

रामगुण्डम RAMAGUNDAM

Ref.No:09/EMG/E-10/2023/ 7

Date: 10.11.2023

To

Dr. G. Trinadh Kumar, IFS Inspector General of Forests Ministry of Env., Forest and Climate Change, Integrated Regional Office, Hyderabad 3rd Floor, Room No. 309, Aranya Bhawan, Opp. RBI, Safiabad - 500004, Hyderabad, Telangana. Email: iro.hyderabad-mefcc@gov.in.

Respected Sir.

Sub: Six monthly compliance report of EC accorded to NTPC Telangana – reg.

PARIVESH Portal is upgraded to PARIVESH2.0 and new registration in PARVESH2.0 portal for uploading Half Yearly EC compliance report is in the process.

Please find enclosed herewith the six-monthly compliance reports for Environmental Clearance (EC) accorded by MOEF&CC Vide Letter No. J- 13012/112/2010-IA. II (T) dated 20<sup>th</sup> January 2016 for NTPC Telangana Super Thermal Power Project Stage-I (2x800MW) pertaining to the period April 2023 to September 2023.

> Ramagundam Super Thermal Power Station, PO: Jyothinagar, Dist: Peddapalli, TS- 505 215: Telephone no.08728-272962

Thanking you

Yours faithfully

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(C. Srinivas Reddy) (AGM-EMG)

Telangaha State Pollution Control Board Environmental Engineer office of the Regional Office, Parnagundam, H. No. Special C-3, NTPC, TTS Near Zilla Parished High School Near Zilla Parisina 505 215
Copy to: JYOTHINAGAR (T.S.) Tiet Peddapalli (TS.)

The Environmental Engineer, Telangana State Pollution Control Board, Regional Office - Ramagundam.

Jyothinagar, Peddapalli (Dist), Telangana, India - 505215

Regd. Office: NTPC Limited, NTPC Bhawan, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003 No. L40101DL1975GO1007966 www.ntpc.co.in

# Telangana Super Thermal Power Plant Stage-I (2X800MW)

#### **ENVIRONMENTAL CLEARANCE**

Half-Yearly Compliance Status April - 2023 to September - 2023

Status as on 30.09.2023

## Telangana Super Thermal Power Plant Stage-I (2 x 800MW)

#### HALF-YEARLY COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS

#### Vide Letter No. J- 13012/112/2010-IA. II (T) Dated 20<sup>th</sup> January 2016

Sr.No.	EC Condition	Status as on 30.09.2023
Α	SPECIFIC CONDITIONS	
(i)	As the Satellite Imagery submitted was not clear, a clear satellite imagery shall be submitted to the Ministry and its R.O. Further, latest authenticated. Satellite imagery shall be submitted on an annual basis to the Ministry and its R.O to monitor the alterations of the area.	<ul> <li>The consultancy contract for the stipulated condition was awarded to Telangana State Remote Sensing Application Centre (TRAC), Govt. of Telangana.</li> <li>TRAC study reports are submitted to Regional Office (South Zone at Chennai) &amp; Central Office of MOEF&amp;CC.         <ul> <li>1st Report on 16.03.2018.</li> <li>2nd Report on 02.11.2019.</li> <li>3rd Report on 21.05.2021.</li> </ul> </li> </ul>
(ii)	The PP shall ensure compliance to the Ministry's Notification. Dated 02.01.2014 regarding use of coal with ash content not exceeding thirty-four per cent, on quarterly average basis. This is to be ensured by incorporating a condition in the MoU/FSA with CIL etc. Also, if required, coal washery shall be installed.	The said condition and Gazette notification S.O.1561(E), dt.21.05.2020 will be complied during operation phase of the project.
(iii)	The Sulphur and ash content of coal shall not exceed 0.5% and 34% respectively. In case of variation of quality at any point of time, fresh reference shall be made to the Ministry and suitable amendments to the environmental clearance will have to be sought.	The said condition and Gazette notification S.O.5481(E), dt.31.12.2021 will be complied during operation phase of the project.
(iv)	FGD shall be installed as the emissions are found to be almost reaching threshold limit of 80 unit (for the worst-case scenario) and also considering the cushion w.r.t NAAQS.	FGD construction works are in progress for all units for controlling SO <sub>2</sub> concentration in flue gas in compliance with the latest MOEF&CC emission norms for TPP dated 05.09.2022.  FGD Package is awarded to GE in Jan-2018. Civil foundation works of various buildings viz., ball mill building, limestone building, gypsum de-watering building are completed. FGD LT MCC-2 charged successfully. FGD HVAC System commissioned. Unit # 1 & unit # 2 absorber shell erection completed. Ball Mills- Lube oil flushing completed. RCPH – Pumps erection completed. FGD duct of unit-1 is completed. More than 70% of unit-2 FGD duct is completed. All work will be well

