHAGENCO TPPs held on 17/06/2021.

Please find attached herewith minutes of virtual meeting of MAHAGENCO TPPs held on 17/06/2021 under chairmanship of Member Secretary. You are requested to submit action taken report.

D.A.: MoM dtd.117/06/2021.


(Dr. V. M. Motghare)
Joint Director (Air Pollution Control)

Copy submitted for information to -

1. Chairman and Managing Director, Maharashtra State Power Generation Co. Ltd., Prakashgad, Bhandra (East)
2. Member Secretary, M.P.C.Board, Sion, Mumbai.

Copy to:

1. Regional Officer, M.P.C.Board, Chandrapur/Nagpur/Aurangabad/Nashik: for information & necessary action.

The Minutes of the virtual meeting held on 17.06.2021, at 12.30 pm, held through Video Conference for Review compliance of MAHAGENCO Thermal Power Plants Maharashtra.

Virtual review meeting of coal based Thermal Power Plants operated by MAHAGENCO was held on 17/06/2021 under the chairmanship of Member Secretary, M.P.C.Board. Meeting was attended by Joint Director (APC), MPCB, Director (Operation) & Executive Director (E & S) MAHAGENCO Head quarter, All TPPS Chief Engineers and MPCB Regional & Sub Regional Officers. List of participants enclosed.

Joint Director (APC) welcomed all participant present in the meeting and flag issues of MAHAGENCO i.e ash utilization, legacy ash disposal, installation of FGD , coal utilization , phase out of old units etc.

Member Secretary, discussed about meeting agenda and requested MAHAGENCO to present plant wise status of compliance, FGD installation, revised notification issued by MoEFCC in 2021 regarding time frame, ash utilization and future planning for 100 % ash utilization, Water consumption, effluent generation and its disposal.

MAHAGENCO, representative gave presentation about present status of 7 coal based thermal power plant. As per revised MoEF&CC issued notification on dated 31.03.2021 they have proposed to install Wet type and partial FGD system. Presently they have using 20-million-ton wash coal out of total consumption of 47 Million Ton.

MAHAGENCO has submitted that, they have exploring the possibility of transportation of fly ash by Railways in jumbo bags /bulk from Koradi / Khaperkheda / Chandrapur TPS. Expression of Interest was invited for the work of "Transportation of fly ash by Railways in Jumbo bags from Khaperkheda TPS". Two agencies submitted their EOI. MAHAGAMS published Expression of Interest for establishment of integrated cement plant/cement clinker grinding unit/ cement blending unit/ ash processing unit in adjacent to Koradi, Khaparkheda & Chandrapur TPS of MAHAGENCO.Also exploring the possibility of Mine Backfilling in consultation with WCL in line with NTPC Talcher, Kaniha, Vindychal and Singrauli.

After due deliberation, it was decided to issue following directions,

1. MAHAGENCO shall submit TPP wise consumption of wash & unwashed Coal.
2. MAHAGENCO shall submit timeline for 100% wash coal utilization in Thermal Power Plants
3. Submit plant wise phasing out of old units.
4. Action plan for achieving of standards till installation of FGD and phasing old units.

5. TPP shall submit status of legacy pond ash storage in ash bund and its disposal plan.
6. TPP shall submit action plan for installation of FGD as per new notification
7. TPP shall submit the report of monthly specific water consumption with electricity generation.
8. MAHAGENCO shall take steps towards to achieve ambient air quality in area.
9. MAHAGENCO shall submit action plan for improvement in present Station Heat Rate.

Further directed Regional officers to submit plant wise status about air/water pollution within 7 days.

The meeting was concluded with vote of thanks to the Chair.



Dr. V.M. Motghare
Joint Director (Air Pollution Control)

MAHARASHTRA POLLUTION CONTROL BOARD

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Opp. PVR Cinema,
Near Sion Circle, Sion (E),
Mumbai - 400 022.

NO.BO/JD(APC)/TPS/DTB-2/Dir- 0007
To

Date: 01/10/2021

Koradi Thermal Power
Station KTPS Chhindwara
Road Koradi Nagpur

Sub: Directions u/s 31A of the Air (Prevention & Control of Pollution) Act, 1981.

