एनटीपीसी NTPC

एन टी पी सी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)

NTPC/KGN/EMG/EC-MOEF/2021-22

Date: 15.11.2021

To
The Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (WZ),
Kendriya Paryavaran Bhawan,
E-5 Arera Colony, Link Road-3,
Ravishankar Nagar, **Bhopal**-462016, Madhya Pradesh

Sub: Submission of 13th Half Yearly Environmental Clearance Compliance Report of Khargone Super Thermal Power Project (2x660 MW) at Village Selda & Dalchi, Khargone, Madhya Pradesh by NTPC Ltd.

EC Ref: J-13012/54/2010-1A.II (T), Dated-31.03.2015

Sir,

With reference to the above mentioned subject we are submitting the half yearly compliance report to stipulated conditions of Environmental Clearance in soft copy vide email (at Email id- rowz.bpl-mef@nic.in) for the period (**Apr'2021 - Sep'2021**) for your kind records please.

Thanking you,

Yours sincerely,

15.11.21

(Anil Khanna)
General Manager-Operations
Khargone Super Thermal Power Project

Encl. as above

Copy to (email):

1. The Director
   IA Division
   Ministry of Environment, Forest and Climate Change,
   Paryavaran Bhawan,
   Lodhi Road, New Delhi-110003, Email- kushal.vashist@gov.in

2. The Member Secretary,
   Central Pollution Control Board,
   Parivesh Bhawan, CBD- cum-Office Complex,
   East Arjun Nagar, **Delhi**-110032, Email-mscb.cpcb@nic.in

3. The Member Secretary,
   Madhya Pradesh Pollution Control Board,
   Parivesh Bhawan, E-5 Arera Colony,
   Paryavaran Parisar, **Bhopal**-462016, Email- ms-mppcb@mp.gov.in

KHARGONE SUPER THERMAL POWER PROJECT (2X660 MW)
COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS

(Vide Letter No. J- 13012/54/2010-IA. II (T) Dated 31st March 2015)

	MOEF & CC Stipulations	NTPC Response
A	**Specific Conditions:**	**Status as on 30.09.2021**
i	Coal transportation shall be by Rail only. An additional EIA shall be carried out and an EMP shall be prepared for laying down the rail line and alternate mode of transportation, in case rail line gets delayed. The EIA/EMP shall be submitted to the Ministry within one year of issuing the EC.	Rail network for NTPC-Khargone has been established and entire coal is being transported by railway route only.
ii	The Sulphur and Ash content of coal shall not exceed 0.5% and 43% respectively. In case of variation of quality at any point of time, fresh reference shall be made to the Ministry for suitable amendments in the environmental clearance.	MOEF&CC Vide Office Memorandum dated 11.11.2020 has modified this condition. The project proponent has to only inform to the Regional Officer of MOEF&CC regarding the change in coal source and quality.
iii	Latest authenticated satellite imagery shall be submitted to the Regional Office of the Ministry on an annual basis to monitor the environmental alterations of the area.	Latest satellite imagery of NTP-Khargone and its vicinity land area being submitted to the Regional Office (Western Zone) of the MOEF&CC at Bhopal annually along with half-yearly compliance status of EC. Please find enclosed the latest satellite imagery of NTPC-Khargone enclosed at Annexure-A.
iv	Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional Office of the Ministry within six months.	Vision document specifying prospective plan of the project was submitted to the Regional Office (Western Zone) of the MOEF&CC at Bhopal vide NTPC letter dated 07.09.2015.
v	Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.	NTPC vide letter dated 07.09.2015 has submitted Scheme for harnessing solar power by installation of roof top solar plant within the premises of the Khargone project. Status of implementation: Works for installation of Roof-top Solar power plant within main-plant premises has been already awarded to M/s Waree by main EPC contractor M/s L&T. Installation works of solar panels started at workshop building and shall also be followed ay Stores & Canteen.
vi	One twin flue stack of 275 m height shall be provided with continuous on-line monitoring system of SO_x, NO_x and $PM_{2.5}$ & PM_{10}. Exit velocity of flue gases shall not be less than 22 m/sec. In addition to the regular parameters, Mercury emission	One twin-flue stack of 275-meter height provided for both units. Continuous online emission monitoring system (CEMS) facilities also provided for monitoring of SO2, NOx and Particulate matter (PM). Exit velocity of flue gases being maintained above 22 m/sec.