Sr.No.	EC Condition	Status as on 30.09.2023
		completed within stipulated time
(v)	NTPC shall endeavor to enter into MoUs with NHAI, Associations of Cement Industries and Municipal Authorities for ensuring ash utilization in roads construction and cement manufacturing.	Already NTPC received Expression of Interest (EOI) for lifting ash from various cement & brick manufacturing industries. NTPC is also continuously making efforts to sign MoU with other cluster of industries for ensuring maximum ash utilization. Matter has also been taken up with NHAI for entering into MOUs for use of ash in road construction works.
(vi)	The PP shall examine possibility of relocating the ash pond. In case, the relocation of ash pond is not possible, precautionary measures by providing maximum green belt between ash pond and reservoir etc. shall be undertaken.	The location of ash pond was selected after making detailed techno feasible examination of all available options. However, maximum possible thick greenbelt will be developed, and bund is under construction between ash pond and reservoir area.
(vii)	Study shall be conducted regarding the impact on agricultural fields in terms of heavy metal in food chain and ground water/soil for a period of one year and the report submitted to the Ministry.	A scientific study for assessment of impact on vegetation within 10 km radius of the Telangana STPP due to fly ash generated was carried through Tropical Forest Research Institute – Jabalpur. Study report was submitted to MOEF&CC Integrated Regional Office-Hyderabad on 29.11.2021.
(viii)	The Ash water Re-circulation System (AWRS) shall be immediately installed for the existing TPP. Till that time, the ash pond effluent shall not be discharged into agricultural fields etc.	AWRS (Ash Water Recirculation System) is already in place for Ramagundam. However, to ensure 100 % recirculation, AWRS is being augmented by awarding an additional AWRS package. AWRS is kept in service since October-2020.
(ix)	The PP shall enhance the green belt of the existing TPP in compliance to the earlier EC conditions etc.	<ul> <li>Already extensive greenbelt has been developed in the existing Ramagundam STPP, Township area and around the proposed Telangana main plant site.</li> <li>Further, plantation will also continue at all available spaces in and around the project area, after construction is complete.</li> <li>Plantation of Approx. 46,000 nos. of additional sapling was done in two phases.</li> <li>To support State Govt's Plantation Program namely "Telangana ku Haritha Haram" following Financial aid was given to District Forest Department;         ✓ FY 2016-17: Rs. 57 lakhs</li> <li>In FY 2019-20 planted more than 80,000 trees.</li> <li>In FY 2020-21 more than 50,000 trees</li> </ul>

Sr.No.	EC Condition	Status as on 30.09.2023
		<ul> <li>are planted at different locations under Ramagundam Municipal Corporation and Sultanabad Municipality.</li> <li>In FY 2021-22 till March 2022, more than 24,800 trees are planted.</li> <li>In FY 2022-23 till March 2023, 14,500 trees are planted. Plantation works are in pipeline for another 71,500 trees.</li> </ul>
(x)	Long term monitoring of temperature shall be undertaken on-site and off-site of the TPP, as data of decrease in temperature needs to be Verified. Further, requisite corrective action shall be taken based on the findings of the monitoring.	Long term monitoring of temperature profile will be undertaken both on-site and off-site of the TPP and accordingly the necessary corrective action will be taken.
(xi)	As the data for the health studies was more than five years old, a fresh Occupational health and epidemic health disorders survey of the study area (10 km radius) shall be conducted and the report submitted to the Ministry and its R.O within one year.	M/s Pollucon Laboratories Pvt. Ltd, Surat, conducted the Occupational Health and Epidemic Health Disorders Survey of the study area (10 Km radius) has submitted the final report. A copy of the final report was submitted to the Regional Office (South Zone), MOEF&CC at Chennai on 25 <sup>th</sup> November 2018.
(xii)	As Committed, a minimum amount of Rs. 20 Crores shall be earmarked as capital cost for CSR activities and the recurring cost per annum shall be as per the CSR Policy of GOI till the operation of the plant commences.	Budget has been increased from Rs.20Cr to Rs.25.89Cr for Community Development works under Telangana STPP Phase-1 project. Works are in pipeline and a on March 2023 Rs.19.57Cr has been utilized.
(xiii)	Vision document specifying prospective plan for the site shall be formulated and submitted to the Regional office of the Ministry within six months.	NTPC has already submitted a project vision document to the Regional Office (South Zone), MoEF&CC at Chennai vide letter dated 06.04.2016.
(xiv)	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.	Following Solar Power Plant has been implemented for harnessing solar power within the premises.  (i) 10 MW PV based Solar Power Plant(land based)  Status: Commisioned on 31st Dec 2013
		Besides this, scheme for harnessing solar power from roof tops within the premises of the upcoming plant has been awarded to M/s. Tata Projects Limited.
		In addition to the above, 100 MW PV based Floating Solar Plant was dedicated to the nation on 30th July 2022 by Honorable Prime Minister of India Shri. Narendra Modi ji.

