



मुजफ्फरपुर थर्मल पावर स्टेशन
Muzaffarpur Thermal Power Station

Ref No.: MTPS/EMG/FY24-25/EC/H2

Date: 25-04-2025

To,

The Regional Officer,
Ministry of Environment, Forest & Climate Change,
2nd Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi,
Jharkhand-834002

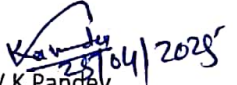
Subject :- Regarding submission of half yearly compliance status (01.10.2024 to 31.03.2025)
of Environmental Clearance conditions of MTPS St-II (2 X195 MW)

Dear Sir,

Please Find attached herewith half yearly compliance status of Environmental Clearance conditions of Muzaffarpur Thermal Power Station, NTPC Ltd. (erstwhile Kanti Bijlee Utpadan Nigam Limited), St-II (2 X 195 MW) for the period from 01.10.2024 to 31.03.2025.

Kindly acknowledge the receipt.

Yours Faithfully


V K Pandey
DGM (EMG)

CC :

The Member Secretary Bihar State Pollution Control Board, Parivesh Bhawan, Plot No. NS-B/2, Patliputra Industrial Area, Patliputra, Patna Bihar-800010	The In-charge, Zonal Office Central Pollution Control Board South End Conclave, Block 502, 5 th & 6 th Floor 1582, Razidanga, Main Road, Kolkata – 700107 (West Bengal)
The Regional Officer Bihar State Pollution Control Board, Regional Office, Bela Industrial Area, R. K. Ashram Chowk, Bela, Muzaffarpur - 842005	

पोस्ट: काँटी थर्मल जिला-मुजफ्फरपुर-843130/P.O-Kanti Thermal, Distt-Muzaffarpur-843130 (Bihar) Tel/Fax : 06223-267310

पंजीकृत कार्यालय :- एन टी पी सी भवन स्कोप कॉम्प्लेक्स, 7 इंस्टीट्यूशनल एरिया लोधी रोड नई दिल्ली-110003

Registered Office: - NTPC Bhawan, SCOPE Complex, 7 institutional Area, Lodhi Road, New Delhi-110003



Compliance status of Environmental Clearance Conditions
(01st October 2024 to 31st March 2025)

Muzaffarpur Thermal Power Project Stage – II (2x195 MW), NTPC Ltd.

(EC Clearance letter No.- J13012/98/2008-IA.II(M) Dt. 09th Nov 2009 and

J-13012/98/2008-IA.I(T) Dt. 31st December 2014)

SI.NO.	STIPULATION	COMPLIANCE STATUS
i.	<p>Status of implementation of 100% utilization of Fly Ash generated for Stage-I shall be submitted to the Regional Office of the Ministry within six months.</p> <p>Fly ash generated from Stage-II shall be fully utilized within a reasonable period not exceeding four years.</p>	<p>Stage-I (2X110MW) units have been retired w.e.f. 08.09.2021. Only St-II units (2X195 MW) are under operation.</p> <p>Ash Utilization during FY (2024-25): 123.88 % Ash Utilization during FY (2023-24): 120.59% Ash utilization during FY (2022-23): 104.86 % Ash utilization during FY (2021-22): 167.77 % Ash utilization during FY (2020-21): 105.53 %</p> <p>MTPS has already achieved the 100 % Ash utilization target</p>
ii.	<p>Stack (s) of 275 m height and twine flue shall be provided with continuous online monitoring equipments for SO_x, NO_x and SPM. Exit velocity of flue gases shall not be less than 21 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.</p>	<p>The corrigendum regarding stack height has been issued by MOEF&CC vide their letter dated 19.11.2009 recommending for bi-flue stack of 146.5 meters height for the project.</p> <p>A bi-flue stack of 146.5 meters height has been constructed. It has the provision of flue gas flow meter for measuring exit velocity and Continuous online stack monitoring facility for measurement of Particulate, SO₂ and NO_x is installed. Mercury emissions monitoring from stack is being done on periodic basis.</p>
iii.	<p>High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 100 mg/Nm³.</p>	<p>Installation of High Efficiency Electrostatic Precipitators (ESPs) is already completed for Unit-3 and Unit-4. The electrostatic precipitators are designed for a guaranteed efficiency of 99.93 % and particulate emissions are within stipulated norms.</p>
iv.	<p>Adequate dust extraction system such as cyclones / bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p>	<p>Presently coal requirement of St-II is being catered through existing CHP having adequate dust extraction system.</p>
v.	<p>Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from 4th year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emitting from the existing ash pond. No ash shall be disposed off in low lying area.</p>	<p>Fly ash is being collected in dry form and storage facility i.e 02 Nos. silos of capacity 900 MT each have been provided.</p> <p>100 % Ash utilization has already been achieved.</p> <p>Monitoring of heavy metals in bottom ash and the effluents from existing ash pond is being carried out and test reports are being submitted to MOEF &CC and BSPCB on quarterly/ half-yearly basis.</p>