	form stack shall also be monitored of six monthly basis.	Mercury emission form stack also being monitored periodically. Please refer stack emission monitoring report for the same enclosed at Annexure-B.
vii	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm^3. Adequate dust extraction system such as cyclones/bag filters and water spray system to control fugitive emissions in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	The High Efficiency Electrostatic Precipitators (ESP) designed for a guaranteed efficiency of 99.97%. The particulate emissions being controlled and maintained below 30 mg/Nm^3 in compliance to latest MOEF&CC emission norms for TPPs dated 07.12.2015. Please refer stack emission monitoring report for the same enclosed at Annexure-A Adequate dust extraction system and water spray system also provided to control fugitive emissions at coal handling, coal stockyard, ash handling area, transfer points and other vulnerable dusty areas.
viii	COC of at least 5.0 shall be adopted.	Closed cycle cooling water re-circulation system has been designed and being implemented with minimum Cycle of Concentration (COC) of 5.0 for conservation/optimization of water requirement for the project.
ix	Monitoring of surface water quantity and quality shall be conducted regularly and records shall be maintained. The monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records shall be maintained. The monitored data shall be submitted to the Ministry every six months.	Monitoring of surface water quality as per stipulations, being carried out regularly through MOEF&CC accredited, NABL certified laboratory of M/s Mahabal Enviro Engineers Pvt. Ltd. Reports submitted **to** Regional Office (Western Zone) of the MOEF&CC at Bhopal at every six months. Please refer surface water reports enclosed at Annexure-B.
x	Monitoring for heavy metals in ground water in the vicinity of plant shall also be undertaken and monitoring report shall be submitted to the ministry every six months.	Monitoring of heavy metals in ground water in and around plant area as per stipulations, being carried out regularly through MOEF&CC accredited, NABL certified laboratory of M/s Mahabal Enviro Engineers Pvt. Ltd. Reports submitted to Regional Office (Western Zone) of the MOEF&CC at Bhopal at every six months. Please refer ground water reports enclosed at Annexure-B.
xi	A well designed rain water harvesting system shall be put in place within six months, which shall comprise of rain water collection from the built up and	Rainwater harvesting study has been already carried out at the project through M/s RAJMI Geo-exploration & Engineering Pvt. Ltd, Indore. A well-designed rainwater harvesting

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	open area in the plant premises and records shall be kept for the quantity of water harvested every year and its use.	system being established, as per recommendations of study report and relevant stipulations. Records shall be maintained for the quantities of water harvested every year and its use upon commissioning of RWH system. Approval of rainwater harvesting scheme obtained from CGWA, Bhopal. Work contract for implementation of RWH scheme awarded to M/s R R Associates, Indore by main EPC Contractor M/s L&T. Boreholes, piezometric holes, chamber construction, plastering, filter media filling works completed. Slab covering and drain connection work is in progress at present.
xii	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.	No water body including natural drainage system of the area has been disturbed due to activities associated with the setting up of the power plant and during the operation of the project.
xiii	Hydro geology of the area shall be reviewed annually through an institute/ organization of repute to assess impact of surface water and ground water (especially around ash dyke). In case, any deterioration is observed specific mitigation measures shall be undertaken immediately. Reports/data of water quality shall be submitted to the Regional Office of the Ministry every six months.	The baseline Hydro-geological study at Khargone project carried out through National Institute of Hydrology (NIH), Roorkee and its study report already submitted. Further, the study shall be reviewed annually from an institute/ organization of repute to assess impact of surface water and ground regime (especially around ash dyke). Proposal for annual hydro-geological study review has been already initiated and is under tendering. Water quality of surface and ground water being monitored regularly as per stipulations, through MOEF&CC accredited, NABL certified laboratory of M/s Mahabal Enviro Engineers Pvt. Ltd and report are submitted to Regional Office (Western Zone) of the MOEF&CC at Bhopal at every six months. Please refer surface & ground water quality reports enclosed at Annexure-B.
xiv	Waste water generated from the plant shall be treated before discharge to comply with the standards prescribed by the SPCB/CPCB.	Effluent Management Scheme has been designed and implemented with the objective to treat the entire wastewater as per the prescribed statutory standards of MPPCB/CPCB. It is to be submitted that during