- Ref :
1. Notification dated 07/12/2015 issued by Ministry of Environment, Forest and Climate Change, Govt. of India.
 2. Directions u/s 5 of the Environment (Protection) Act, 1986 issued By Central Pollution Control Board vide letter dated 11/12/2017.
 3. Minutes of the Meeting held on 27/03/2018, 15/04/2019 & 25/4/2019.
 4. Direction issued by Member Secretary M.P.C.Board vide letter No.BO/JD(APC)/TB-2/Dir/B-2545 dtd. 06/07/2018.
 5. Direction issued by Chairman, M.P.C.Board vide letter No. BO/JD(APC)/TPS/TB-2/Dir-2130 dtd. 19/06/2019.
 5. MoEFCC amended notification No. G.S.R. (E) dtd. 31/03/2021.
 6. This Office letter No. BO/JD(APC)/TB-2/B-0010 dtd. 29/04/2021.
 7. CPCB letter No. B-33014/7/2021/IPC-II/TPP dtd. 01/07/2021.
 8. Direction under section 18(1)(b) of air (P & CP) Act, 1981 issued by CPCB vide letter No. IPC-II/TPP/CP-16/9/2021/4707-4736 dtd. 12/08/2021.

WHEREAS, the Ministry of Environment and Forests, Govt. of India has published a Notification dated 07/12/2015 for emission limit for particulate matters and notified new limits for Sulphur Dioxide (SO₂), Oxides of Nitrogen (NO_x) and Mercury emissions and water consumption limit for coal /lignite based Thermal Power Plants. As per the said Notification, the Thermal Power Plants are required to achieve the notified limits within 2 years from the date of the Notification.

AND WHEREAS, with the implementation of the amendment in the notification dtd.07/12/2015, it is expected that there would be reduction in emission of PM, Sulphur dioxide and oxide of Nitrogen, which in turn will help in improvement in Ambient Air Quality in and around thermal power plants, d\beside reduction of mercury emission, and reduction in water

AND WHEREAS, the Central Pollution Control Board has issued directions u/s 5 of the Environment (Protection) Act, 1986 vide letter dated 11/12/2017 and given stipulated time period for upgradation of existing ESP, installation of FGD and installation of low NO_x burners, providing over fire air (OFA) etc. and also achieve progressive reduction, so as to comply NO_x emission limit.

35

AND WHEREAS, the Board has conducted meeting on 27/03/2018, 15/04/2019 & 25/04/2019, to review compliances made by Coal Based Thermal Power Plants in the State of Maharashtra to achieve standards of SO₂, NO_x and TPM prescribed in the Notification dated 7/12/2015.

AND WHEREAS, vide No. G.S.R. (E) dtd. 31/03/2021 MoEF & CC, GoI has issued amended notification. As per notification Thermal Power plants are divided in 3 categories based on their location to comply with emission norms within the time limit as specified in notification as below,

| Sr. No | Category | Location/Area | Timeline for compliance | |
|--------|----------|--|-------------------------|------------------------|
| | | | Non retiring units | Retiring units |
| 1 | A | within 10 km radius of National Capital Region of cities having million plus population) | Upto 31" December 2022 | Upto 31" December 2022 |
| 2 | B | (within 10 km radius of critically polluted areas or Non-attainment cities) | Upto 31" December 2023 | Upto 31" December 2025 |
| 3 | C | (other than those included in category A & B) | Upto 31" December 2024 | Upto 31" December 2025 |

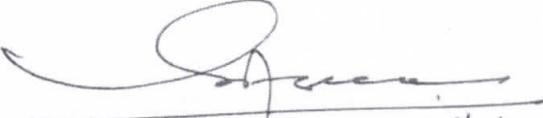
AND WHEREAS, vide letter dtd. 29/04/2021 Board has already communicated amended notification.

AND WHEREAS, Central Pollution control Board has constituted Task Force under Member Secretary, CPCB for categorization of thermal power plant as per amended notification no. G.S.R. 243 (E) dtd. 31/03/2021.

AND WHEREAS, CPCB Task Force committee has done categorization of Thermal Power plant as per amendment notification 31.03.2021 and you thermal power plant/Captive Thermal Power plant is under Category A... & timeline for compliance upto... 31st December 2022... as mentioned in above table.

NOW THEREFORE, in view of the above, you are hereby directed to submit status of for upgradation of existing ESP, installation of FGD and installation of low NO_x burners, providing over fire air (OFA) etc. with time bound program as per amended notification no. G.S.R. 243 (E) dtd. 31/03/2021 within next 15 days.

In case, you fail to comply with the aforesaid amended notification, the Board will have no option than to levying environment compensation on thermal power plant as mentioned in said notification, which please note.


 (Dr. V. M. Motghare) 3/9/21
 Joint Director (Air Pollution Control)

Copy for information to:

1. The Hon'ble Chairman, MPCB, Mumbai.
2. The Member Secretary, MPCB, Mumbai.

Copy to:

1. Law Officer, (P&L Div), MPCB, Mumbai-for information.
2. Regional Officer,...../Sub Regional Officer- for information necessary follow up. Nagpur Nagpur

CPCB Meeting Scheduled on 24/08/2021 at 2.30 pm

Sub: Categorization of Captive Power Plants as per MoEF&CC Amendment notification No. G.S.R.243 € dtd.31/03/2021. Submission report to CPCB.