Sr.No.	EC Condition	Status as on 30.09.2023
(xv)	A long term study of radio activity and heavy metals contents of coal to be used shall be carried out through a reputed institute and results 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.	MoEF&CC has granted amendment to EC General conditions No.xv vide letter No:F.No.J-13012/112/2010-IA(T); dated:21.10.2020 with the additional conditions.  Status of compliance of additional conditions are enclosed as Annexure-I
(xvi)	Online continuous emission monitoring system for stack emission and ambient air shall be installed.	Online Continuous Emission Monitoring System (CEMS) for stack emission shall be installed for proposed units. Online Continuous Ambient Air Quality Monitoring System (AAQMS) at 3 locations are already installed and are functional.
(xvii)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³ or as would be notified by the Ministry, whichever is lesser. 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 along with an environment friendly sludge disposal system.	MoEF&CC has granted amendment to EC Specific conditions No 6A(xvii) and 6A(xxiii) vide J-13012/112/2010-IA.II(T); dated:06.03.2017. Status of compliance of the conditions are enclosed as Annexure-II
(xviii)	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 area shall be provided	Adequate no. of dust suppression and dust extraction systems are under construction in coal handling area including coal stockyard area, ash handling area and other vulnerable dusty area for control of fugitive dust emissions. Water sprinklers will also be installed at dust prone sites in order to attenuate fugitive dust emission. Dry fog dust suppression system is being provided at all transfer points.
(xix)	COC of at least 5.0 shall be adopted.	Closed cycle cooling system is designed for 5.0 COC (Cycle of Concentration).
(xx)	Monitoring of surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report.	Monitoring of surface and groundwater quality will be carried out regularly as per stipulations and Half-Yearly reports will be submitted to MOEF&CC's Integrated Regional Office at Hyderabad during the operation phase of the project.
(xxi)	A well designed rainwater harvesting system shall be put in place within six months, which shall	Rainwater harvesting system will be put in place and records shall be maintained.

Sr.No.	EC Condition	Status as on 30.09.2023
	comprise of rain collection from the built up and Open area in the plant premises and detailed record kept of the quantity of water harvested every year and its use.	All the main plant & offsite buildings, switchyard control rooms are having provisions of rainwater harvesting and is incorporated in the contract.
(xxii)	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 / shall be disturbed due to activities associated with the setting up / operation of the power plant.
(xxiii)	Wastewater generated from the plant shall be treated before discharge to comply limits prescribed by the SPCB/CPCB.	MoEF&CC has granted amendment to EC Specific conditions No 6A(xvii) and 6A(xxiii) vide J-13012/112/2010-IA.II(T); dated:06.03.2017. Status of compliance of the conditions are enclosed as Annexure-II
(xxiv)	Online continuous effluent monitoring system shall also be installed.	Online Continuous Effluent Monitoring System will be installed during operation phase of the project.
(xxv)	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	All additional soil leveling of the project site will be done from within the sites only with all necessary precautions to protect natural drainage system of the area.
(xxvi)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) shall be monitored in the bottom ash. No ash shall be disposed off in low lying area.	An ash management & disposal scheme will be implemented consisting of dry ash extraction system (DAES) for dry collection of fly ash with storage facility (silos), supply of ash to entrepreneurs for utilization and promoting ash utilization to maximum extent and safe disposal of unused ash in the ash pond area.
		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.  Monitoring for mercury & heavy metals in the bottom ash and water emanating from ash pond will be done during the operation
(xxvii)	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 mitigated and suitable compensation provided in consultation with the local Panchayat.	phase of the project.  Noted for compliance. Fugitive emission of fly ash & dust will be controlled with the aid of suitable pollution control devices such as dust extraction system and dust suppression system, bag filters, etc. Extensive plantation will be undertaken in all available spaces including coal handling, ash pond area etc.
(xxviii)	Green Belt consisting of three tiers of plantations of native species all around plant and at least 50 m	Already greenbelt has been developed in existing Ramagundam STPP, Township area