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		normal course of project operation, feasibility of zero discharge being adopted based on maximum recycle/reuse of wastewater for various plant usage, thereby reducing and optimizing the quantities of water requirement and effluent generation to the extent feasible.
xv	Additional soil for leveling of the proposed site, if require shall be taken from within the sites (to the extent possible) so that natural drainage system of the area is protected.	All additional soil leveling of the project site being taken from within the sites only (to the extent possible) with all necessary precautions to protect natural drainage system of the area.
xvi	Fly ash shall be collected in dry from and storage facility (silos) shall be provided. Un-utilized 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 effluents emanating from the ash pond and in the bottom ash also. No ash shall be disposed-off in low-lying area.	An ash management & disposal scheme being implemented consisting of dry ash extraction system (DAES) for dry collection of fly ash with adequate storage facility (silos) to supply ash to entrepreneurs for utilization and promoting ash utilization to maximum extent and safe disposal of un-utilized ash in the ash pond in the form of slurry. Further, long-term agreement for fly ash utilization of about 3055 MT/day also done with cement industries. Copy of MOUs already submitted. Fly ash being issued to end users as per stipulations to achieve maximum ash utilization. Two different systems are being provided for ash disposal: Conventional wet slurry disposal system with ash water re-circulation for bottom ash and High Concentration Slurry Disposal (HCSD) system for fly ash. Periodic monitoring for mercury & heavy metals (As, Hg, Cr, Pb etc.) in the ash water emanating from ash pond and in the bottom ash being done regularly through MOEF&CC accredited, NABL certified laboratory of M/s Mahabal Enviro Engineers Pvt. Ltd. Report are submitted to Regional Office (Western Zone) of the MOEF&CC at Bhopal at every six months. Please refer ash water & bottom ash analysis reports enclosed at Annexure-B respectively. No ash is being disposed-off in low-lying area.
xvii	Fugitive emission of fly ash (dry or wet) shall be controlled such that no agricultural or non-agricultural land is affected. Damage to any land shall be	Fugitive emission of fly ash & dust being controlled up to the maximum extent with the aid of suitable pollution control devices such as ESP, Dust Extraction system, Dust

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	mitigated and suitable compensation shall be provided in consultation with the local Panchayat.	Suppression systems and water spray arrangements etc. Further, extensive plantation being undertaken in all available spaces including ash & coal handling areas. selectively with Air Pollution Tolerant (APTI) plant species. Ash being disposed-off in the designated area only. Moreover, trucks with closed containers/bulker being used for transportation of fly ash in order to avoid any dust emission.
xviii	Ash pond shall be line with HDPE/LDPE lining or any other suitable impermeable media so that no leaching takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	To avoid any leaching and ground water contamination from ash slurry, bottom ash lagoons are being provided with impervious lining with suitable impermeable material i.e. Bentonite blended clay in order to achieve the required permeability. Overflow lagoon of ash dyke is also designed with and lined with impervious thick liner of 300 mm at bottom. The structure of ash dykes has been designed, constructed and being operated as per state-of-the-art engineering practices for the design and construction of earth dams with adequate factor of safety. Ash dyke being constructed considering the seismic parameters in its design. Further, Regular monitoring and inspection of ash dykes and an emergency response system will ensure that there are no risks of failure as apprehended.
xix	A long-term study of radioactivity and heavy metals contents of coal to be used shall be carried out through a reputed institute and results shall be analyzed every two years and shall be reported to the Ministry along with the monitoring reports. Thereafter, mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Radioactivity and Heavy metals content studies in coal used have been carried out through reputed institute i.e., Board of Radiation & Isotope Technology (BRIT-BARC) and M/s Mahabal Enviro Engineers Pvt Ltd. (MOEF&CC and NABL accredited Lab) respectively. Reports already being submitted to the regional office of MOEF&CC at Bhopal along with half-yearly compliance reports. Further analysis study for radioactivity and heavy metal contents will continued to be carried out periodically through reputed institute and reports shall be submitted. Please refer Heavy metals content report and Radioactivity content reports in coal used enclosed at Annexure-B & Annexure-C.
xx	Green Belt of least 50m width consisting of three tiers of plantations of native	Extensive afforestation as prescribed, being undertaken at all available spaces in and

