



टीएचडीसी इंडिया लिमिटेड
(श्रेणी-क मिनी रत्न उपक्रम)
THDC INDIA LIMITED
(Schedule - A Mini Ratna PSU)



सं० टीएचडीसी/ऋ०/सा०एवंपर्या०/फ०-400/२०१(ए)

दिनांक: 17.11.2023

सेवा में,

Deputy Director General of Forests (C),
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय,
क्षेत्रीय कार्यालय (मध्य क्षेत्र),
केंद्रीय भवन, पंचम तल,
सेक्टर-H, अलीगंज, लखनऊ - 226024

विषय: 14th Six monthly progress report (April-2023 to Sept-2023) on Environmental Aspects of of 2 × 660 MW Khurja Super Thermal Power Project at Villages Dushhara Kherli, Jahanpur, Naiphal and Rukanpur in Khurja Taluk, Bulandshahar Distt. Uttar Pradesh by THDC India Limited - reg.

Sir,

In compliance to Point (xiv) of Part B: General Conditions of Environment Clearance letter No. J-13012/100/2011-IA.II(T) dtd. 30.03.2017 issued by MoEFCC., please find enclosed herewith the six monthly progress report (**April-2023 to Sept-2023**) on environmental aspects of 2 × 660 MW Khurja Super Thermal Power Project for kind consideration.

Thanking You,



(अमरदीप)

महाप्रबंधक (सामा. एवं पर्यावरण)

संलग्नक: उपरोक्तानुसार

प्रतिलिपि: सादर सूचनार्थ

- 1.) निदेशक आई.ए.आई, इंदिरा पर्यावरण भवन, वायु विंग, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, जोर बाग रोड, नई दिल्ली - 110 003
- 2.) सदस्य सचिव, केन्द्रीय प्रदूषण नियंत्रण बोर्ड, परिवेश भवन, सी.बी.डी. कम आफिस कोम्प्लेक्स, पूर्वी अर्जुन नगर, दिल्ली - 110032
- 3.) सदस्य सचिव, उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, बिल्डिंग स०टीसी-12V, विभूति खंड, गोमती नगर, लखनऊ - 226010
- 4.) क्षेत्रीय अधिकारी, क्षेत्रीय कार्यालय, उत्तर प्रदेश प्रदूषण नियंत्रण बोर्ड, F-5, जमुना पुरम कालोनी, बुलंदशहर, उत्तर प्रदेश 203001