Sr.No.	EC Condition	Status as on 30.09.2023
	width shall be raised. Wherever 50 m width is not feasible a 20 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 80 %	and around the proposed Telangana main plant site. Further, plantation will also continue at all available spaces in and around the project area, after construction is complete.
		Further, extensive plantation being undertaken in all available spaces including ash & coal handling areas, ash pond area etc. selectively with Air Pollution Tolerant (APT) plant species.
(xxix)	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 and eventual employment	Various CSR schemes have been implemented and will be continued based on need-based survey in consultation with the village Panchayat and the District Administration.
	in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programmes.	Separate budget has been earmarked for implementing CSR-CD activities for the project and shall be utilized in accordance with the said stipulations.
		NTPC is already providing solar lights & toilets in villages, distributed scholarships to school children & organized medical camps for local population and provided vocational training for local youth.
		Development of infrastructure facilities, viz., improvement in roads, bus shelters, public facilities, solar streetlamps, sanitation, toilets, medical, Schools, sports facilities etc. are already being implemented.
(xxx)	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.	Social committee will be engaged at an appropriate time after a substantial amount is incurred on this account.  Work order issued to Department of Business Management, Shathavahana University, Karimnagar for social audit of CSR activities under CD-Budget and audit conducted in
		October 2018. Audit Report submitted on 08.05.2019.
(xxxi)	An Environmental cell comprising of at least one expert in environmental science/ engineering, ecology, occupation health and social science, shall be greated preferably at the project site itself and	An Environment Management Group (EMG) is already functional.
	be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured	The EMG will be responsible for implementing and monitoring the stipulations. EMG shall have sufficient

Sr.No.	EC Condition	Status as on 30.09.2023
	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.	trained manpower and equipment for environmental monitoring and other environmental related activities to ensure compliance with statutory requirements. It will interact regularly with the State Pollution Control Board.
В	GENERAL CONDITIONS	
(i)	The treated effluents conforming to the prescribed standards only shall be recirculated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	The concept of Zero Liquid Discharge (ZLD) shall be adopted through reuse of plant effluents during operation phase.
		The project shall have an integrated scheme for treatment, recycle and reuse of effluents. Effluent Treatment System comprising of ETP, neutralization pit, oil and grease separator, lamella clarifier, cooling towers etc., are being provided. The effluents shall be treated adequately conforming to the prescribed regulatory standards.
		An independent plant effluent drainage system is under construction to ensure that plant effluents do not mix with storm water drainage.
(ii)	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/ plantation.	All domestic sewage emanating from plant and township will be treated in a sewage treatment plant. The treated sewage conforming to prescribed standards shall be utilized for plantation & raising greenbelt to the extent possible.
(iii)	Adequate safety measure 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.	Hydrant system for covering the entire power station including all the auxiliaries and buildings in the plant area will be implemented. The erection, installation/commissioning of the system with piping, hydrants, valves, instrumentation, hoses, nozzles, hose boxes/stations etc., are in progress.
		Copy of these measures with full details shall be submitted to MOEF&CC's Integrated Regional Office at Hyderabad.
(iv)	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	Storage facilities for auxiliary liquid fuel LDO/LSHS are designed conforming to the safety standards and where risk is minimal.
	exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	A detailed Disaster Management Plan & Risk assessment including fire and explosion issues will be prepared and finalized in