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	species around the plant shall be raised. Wherever 50m width is not feasible, an adequate justification shall be submitted to the Ministry and appropriate width not less than 20m shall be planted. Tree density shall not be less than 2500 per ha with survival rate not less than 80%.	around project in phased manner with completion of construction activities. Greenbelt around the main-plant area except transmission corridor being planted. Greenbelt around the township and avenue plantation along the roads also being done. About 53,000 saplings have been planted till date under Greenbelt development in and around project at NTPC land. Moreover, about 2,50,000 saplings have been planted outside the project at various locations in Khandwa and Khargone districts at degraded forest sites of Madhaya Pradesh Rajya Van Vikas Nigam. About 5,000 fruit plant saplings also being distributed free ever year, among local villagers. NTPC-Khargone has also taken up funding of Miyawaki plantation of 20,000 plants at Khargone city as per directions of Collector, Khargone.
xxi	Green belt shall also be developed around the ash pond over and above the Green Belt around the plant boundary.	Greenbelt plantations along the vicinity of ash storage & disposal sites and along boundary walls also being planted.
xxii	CSR schemes identified based on need-based assessment shall be implemented in consultation with the village Panchayat and the District Administration starting from the development of project itself. As part of CSR, prior identification of local employable youth the eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generation programs.	An amount of Rs.102.60 Crores has been spent on various Community Development activities (Infrastructure, Health, Education, Drinking Water and Sanitation, Covid-19 related activities, Solar Lights etc.), in the district of Khargone including project affected villages in the FY 2021-22. Further, a contract is also under Award for conducting Need Assessment Study and Social Impact Assessment Study.
xxiii	For 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 (every six months) and final.	Community Development activities is periodically reviewed internally.

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xxiv	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 appropriated seniority and qualification. It shall be ensured 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.	An Environment Management Group (EMG) with qualified team, headed by DGM (EMG) is already functional at the Khargone project site. EMG is responsible for implementation and compliance of environmental stipulations and ensure social impact improvement/ mitigation measures.
B	**General Conditions:**	
i	Space for FGD shall be provided for future installation, if required.	Space for FGD was already provided. Further, installation of FGD plant package awarded to M/s L&T and erection works for both units is in progress.
ii	The treated effluents conforming to the prescribed standards under Environment (Protection) Act 1986 only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	Adequate effluent treatment system comprising of ETP, neutralization pit, oil and grease separator, lamella clarifier, cooling towers etc. provided to treat effluents conforming the prescribed standards. The project having an integrated scheme for treatment, recycle and reuse of effluents. Cooling water blow down reused in CHP, AHP and firefighting. Ash water effluent recirculation also being provided for reused purpose. Independent plant effluent drainage system provided to ensure that plant effluents do not mix with storm water drainage. Provision made for treatment, recirculation & reuse of effluents & service water effluents of coal handling plant. Further, Zero Liquid Discharge (ZLD) scheme being implemented for recycle & reuse of wastewater generated, thereby reducing, and optimizing the quantities of water requirement and effluent generation to the extent feasible.