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
A-SPECIFIC CONDITIONS		
1	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 drawl from the River Ganga.	<p>In compliance with the condition, an MoU with UPJN was signed on 06.01.2023 for the preparation of DPR.</p> <p>DPR was submitted by UPJN on 06.04.2023.</p> <p>After reviewing the DPR, a meeting was conducted between officials from UP Jal Nigam and THDCIL on 08.09.2023 in the chairmanship of the Director (Technical), THDCIL at Rishikesh. A detailed discussion was carried out about the capacity of the existing WTP facility at KSTPP and the quality and quantity of effluent from the nearby STP.</p> <p>It has been decided to update the DPR as per the discussion made in the said meeting.</p> <p>Also, a reminder letter has been sent to UP Jal Nigam on 20.09.2023 with a request to share the revised DPR.</p>
2	Compliance of EC Conditions, E(P) Act, 1986, MoEF&CC Notifications, Rules, Regulations and Guidelines issued time to time shall be done by an Environment Compliance Officer to be nominated by Head of the Company who shall be responsible for compliance and implementations of EC conditions.	The Head of the Department (HoD) of Corporate Environment Dept., Rishikesh has been appointed as Environment Compliance Officer by the Chairman and Managing Director (CMD) of the company.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
3	Greenbelt development shall be developed in 400 acres (170 hac) with native and indigenous species to maintain 33% of the land green. Greenbelt plan shall be formulated in consultation with local Forest Department and submitted to the Ministry and its Regional Office for monitoring. The budget of Rs. 5 Crores for greenbelt shall be accordingly revised in consultation with forest Department. No herbs and shrubs shall be planted. Only tall seedlings shall be planted. Greenbelt development shall start during construction period.	As per EC condition, a Green Belt Development Plan in an area of 400 acres (170 ha) was prepared by Divisional Director, Social Forestry Division, Bulandshahar, UP on request of the project and submitted along with estimate vide letter dated 08.06.2020. A MoU has been signed with the Forest Department for developing Green Belt on 70 ha land. Out of which, 40 ha land has been provided to Forest Department, wherein plantation has been completed in 40 ha land.
4	Hydrogen plant shall be shifted away from UnchaGaon. Minimum of 500 m distance shall be maintained from the village. The layout indication relocation of Hydrogen plant shall be submitted to the Ministry and its Regional Office.	Provision of Hydrogen Generation Plant has been deleted from the General Layout Plan. Required hydrogen shall be procured from the market.
5	Need based assessment study shall be conducted for implementing CSR activities. Company shall provide Guest teachers to the surrounding Govt. schools	Need Assessment study of project affected villages has been conducted through Department of Social Work, University of Delhi. Brief details of various CSR/CD activities being undertaken is given at point no. 28.
6	Alternate technologies for Fly ash utilization such as road making using geo-polymers shall be explored in consultation with director AMPRI, Bhopal/DG CSIR. Use of ash dyke shall be minimized.	Project is in process of exploring alternate technologies and avenues for utilisation of Fly ash in various construction activities/industries such as bricks, concrete pavement etc. to minimize storage in ash dyke. THDCIL is planning to visit AMPRI to explore the alternative technology other than utilization in the form of fly ash bricks. Accordingly, an action plan for utilization of 100% Fly ash is to be chalked out. THDCIL has carried out correspondence in this regard with the AMPRI, Bhopal vide letter dt. 11.01.2023 and the reply from AMPRI is awaited.

COMPLIANCE STATUS (April, 2023 to September, 2023) ON ENVIRONMENTAL CLEARANCE CONDITIONS OF 1320 MW KHURJA STPP
Vide Letter No. J-13012/100/2011-IA. II (T) dated 30.03.2017