Sr.No.	EC Condition	Status as on 30.09.2023
		consultation with Department of Explosives, Nagpur and regular mock drills shall be conducted as per plan in order to address any eventuality in case of an accident.
(v)	First Aid and sanitation arrangement 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 will ensure effective compliance of the said stipulations. Various measures implemented during construction phase through contractor are:
		<ul> <li>Adequate infrastructure facilities, such as sanitation, fuel, restroom, medical facilities, safety, and suitable water supply are being provided to the labor colonies housing the work force during construction phase of the project.</li> <li>Safety equipment such as earplugs and earmuffs, helmets, face shields, safety goggles etc. is being provided to workers engaged in high risk areas.</li> <li>A first aid center is established to provide immediate medical aid to the workers and their family members. A 24 Hr ambulance is in service at site to transport injured workers to nearby hospitals.</li> </ul>
(vi)	Noise levels emanating from turbines shall be so controlled such that the noise in the 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/ear muffs 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	Design specification for the equipment has been made to comply with the stipulation. Personal protective equipment has been arranged through contractors during construction phase. Periodic examination of workers during operation phase shall be done as stipulated.  The workers working in generator hall and other high noise area will be provided with
(vii)	noisy areas.  Regular monitoring of ambient air ground level concentration of SO <sub>2</sub> , NOX, PM <sub>2.5</sub> & PM <sub>10</sub> and Hg 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	appropriate ear protection devices.  Regular monitoring of ambient air quality is being carried out through Continuous Ambient Air Quality Monitoring System and internal as well as through third party monitoring and reports shall be submitted to Telangana SPCB and MOEF&CC's Integrated Regional Office at Hyderabad.  The data shall also be put up on the website

Sr.No.	EC Condition	Status as on 30.09.2023
	regional office of this Ministry. The data shall also be put on the website of the company.	of the company during the operation phase of the project.
(viii)	Utilization of 100% Fly Ash generated shall be made from 4 <sup>th</sup> year of operation. Status of implementation shall be reported to the Regional office of the Ministry from time to time.	Shall comply to Gazette Notification by MOEF&CC dated 31.12.2021 and status of ash utilization shall be submitted by the 30th day of April, every year to MOEF&CC's Integrated Regional Office at Hyderabad and TSPCB.
(ix)	Provision shall be made for the housing of construction labour (as applicable) 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.	A labour colony with necessary infrastructure facilities such as housing, sanitation, mobile toilet, fuel, medical facilities, safety, drinking water supply etc. has been provided for construction labour through EPC contractor. Also NTPC will ensure effective compliance of the said stipulations.
(x)	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 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://envfor.nic.in.	The information of Environmental Clearance was published in Two newspapers widely circulated in the region on 23.01.2016 namely:  1. THE HINDU (English) & 2. EENADU (Telugu)
(xi)	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, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Copy of Environmental Clearance letter has been submitted to Municipal Corporation, office of Zilla Parisad and other concerned local authorities on 23.01.2016.  The Environmental Clearance was also uploaded on the NTPC website on 25.01.2016.
(xii)	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 periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCBB. The criteria pollutant levels namely; SPM, RSPM (MP <sub>2.5</sub> & PM <sub>10</sub> ), SO <sub>2</sub> , NO <sub>X</sub> (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.	The status of compliance of stipulated EC conditions uploaded and updated periodically on company website.  The latest HYC status report of the stipulated Environmental Clearance (EC) conditions is regularly being submitted to the Integrated Regional Office of MOEF&CC at Hyderabad, Zonal Office of CPCB and the SPCBB.  LED screen near the project entrance gate is installed and it displays ambient air quality in terms of PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NOx.
(xiii)	The environment statement for each financial year	Shall be comply

Sr.No.	EC Condition	Status as on 30.09.2023
	ending 31st 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 environmental clearance conditions and shall also be sent the respective Regional Offices of the Ministry by e-mail.	The Environment Statement for each financial year ending 31st March in prescribed Form-V will be submitted to the Telangana State Pollution Control Board (Telangana SPCB) once the plant becomes operational by the project proponent.
(xiv)	The project proponent shall submit six monthly reports on the status of the implementation 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 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 and Forests.	Half-yearly compliance report for the period October 2022 to March 2023 was submitted on 22.06.2023 and the same was uploaded on company website.  Further, the latest half-yearly compliance report for the period April 2023 to September 2023 is submitted herewith.
(xv)	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 up-date the same from time to time at least six-monthly basis. Criteria pollutants levels including NO <sub>X</sub> (from stack & ambient air) shall be displayed at the main gate of the power plant.	Noted and being complied.
(xvi)	Separate funds shall 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 protections measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Separate funds have been already allocated for Environment Protection measures.  Financial Provision stipulated towards environment protection measure will not be diverted for any other purpose.
(xvii)	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	Financial approval of the project is on 29.01.2016 and start of Land development work is on 09.05.2017.  COD of Unit-1 was declared on 28.09.2023.