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iii	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	Sewage treatment plant provided to treat domestic sewage effluents emanating from plant and township. The STP treated water, conforming to prescribed standards utilized for plantation & raising greenbelt to the extent possible.
iv	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 etc. as and when finalized, shall be submitted to the ministry as well as to the regional office of the Ministry.	Adequate no. of Fire Spray & Hydrant system covering the entire power station including all the auxiliaries and buildings in the plant area being provided as per fire safety requirements. The system is adequately equipped with piping, hydrants, valves, instrumentation, hoses, nozzles, hose boxes/stations etc. Copy of safety measures details already submitted along with Half-yearly compliance dated 22.04.2019.
v	Separate storage facilities for auxiliary liquid fuel such as LDO/HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Provisions of the Manufacture, Storage and Import of Hazardous Chemical Rules and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996 shall be applicable as per the quantity stored. Disaster Management System shall be established as per the Disaster Management Plan to meet any eventuality in case of an accident taking place due to storage of oil.	Storage facility designed and provided for LDO as auxiliary liquid fuel, inside plant area conforming to the adequate safety standard and where risk is minimal. Necessary license has been obtained from Department of Explosives. Sulphur content in LDO being ensured within limits. A detailed Disaster Management Plan & Risk assessment including fire and explosion issues is being prepared and finalized in consultation with Department of Explosives. Regular mock drills being conducted as per plan in order to address any eventuality in case of an accident.
vi	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	All arrangements related to first aid, health & safety, and sanitation for workers during construction phase of the project have been kept under the scope of EPC contractor. However, NTPC being ensuring effective compliance of the said stipulations.
		Various measures implemented during construction phase through contractor are:- • Adequate infrastructure facilities, such as sanitation, fuel, restroom, medical facilities, safety, and suitable water supply being provided at various stages of project construction to the labor colonies housing

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		the work force during construction phase of the project. • Safety equipment such as earplugs and earmuffs, helmets, face shields, safety goggles etc. being provided to workers engaged in high-risk areas. • 24x7 hrs. ambulance service is available at site to transport injured workers to nearby hospitals.
vii	Noise levels from turbines in work zone shall be limited to 85 dB (A) from source. 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.	Design specification for the equipments has been made to comply with the stipulation. Noise levels from turbines in work zone being maintained within prescribed limits of 85 dB (A) from source. Requisite personal protective equipment's (PPE's) have been provided through contractors during construction phase. Periodic examination of workers also being done as stipulated. Workers of generator hall and other high noise area being provided with appropriate ear protection devices/PPEs.
viii	Regular monitoring of ambient air ground level concentration of SO_2, NO_x, $PM_{2.5}$ & PM_{10} and Hg shall be carried out in the impact zone of the project and record shall be maintained. In case these levels exceed the prescribed limits, necessary control measures shall be taken immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Monitoring reports shall be submitted to the Regional Office of this Ministry every six months. The data shall also be uploaded on the website of the company.	Regular monitoring of ambient air quality carried out regularly in the impact zone through MOEF&CC accredited, NABL certified laboratory of M/s Mahabal Enviro Engineers Pvt. Ltd and reports are submitted to the Regional Office of MOEF&CC at Bhopal at every six months. Please refer ambient air quality reports enclosed at Annexure-B. Further, three nos. of continuous AAQMS stations have been also provided at main-plant and township. Additionally, one more CAAQMS station installed at Khargone city as per directions from MPPCB. The locations of monitoring stations were finalized in consultation with MPPCB. The ambient air monitoring data being uploaded on intranet website.
ix	Fly Ash generated shall be utilized 100% from the 4th year of operation of the power plant. Status of fly ash utilization shall be reported each year to the Regional Office of the Ministry.	An ash utilization plan has been prepared and being implemented in compliance to MOEF&CC, Fly ash Gazette Notification dated 03.11.2009 and its amendments thereafter. Annual status of fly ash utilization being reported to the Regional office of MOEF&CC at Bhopal. Annual compliance report of Ash Utilization for the FY 2020-21 is submitted

