

Ref: PPGCL/ENV/FY25/460

Date: 20.11.2024

To,
Deputy Director General of Forests (C),
Ministry of Environment, Forest and Climate Change
Regional Office (CZ),
Kendriya Bhawan, 5th Floor Sector "H", Aliganj
Lucknow – 226020

Subject: Half yearly report for the period April'24 to September'24 on compliance of the stipulated condition of Environment Clearance awarded by MoEF for 3 x 660 MW to M/s Prayagraj Power Generation Company Limited at Bara, Prayagraj.

Dear Sir,

We are enclosing here with the half yearly report for the period April'24 to September'24 on compliance of the stipulated condition of Environment Clearance granted by MoEF for 3 x 660 MW to M/s Prayagraj Power Generation Company Limited at Bara, Prayagraj.

This is for your kind information and record please.

Sincerely

For Prayagraj Power Generation Company Limited


S H Pandey
Chief - O&M Services

Enclosure: Environment Clearance compliance with Annexure 1 to 13.

Cc: i) Incharge,

CPCB, Zonal Office (North), Lucknow

ii) Member Secretary

UPPCB, Lucknow

iii) Regional Officer

UPPCB, Prayagraj

Handwritten notes and stamps:
26/11/2024
प्रदूषण नियन्त्रण बोर्ड
प्रयागराज

Prayagraj Power Generation Company Limited

Registered Office : Shatabdi Bhawan, B 12 & 13, Sector 4, Gautam Budh Nagar, Noida, Uttar Pradesh - 201301
Phone: + 91-120-6102000/6102208 CIN: U40101UP2007PLC032835

Plant Address : P.O. - Lohgara, Tehsil - Bara, Prayagraj (Allahabad), Uttar Pradesh - 212107
Phone: + 91-7525006400/ 8528846666, Web:-ppgcl.co.in, Email:-ppgcl@ppgcl.co.in

SIX MONTHLY COMPLIANCE STATUS

OF

CONDITIONS STIPULATED IN

ENVIRONMENTAL CLEARANCE (EC)

OF

M/s PRAYAGRAJ POWER GENERATION COMPANY LIMITED
(3X660 MW)

FOR THE PERIOD APRIL - 2024 TO SEPTEMBER - 2024

Name of Project: 3x660MW THERMAL POWER PROJECT at BARA, Allahabad, (UP) of M/s Prayagraj Power Generation Co. Ltd (PPGCL)

Clearance letter No: J-13011/60/2008-1A.II (T) 08.09.2009 & Extension of validity letter No J-13011/60/2008 – 1A.II (T) dated 23.03.2015 and subsequent Amendment dated 08.02.2024.

S.No	Stipulated Conditions	Compliance Status
(i)	No additional land in excess of 1468 acres ha shall be acquired for any activity/facility of this project.	Noted.
(ii)	A certificate from the Tehsildar for the land use of the project area with respect to single crop/double crop shall be furnished within 15 days from the date of the issue of this letter.	Complied. Required certificate for land use, issued by Tehsildar was submitted vide letter No. PPGCL/109 dated 22.8.2009.
(iii)	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 34% respectively at any given time.	The average ash percentage in coal for the period from Apr-2024 to Sep-2024 is 33.04% and Sulphur content is within 0.35%.
(iv)	Two stacks (one bi-flue and one single flue) of 275 m height each shall be provided with continuous online monitoring equipments for SO _x and NO _x particulate matter. Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack may also be monitored on periodic basis.	Stack of 275 m height is provided with online continuous monitoring equipment in all three units for SO _x , NO _x , and particulate matter. Average exit velocity of flue gas from Unit I, II and III stack for the period from Apr-2024 to Sep-2024 is 23.28 m/s, 24.4 m/s and 23.29 m/s respectively. Mercury monitoring is also being carried out through third party. Stack monitoring report is attached as Annexure-1 .
(v)	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm ³ .	Complied. High efficiency ESP has been installed and is in continuous operation. Stack monitoring report is attached as Annexure-1 .
(vi)	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.	Complied. Dust extraction and dust suppression system has been installed. Fogging system has been installed in wagon tippler. Also, the roads have been made pucca. Photographs are attached as Annexure-2 .
(vii)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from 4 th year onwards. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb, etc.) will be monitored in the bottom ash and also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	RCC Silo's have been constructed for storage of dry fly ash from ESP hoppers. Fly ash utilization being done through cement and brick manufacturers. Mercury and other heavy metals monitored in the bottom ash and from the effluents of existing ash pond by third party is attached as Annexure – 3 . Fly ash utilization in low lying area is permitted vide MoEF&CC OM dated 28 th August 2019.