SI.NO.	STIPULATION	COMPLIANCE STATUS
vi.	Ash pond shall be lined with HDP/LDP or any other suitable impermeable lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Suitable impermeable lining of Ash Pond is already envisaged. The seismic parameters are taken at design stage as well as at construction stage to protect the damage of ash dyke.
vii.	Closed cycle cooling system with natural draft cooling tower shall be provided. The effluents shall be treated as per the prescribed norms.	A closed circuit type circulating cooling water system using Induced Draft Cooling Towers (IDCT) is provided.
viii.	No ground water shall be extracted for the project work at any stage.	Noted & Complied
ix.	The treated effluents conforming to the prescribed standards only shall be discharged and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	<p>An effluent treatment system has been commissioned to treat waste water as per the prescribed statutory standards and is being re-used in the process.</p> <p>Ash water re-circulation system (AWRS) is under operation to re-circulate ash pond effluent.</p> <p>Arrangement for separate plant effluent handling system has been made to ensure that plant effluents do not mix with storm water drainage.</p>
x.	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt / plantation	STP has been commissioned and presently under operation. STP Treated Water is being re-used as a process water through ETP/CMB at Plant. In addition to above, treated water is being used for development of green belt/horticulture purpose.
xi.	Rain water harvesting should be adopted. Central Ground Water Authority/Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.	The rain water harvesting scheme has been implemented as per recommendation / stipulations of Central Groundwater Board (CGWB).
xii.	Adequate safety measures shall be provided in the plant area to check / minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry at Bhubaneswar.	Adequate safety measures have been provided to check / minimize spontaneous fires in coal yard, especially during summer season. The dedicated fire wing of CISF equipped with firefighting equipment has been deployed.
xiii.	Storage facilities for auxiliary liquid fuel such as LDO and/HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	<p>Storage facility for liquid fuel (LDO) is developed in consultation with petroleum and explosive safety organization, Gov of India.</p> <p>A disaster management plan has been prepared & approval has been accorded by Chief Inspector of factories, Bihar, Patna.</p>
xiv.	Regular monitoring of groundwater in and around the ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained, and six-monthly reports shall be furnished to the	Regular monitoring of groundwater including heavy metals (Hg, Cr, As, Pb) around ash pond area is being conducted and ground water monitoring data is being compared with the