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		along herewith. Please refer Annual compliance report of Ash Utilization enclosed at Annexure-D
x	Provision shall be made for the housing of construction labor (as applicable) within the site with all necessary infrastructures 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 structure to be removed after the completion of the project.	Labor colony with necessary infrastructure facilities such as housing, sanitation, mobile toilet, fuel, medical facilities, safety, drinking water supply etc. have been provided for construction labor. The same has been kept have been kept under the scope of EPC contractor. However, NTPC ensures effective compliance of the said stipulations.
xi	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of receipt 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 see at Website of the Ministry of Environment and Forests at http://envfor.nic.in.	The information of Environmental Clearance was published in two newspapers widely circulated in the region; 1. Hindustan Times (English) on dated 04.04.2015. and 2. Nai-Dunia (Hindi) on dated 04.04.2015.
xii	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ 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 clearance letter were sent vide our letter dated 06.04.2015 to Sarpanch of village Panchayat of Selda & Dalchi village, CEO of Khargone Distt & CEO of Khargone Municipal Corporation. The Environmental Clearance is uploaded on the NTPC website.
xiii	The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same every six months. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	The latest status of Half Yearly Compliance (HYC) report of Environmental Clearance (EC) conditions regularly being submitted to the Regional Office (Western Zone) of the MOEF&CC at Bhopal and offices of CPCB & MPPCB. Latest compliance status of EC also uploaded on the NTPC website, which is periodically being replaced with updated HYC report.

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v	The criteria pollutant levels namely; SPM, RSPM ($PM_{2.5}$ & PM_{10}), SO_2, NO_x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Continuous Emission Monitoring System (CEMS) for Stack emission pollutant parameters; Particulate Matter (PM), NOX, & SO2 have been provided. Continuous Ambient Air Quality Monitoring Station (CAAQMS), three nos. have been provided at main plant and township. Relevant environment data for pollutant levels along with Hazardous wastes & Haz. chemicals handled, being displayed at a convenient location near the main gate of the company in the public domain.
xv	The environment statement for each financial year ending 31st March in Form-V as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall be submitted by the project proponent to the concerned State Pollution Control Board. The same shall also be uploaded on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	The Environment Statement for each financial year ending 31st March in Form-V being regularly submitted to the MP Pollution Control Board & Regional Office (Western Zone) of the MOEF&CC at Bhopal. Copy of Annual environment statement for the FY 2020-21 enclosed herewith at Annexure-E.
xvi	The project proponent shall submit six monthly reports on the status of the implementations of the stipulated environmental safeguards to the Ministry of Environment and 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 every six months and simultaneously send the same by email to the Regional office, Ministry of Environment and Forests.	Six monthly compliance status report of EC conditions regularly being submitted to the Regional Office of MOEF&CC, CPCB & MPPCB and being uploaded on the NTPC website, which is periodically being replaced with updated report. The latest half yearly progress report for the period of Apr'2021 to Sep'2021 is submitted herewith.
xvii	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	A complete set of documents including Environmental Impact Assessment (EIA) Report and Environment Management Plan (EMP) along with the additional information/clarifications was already submitted to Regional Office (Western Zone) of the MOEF&CC at Bhopal on 05.10.2015

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	time to time shall be forwarded to the Regional Office for their use during monitoring.	
xviii	The details of the funds along with item-wise break-up of Rs.1421.2 crores allocated for implementation of environmental protection measures shall be submitted to the Ministry. This 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 shall be reported to the Ministry.	The requisite funds for environmental mitigation measures have been included in the project cost. Financial provision stipulated towards environmental mitigate measures shall not be diverted for other purposes.
xix	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 said stipulation being complied. Site leveling/ Land development work started on July 17th, 2015. Trial operation commissioning of Unit#1 (660 MW) achieved on 29/09/2019 and Commercial Date of Operation (COD) declared from 01/02/2020. Trial operation commissioning of Unit#2 (660 MW) achieved on 24/03/2020 and Commercial Date of Operation (COD) declared from 04/04/2020.
xx	Full cooperation shall be extended to the Scientists/officers from the Ministry / Regional Office of the Ministry/ CPCB /SPCB who would be monitoring the compliance of environmental status.	Full cooperation shall be extended to the Scientists/ Officers from the Ministry/ Regional Office of the Ministry at Bhopal/ CPCB/ SPCB during monitoring of the project.
5	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	Noted.
6	The environmental clearance accorded shall be valid for a period of 5 years from the date of issue of this letter to start operation of the power plant.	Noted.
7	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.