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
7	Separate environmental clearance may be obtained for township construction under EIA Notification, 2006 and its amendments, as applicable.	As per EIA Notification 2006, prior Environmental Clearance is applicable for Township and Area Development projects having area more than 50 hectare.Hence, not applicable in case of Khurja STPP as the township area is limited to 30 acre (12.15 ha) only.
8	MoEF&CC Notification S.O. 3305(E) dated 7.12.2015 shall be implemented with respect to specific water consumption, zero liquid discharge and revised emission standards. The PM, SO ₂ , NO _x and Hg emissions shall not exceed 30 mg/Nm ³ , 100 mg/Nm ³ , 100 mg/Nm ³ and 0.03 mg/Nm ³ respectively. The specific water consumption shall not exceed 2.5 m ³ /MWh and zero wastewater discharge shall be achieved.	The different components of thermal plant to be installed at project are being designed to ensure the compliance of MoEF&CC Notification S.O.3305 (E) dated 7.12.2015 during the operation phase of the plant.
9	MoEF&CC Notification GSR 02 (E) dated 2.1.2014 regarding use of raw or blended or beneficiated or washed coal with ash content not exceeding 34% shall be complied with as applicable.	Shall be complied with during the operation phase of the project
10	MoEF&CC Notifications on fly-ash utilization S.O. 763(E) dated 14.09.1999, S.O. 979(E) dated 27.03.2003, S.O. 2804(E) dated 03.11.2009, S.O. 254(E) dated 25.01.2016 and subsequent amendments shall be complied with.	Shall be complied with during the operation phase of the project.
11	Necessary permission from Water Resource Department shall be obtained for diversion of diverting the Aligarh natural drain from the project site.	No objection has been obtained from Drainage Circle, Aligarh vide letter no.2783/DCA/THDC dt 05.05.2018. After the NOC from Water Resource Department, diversion of the Aligarh natural drain from the project site is completed.
12	Vision document specifying prospective plan for the site shall be formulated and submitted to the	Vision document has already been submitted on dated 28.09.2017.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	Regional Office of the Ministry within six months.	
13	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.	Necessary provision for harnessing solar power has been made. Currently, construction works of township/guest house/offices, etc. are under progress. Rooftop solar modules shall be installed after completion/finishing of construction works. THDCIL is awarded consultancy services for the preparation of DPR from Solar Energy Corporation of India Limited to harness solar power.
14	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 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.	A detailed study on the chemical composition of coal used, particularly heavy metal and radioactivity contents will be carried out through a reputed institute once the project starts receiving coal during the operation phase. Results thereof will be analyzed every two year and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash) will be put in place.
15	Online continuous monitoring system for stack emission, ambient air and effluent shall be installed.	An Online Continuous Stack Emission Monitoring System (CSEMS) for parameters like particulate matter (PM), NO _x , SO ₂ , Ambient Air, and Effluent will be installed. UPPCB has identified locations for the installation of samplers (CSEMS) for monitoring the aforesaid parameters at the Project site. The purchase of the samplers is under process.
16	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 30 mg/Nm ³ or as would be notified by the Ministry, whichever is stringent. Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal handling and ash	Appropriate provisions in this regard are being under taken and erection of ESP-1&2 is under process.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	handling points, transfer areas and other vulnerable dusty areas shall be provided along with an environment friendly sludge disposal system.	
17	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.	Appropriate provisions in this regard have been made in the EMP of project and shall be complied at the appropriate stage. Additionally, during levelling phase of the project land, the water spraying is being carried out in dusty area of the project.
18	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.	Shall be complied with during the operation phase of the project. THDCIL is in process to get the necessary consultancy and monitoring services to comply with the condition.
19	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 open area in the plant premises and detailed record kept of the quantity of water harvested every year and its use.	Rainwater harvesting study has been carried out at the project through M/s RAJMI Geo-exploration & Engineering Pvt. Ltd, Indore. A well-designed rainwater harvesting system will be established as per recommendations of study report and approval of the concerned authority. Approval and guidance have been sought from Central Ground Water Board, regarding implementation of Roof Water Harvesting in KSTPP after submitting the project report “Hydrological investigation and proposal for rain water harvesting plan & design”. The suggestions/recommendations from CGWB have been received and forwarded to implementing agency LMB for incorporation and further necessary action.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
20	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 except the Aligarh drain passing through ash pond proposed for diversion without affecting the natural drainage.	No water bodies including the natural drainage system in the area are being disturbed due to activities associated with the setting up of the power plant except the Aligarh drain. After the NOC from the Water Resource Department, the diversion of the Aligarh natural drain from the project site is completed.
21	Additional soil for levelling 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.	Being complied with.
22	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.	Shall be complied with during the operation phase of the project
23	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 and implementation done in close co-ordination with the State Pollution Control Board.	Shall be complied with during the operation phase of the project
24	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	Shall be complied at appropriate stage of Operation of the project.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	provided in consultation with the local panchayat.	
25	Green Belt consisting of three tiers of plantations of native species all around plant and at least 50 m 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%.	Shall be complied.
26	Green belt shall also be developed around the ash pond over and above the Green Belt around the plant boundary.	Shall be complied.
27	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.	The Corporate Environment policy is already in place. Copy of the Environment policy has been shared along with the hierarchy of officer designated for compliance of Clearance conditions of the project.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
28	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 in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programmes.	Budget Provision of Rs. 33.20 Cr. has been made in the EMP for local area/ community development activities and action has been initiated by THDCIL for the same. Need Assessment study of project affected villages has been conducted through Department of Social Work, University of Delhi. The CSR/CD scheme is implemented as per the need assessment and with consultation of the local representative and district administration. CSR activities are being undertaken in following areas- <ol style="list-style-type: none"> 1. Community Health 2. Skill Development 3. Education 4. Infrastructure 5. Women empowerment
29	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.	CSR work has been monitored by the Department of Management Studies, IIT Roorkee. For continuous monitoring by an independent external agency, a MoU has been signed on 16.02.2023 between M/S WAPCOS Limited and THDCIL.
B-GENERAL CONDITIONS		
1	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.	Shall be complied with.
2	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	Shall be complied with at appropriate stage