Sr.No.	EC Condition	Status as on 30.09.2023
	plant.	
(xviii)	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.	Being Complied  Full cooperation shall be extended to the Scientists / officers from the Ministry / MOEF&CC's Integrated Regional Office at Hyderabad / CPCB / Telangana SPCB during monitoring of the project.
7	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.
8	The environmental clearance accorded shall be valid for a period of 7 years from the date of issue of this letter to start operations by the power plant.	Noted.
9	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 Environmental (Protection) Act, 1986.	Noted.
10	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 conditions (s) imposed and to add additional environmental protection measures required, if any.	Noted.
11	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 Environmental (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.	Noted.
12	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.

## EC Amendment issued by MOEF&CC Vide Letter No. J- 13012/112/2010-IA. II (T) dated 08<sup>th</sup> August 2022.

Sr. No	EC Condition	Status as on 30.09.2022
(i)	Area of Ash Pond shall be reduced by 50%. Reduced area (200Acre) of Ash pond shall be used for Greenbelt development, out of which 30 acres land (50m width) shall be used for creating plantation barrier between water storage area and ash pond so as to avoid mixing pollutants in the water body. Plantation shall be done by Miyawaki technique with 90% survival rate.	Area of Ash Pond is reduced to 50% by abandoning Lagoon 1 which is 200Ac. Greenbelt development width of 50 m is identified between reservoir and ash dyke for creating plantation barrier between water storage area and ash pond. Miyawaki method of plantation will be taken up.
(ii)	HDPE lining shall be provided to the Ash Pond and the height of the Ash Pond shall not increase beyond 16m.	PO is awarded for HDPE lining in Ash Pond Area. Work is in final stage of completion.
(iii)	All other condition mentioned in EC dated 20.01.2016 shall remain unchanged.	Noted.

#### Annexure-I

## Amendment in General EC Condition No-xv Proposal No IA/TG/THE/113457/2019 by MoEF&CC vide letter No:F.No.J-13012/112/2010-IA(T); dated :21.10.2020

Sr. No	EC Condition	Status as on 30.09.2023
i	Radio activity and heavy metals' contents in coal and fly ash (including bottom ash) shall be carried out through a reputed institute once in a year and the analysis reports to be submitted to the Ministry and its Regional Office.	Shall be complied during operation stage
ii	The total Radio-activity in the working areas such as coal stock yard, fly ash pond shall be calculated based on the analysis results per unit weighty of coal/ash. The total radio-activity in the atmosphere is to be compared with the maximum permissible dosage levels of each person working in those areas. This is to be conducted one in a year.	Shall be complied during operation stage
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 the 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.	Shall be complied during operation stage
iv	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 50km radius of the proposed power project to minimize the water drawl from surface water bodies.	Shall be explored.

### Amendment in Specific EC Condition No 6A(xvii) and 6A(xxiii) by MoEF&CC vide J-13012/112/2010-IA.II(T); dated:06.03.2017

Sr. No	EC Condition	Status as on 30.09.2023
i	Specific condition no.6A(xvii): High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed the standards prescribed in the MoEF&CC vide Notification S.O.3305(E) dated 07.12.2015 or any other standards notified by the Ministry	The High Efficiency Electrostatic Precipitators (ESP) has been designed and installed for achieving guaranteed efficiency of greater than 95 % in order to comply with the stipulation.
	whichever is stringent. Emission standards notified vides.S.O.3305(E) dated 07.12.2015 shall be complied with 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	Besides, adequate dust extraction systems and suitable water spray systems are included in the design of the plant to suppress/avoid dust emissions from the coal and ash handling areas.
	vulnerable dusty areas shall be provided along with an environment friendly sludge disposal system.	However, NTPC will also make all its efforts in order to comply with the latest emission notification by MOEF&CC for TPP dated 07.12.2015 and control particulate emission below 30 mg/Nm <sup>3</sup>
ii	Specific condition no.6A(xxiii): Wastewater generated from the plant shall be treated and reused for various purposes within the plant. There shall not be any discharge of wastewater. Zero liquid discharge shall be adopted, and specific water consumption shall be achieved as per the MoEF&CC Notification S.O.3305(E) dated	An effluent management scheme will be implemented during the operation phase of the project with the objective to treat the wastewater as per the prescribed statutory standards of TSPCB/CPCB before its final discharge.
	07.12.2015.	The water system of Telangana STPP, Phase-I has been designed with Zero Liquid Discharge (ZLD) concept by 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.
		Accordingly, NTPC has already revised its water requirement in order to comply with the latest emission notification by MOEF&CC for TPP dated 07.12.2015.