KHARGONE SUPER THERMAL POWER PROJECT (2X660 MW)
COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS

(Vide Letter No. J- 13012/54/2010-IA. II (T) Dated 31st March 2015)

8	In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	Noted.
9	The above stipulations would be enforced among others under the water (prevention and Control of pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act,1981, the Environment (Protection) Act,1986 and rules there under, Hazardous Wastes (Management, Handling & Trans-boundary Movement) Rules, 2008 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	Noted.
10	Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted.

COMPLIANCE REPORT OF ADDITIONAL CONDITIONS

(Vide Letter No. J- 13012/54/2010-IA. II (T) Dated 22nd August 2019)

	MOEF & CC Stipulations	**NTPC Response**
A	**Specific Conditions:**	**Status as on 30.09.2021**
1	While commissioning the proposed project, the compliance of revised emission norms vide Notification dated 07.12.2015 for the parameters PM: 30 mg/Nm3; S02: 100 mg/Nm3; NOx: 100 mg/Nm3 and Hg: 0.03 mg/Nm3 shall be achieved along with specific water consumption as per the notification vide dated 28.06.2018. The FGD System, NOx control measures such as SCR/ SCNR/	NTPC Khargone STPP ensures compliance to all standards as stipulated in the revised emission norms vide referred MOEF&CC Notification and its amendments thereafter. Specific water consumption being maintained within prescribed norms as per the referred MOEF&CC notification dated 28.06.2018. Particulate Matter (PM) emissions from boiler stacks also being controlled within prescribed new emission norms (i.e. 30 mg/Nm3) under referred notification dated 07.12.2015. FGD

	DeNOx burners shall be installed to achieve the revised emission norms.	installation work for SO2 emission control already in progress. Further, Over Fire Air (OFA) combustion system also provided for NOx emission control. CPCB directions have been also obtained for both units vide letter dated 20/12/2019 & 15/12/2020 respectively. As per referred directions, FGD installation timeline by 31/7/2021 and NOx compliance by 31/12/2022 in Unit-1, whereas immediate NOx compliance in Unit-2 is directed. However, CPCB-Task Force vide MoM dtd. 27/08/2021 for categorization of TPPs in line with MOEF&CC Notification dated 31/03/2021, recommended for extension in compliance of new emission norms by Dec'2024 for Category-C power plants including both units of NTPC-Khargone. Copy of CPCB-Task Force MoM enclosed at Annexure-F.
2	The status of installation of FGD and De-NOx/SCR/SNCR control systems to comply with new emission norms for both units shall be submitted.	For SO2 control, installation of FGD plant package already awarded to M/s L&T. Erection works are in progress. Latest status of installation of FGD system enclosed at Annexure-G. Over fire Air combustion control system (air/fuel ratio optimization around the burner) provided in both units to control NOx emissions. However, globally available SCR/SNCR system for reducing NOX emissions are not tested for Indian coal having high ash contents. Pilot test studies conducted at NTPC units at different locations to test efficacy of SCR system on Indian coal.
3	The detailed progress report of construction of proposed project shall be submitted to the Ministry and its Regional Office along with six monthly compliance report till both units are commissioned.	Both unit#1 and unit#2 were commissioned and under commercial operation from 01/02/2020 & 04/04/2020 respectively.
4	As per the Revised Tariff Policy notified of Ministry of Power issued 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 drawl from surface water bodies. The details of Sewage Treatment Plants located within 50 km radius along with the capacities shall be submitted.	No sewage treatment plant of adequate capacity available with local municipality/ local bodies within 50 km radius of NTPC-Khargone station. Feasibility of using treated sewage water from the STPs located in 50 Km shall be further explored in near future.

5	Daily quantity of (Average, minimum and maximum) fresh water withdrawn from Narmada River at Omkareshwar Dam for the plant purpose shall be submitted along with six monthly compliance report.	Fresh water withdrawn data is enclosed at Annexure-H.