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
3	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.	Shall be complied with at appropriate stage
4	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%. Disaster Management plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Shall be complied with at appropriate stage
5	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Dispensaries along with First Aid and sanitation arrangements have been provided by the THDCIL and Contractors.
6	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 noisy areas.	In the construction phase proper measures are being ensured and, in the operation phase the necessary arrangements/actions shall be taken.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
7	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 and records maintained. If at any stage these levels are found to exceed 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.	Continuous Ambient Air Quality System (CAAQMS) and continuous Stack Emission Monitoring System (CSEMS) for parameters like particulate matter (PM) NO _x , SO ₂ , Ambient Air, and Effluent will be installed. UPPCB has identified locations for the installation of samplers/CAAQMS for monitoring the aforesaid parameters at the Project site. The procurement of the samplers/CAAQMS is under process. However, the monitoring of SO ₂ , NO _x , PM _{2.5} & PM ₁₀ are monitored on quarterly basis from M/s Ambiantal Global Private Ltd., Ghaziabad (UP) . The Monitoring of the parameters has been done on 16.08.2023.
8	Utilization of 100% fly ash generated shall be made from 4th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Shall be complied with during the operation phase of the project.
9	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.	The contractors have provided labor colony with the necessary infrastructure and amenities.
10	The project proponent shall advertise in the 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	The Advertisement has been published in national and local newspaper on Apr' 2017.

COMPLIANCE STATUS (April, 2023 to September, 2023) ON ENVIRONMENTAL CLEARANCE CONDITIONS OF 1320 MW KHURJA STPP
Vide Letter No. J-13012/100/2011-IA. II (T) dated 30.03.2017

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	environmental clearance and copies of clearance letter are available with the State Pollution Control board/Committee and may also be seen at the Website of MoEF&CC at http://envfor.nic.in	
11	A copy of the clearance letter shall be sent by the proponent to concerned panchayat, ZilaParisad/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 Environment Clearance letter was sent to all concerned. Same is available on company's website.
12	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 SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 & PM10), SO2, Nox (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.	Shall be complied with
13	The environment statement for each financial year 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)	Form-V for 2022-2023 has been submitted to SPCB& RO, MoEF&CC, Lucknow vide letter dt. 26.09.2023.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	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 to the respective Regional Offices of the Ministry by e-mail.	
14	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to MoEF&CC, 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, MoEF&CC.	The last six monthly report has been submitted to all the concerned offices vide letter dated 30.05.2023.
15	The progress for the project shall be submitted to CEA on six monthly basis.	The progress report of the project is being submitted to CEA regularly.
16	Regional Office of the MoEF&CC 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 upload the compliance status in their website and update same from time to time at least six monthly basis. Criteria pollutants levels including NO _x (from stack & ambient air) shall be displayed at the	EIA and EMP reports are already available on the THDCIL website. The compliance status is being uploaded on the website and shared with concern authority.

S.NO.	COMPLIANCE CONDITION	CURRENT STATUS
	main gate of the power plant.	
17	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 protection measures shall not be diverted for other purposes and year wise expenditure should be reported to the Ministry.	A budget provision of Rs. 1783.5 Cr was made for Environmental Protection measures.
18	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.	Shall be complied with.
19	Full cooperation shall be extended to the Scientists/Officers from the Ministry /Regional Office of the Ministry/Regional office of the Ministry/CPCB/SPCB who would be monitoring the compliance of environmental status.	Shall be complied with.
C		
1	An as built or as completed report on EMP to be submitted stating the scope/extent of work envisaged in the EIA along with estimated cost vis-à-vis the actual completed works and cost incurred. A certificate/completion certificate accordingly, shall have to be submitted before commissioning of the TPP.	Shall be complied with.