SI.NO.	STIPULATION	COMPLIANCE STATUS
	Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	baseline data. It is found that there is no adverse effect on ground water quality due to project. The copy of ground water monitoring reports are being submitted to MoEF & CC and BSPCB on quarterly basis.
xv.	Shelter Belt consisting of 3 tiers of plantations around the plant of 100 m width and adequate tree density shall be developed.	The Unit-1 & Unit-2 (Stage-I) was commissioned long back in 1985 & 86 and in the same plant area, Stage-II (2X195MW) has been constructed. Thus, there are constraints in land availability in plant area to accommodate 100 m width green belt. However, MTPS has already planted 70,218 nos. trees till 31 st March 2025 in Plant, Township, ash dyke area and other locations. In addition, suitable locations have also been identified in plant premises and accordingly further plantation is being done in a regular manner.
xvi.	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	First aid and sanitation arrangements is already functional at site.
xvii.	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 Dba. For people working in the high noise area, requisite personal protective equipment like earplugs / earmuffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy / less noisy areas.	Noise level control has been taken in Design specification of the equipment and provisions of suitable enclosures have been made to limit noise level within stipulated limit. Peoples working in high noise area is provided with appropriate ear protection devices / PPEs. Periodic medical examination of workers is being done.
xviii.	Regular monitoring of ground level concentration of SO ₂ , NO _x , Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional office of this Ministry. The data shall also be put on the website of the company.	Regular monitoring of ground level concentration of SO ₂ , NO _x , Hg, SPM and RSPM is being carried out. The Copy of Reports are being submitted to MoEF & CC and BSPCB quarterly basis. Control measures are being taken immediately. Four nos. of AAQMS have been finalized at the suitable location site in consultation with BSPCB, Patna. Periodic reports are being submitted to regional office of the MOEF&CC at Ranchi on quarterly basis.

SI.NO.	STIPULATION	COMPLIANCE STATUS
xix.	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of issue of this letter.	R&R Plan is being implemented as per prevalent R&R Policy.
xx.	An amount of Rs. 12.0 Crores shall be earmarked as one-time capital cost for CSR programme. Subsequently, a recurring expenditure of Rs. 2.4 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Condition No. xx deleted vide EC amendment dated 21.10.2020 granted by MOEF.
xxi	As part of CSR Programme the company shall conduct need-based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc can form a part of such Programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.	CSR expenditure is being done as per need-based assessment / requirement of nearby villages. Further CSR budget is being envisaged as per provision of section 135 of Companies Act, 2013. Applicable budget has also been earmarked for Community development work and accordingly CD work is being implemented.
xxii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Noted and being followed.
xxiii.	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution control Board/Committee and may also be seen at website of the Ministry of Environment and Forests at http://www.envfor.nic.in	Advertisement regarding Environmental Clearance has been published in two local newspapers widely circulated in Bihar. <ol style="list-style-type: none"> 1. "DAINIK JAGARAN" dated 22.11.2009. 2. "HINDUSTAN" dated 25.11.2009.

Sl.NO.	STIPULATION	COMPLIANCE STATUS
xxiv.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Copy of EC letter has been sent to office of Zila Parisad, Municipal Corporation and other concerned local authorities. The EC letter has also been uploaded on the company web site.
xxv.	A dedicated environment management cell with suitable qualified staff shall be set up under the control of a Senior Executive, who will report directly to the Head of the Organization.	Dedicated Environment Management Group (EMG) under the control of senior executive and directly reporting to Head of Project (HOP) has been set up.
xxvi.	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB, and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Online monitoring data is already connected to CPCB/BSPCB server. The digital display Board has been installed at main gate of the plant.
xxvii.	The environment statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Environment statement in the prescribed Form-V is being submitted to BSPCB and Regional Offices of the Ministry by e-mail. The same is also available on website of the company.
xxviii	The project proponent shall also submit six monthly reports on the status of implementation of the stipulated environmental safeguards and the results of monitoring to the Ministry of Environment & Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment & Forests.	The half yearly compliance report is being regularly submitted to the concerned statutory authority and updated report is also being uploaded on website.

SI.NO.	STIPULATION	COMPLIANCE STATUS
xxix.	Regional Office of the Ministry of Environment & forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and updates the same from time to time at least six-monthly basis.	EIA report and EMP already submitted to Regional Office of MOEF &CC.
xxx	Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	The requisite funds for environmental mitigation measures have been included in the project cost. The fund earmarked for the environment protection measures will not be diverted for any other purpose.
xxxi.	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	The date of financial closure of the project (stage-II) was 27.09.2011. Land development was started on 29.09.2010. COD of unit#3 was completed on 18th March 2017 and unit#4 is 1st July 2017.
xxxii.	Full cooperation should be extended to the Scientists / Officers from the Ministry / Regional Office of the ministry / the CPCB / the SPCB who would be monitoring the compliance of environmental status.	Noted and being complied.
xxxiii.	Harnessing solar power within the premises of the plant particularly at available rooftops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.	Rooftop Solar PV plant of total 125 KWp capacity has been installed & commissioned at various buildings within premises of plant. The cumulative actual generation up to 31.03.2025 is 5,29,506 KWh.
xxxiv.	A long term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute and result thereof analyzed every two year and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Monitoring of Heavy metals contents in coal, fly ash and bottom ash is being carried out and radio activity contents of coal has also been carried out through reputed institute. The report are being submitted to MOEF & CC and BSPCB on quarterly basis.
xxxv.	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.	Fugitive emission of fly ash and dust is being controlled up to the maximum extent with the aid of suitable pollution control devices such as, dust extraction and suppression system, water sprinkling system etc.

SI.NO.	STIPULATION	COMPLIANCE STATUS
xxxvi.	Space for FGD shall be provided for future installation as may be required.	Space has already been kept in the design specification for installation of FGD plant.
xxxvii.	No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up/operation of the power plant.	Noted and being followed
xxxviii.	Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board.	Noted and being followed
xxxix.	Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.	The green belt around ash pond for St-II is being developed over and above green belt at Plant and township area.
XL.	For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit Committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.	Periodic monitoring of CSR activities is being carried out. Further CSR activities shall also be evaluated by an independent external agency.
XL i.	An Environmental Cell comprising of at least one expert in environmental science/engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be insured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.	Dedicated Environment Management Group (EMG) with 01 no. expert in environmental science under the control of senior executive and directly reporting to Head of Project (HOP) has been set up.
XLii.	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.	A well laid NTPC Corporate Environment Policy is already available. The adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations is being ensured.

Muzaffarpur Thermal Power Project Stage – II (2x195 MW), NTPC Ltd.

**Compliance status of additional condition of Environmental Clearance vide amendment
letter No.- J13012/98/2008-IA.II(T) dt. 21st Oct 2020
((01st October 2024 to 31st March 2025))**

Sl.NO.	STIPULATION	COMPLIANCE STATUS
i.	The condition No. xx of EC dated 09.11.2009, regarding CSR expenditure is hereby deleted	Noted
ii.	As per the Revised Tariff Policy notified by Ministry of Power vide dated 28.01.2016, project proponent shall explore the use of treated sewage water from the Sewage Treatment Plant of Municipality / local bodies / similar organization located within 50 Km radius of the proposed power project to minimize the water drawal from surface water bodies. The details of sewage Treatment Plants located within 50 KM radius along with capacities shall be submitted.	Action has been taken to explore use of treated sewage water from the Sewage Treatment Plant of Municipality / local bodies / similar organization located within 50 Km radius of the MTPS. Accordingly, communication has been sent to concerned State authority regarding availability of STP water including details of STP. However, at present there is no STP within 50 KM radius.
iii.	While commissioning the proposed unit, the compliance of revised emission norms issued vide Notification dated 07.12.2015 and as amended time to time shall be achieved along with specific water consumption as per notification dated 28.06.2018. The FGD system and NOx control measures such as SCR/SCNR/De-NOX burners shall be installed to achieve the revised emission norms.	<p>The compliance of revised emission norms issued vide Notification dated 07.12.2015 and as amended time to time is being complied.</p> <p>The norms for specific water consumption as per notification dated 28.06.2018 is being complied.</p> <p>The NOx control system has already been commissioned in St-II units and same is being complied.</p> <p>The FGD system has already been envisaged and compliance will be done as per latest MOEF&CC gazette notification.</p>