(viii)	Ash pond shall be lined with HDPE lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Ash pond is lined with HDPE. Adequate safety measures have been adopted to protect the ash dyke from getting breached.
(ix)	Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms. COC of 5 shall be adopted.	Complied. Effluent is being treated and COC maintained.
(x)	No ground water shall be extracted for the project work at any stage.	Being Complied. Water is being taken from Yamuna River through pipeline.
(xi)	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.	Being Complied, the treated effluent is re-used within the plant.
(xii)	A sewage treatment plant shall be provided and the treated sewage shall be used for raising green belt/plantation.	Complied. The treated sewage water is being used for raising green belt / plantation.
(xiii)	Rain water harvesting should be adopted. Central Ground Water Authority/Board shall be consulted for finalization of appropriate rain water harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Being complied. Central Ground Water Authority (CGWA), Allahabad Office has been consulted for appropriate rainwater harvesting system. The suggestion of Central Ground Water Authority (CGWA) regarding rainwater harvesting has already been submitted vide letter no PPGCL/BARA/MOEF/15/10/169 dated: 27.04.2015. As advised by Central Ground Water Authority (CGWA), four nos. of Piezometers have been installed for ground water monitoring and water storage facilities have been created for rainwater storage.
(xiv)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yards, especially during summer season. Copy of these measures with full details along with location plant lay out shall be submitted to the Ministry as well as to the Regional Office of the Ministry at Lucknow.	Complied. Fire protection system for plant includes measure to check / minimize spontaneous fires in coal yard. We have already submitted the details of fire protection system to check / minimize spontaneous fires in coal yard with plant lay out vide our letter no PPGCL/BARA/ MOEF/ 14/05 Date 09.05.2014
(xv)	Storage facilities for auxiliary liquid fuel such as LDO and/HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur contents 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.	Complied.
(xvi)	Regular monitoring of ground water in and around ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained, and six monthly reports shall be furnished to the Regional Office of this Ministry.	Being complied with. The ground water monitoring report is attached as Annexure 4 . The parameters are within standards.

	The data so obtained should be compared with the base line data so as to ensure that the ground water quality is not adversely affected due to project.	
(xvii)	A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of total area preferably with local species.	We have planted approx.3,77,366 nos. of sapling till Sept-2024. Saplings will be planted during coming monsoon. Suitable local native species of sapling have been planted such as Neem, Seesham, Karanj, Pipal, Bargad, Kadam, Alstonia, Gulmohar, Bamboo, Ashoka. Other species include Imli, Amla, Mango, Guava, Bougenvillia, Champa and Kanail. Photographs of green belt is attached as Annexure – 5.
(xviii)	First-Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Complied.
(xix)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited of 75 dB (A). For people working in the high noise area, requisite personal protective equipments like ear-plugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine areas, 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.	Being complied with. Personal protective equipment like earplugs/ ear muffs etc. have been provided. Noise monitoring report is attached as Annexure- 6.
(xx)	Regular monitoring of ground level concentration of SO ₂ , NO _x , RSPM 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 Regional Office of this Ministry. The data shall also be put on the web site of the company.	Complied. The locations of the monitoring stations have been approved by U. P. Pollution Control Board (UPPCB) vide our letter no PPGCL / BARA / MOEF / 14 / 05 Dated 09.05.2014. Ambient air quality monitoring report is attached as Annexure- 7.
(xxi)	A good action plan for R&R with package for the project affected persons be provided as per prevalent R&R policy within three months from the date of issue of this letter.	Complied.
(xxii)	An amount of Rs. 32 crores as capital and Rs. 6 crores/annum as recurring should be earmarked for activities to be taken up under CSR by the above proponent. Details of the activities to be undertaken in this regard should be submitted within one month from the date of issue of this letter.	During FY 24-25, an amount of Rs. 6.97 Crore has been incurred in different programs under thrust area – Education, Health & Sanitation, Entrepreneurship, Skill building & livelihood, Social and financial inclusion. The activities undertaken are Skill building training to 150 youths of surrounding community through NSDC, support to DAV

		Sardar Patel public School, health services at health center and developed SHGs in surrounding community. We have received EC amendment on 8th Feb 2024 and is sought for CSR expenditure condition in line with section 135 of companies Act 2013 which states that company shall spend at least two percent of the average net profits of the company made during the three immediately preceding financial years. Details of CSR activities is attached as Annexure-8 along with Amendment EC. <table border="1"> <thead> <tr> <th colspan="3">CSR Expenditure FY 24-25</th></tr> <tr> <th>Sr. No</th><th>Thrust Area/Programs</th><th>Amount (Rs Lakh)</th></tr> </thead> <tbody> <tr> <td>1</td><td>Education</td><td rowspan="5">137.18</td></tr> <tr> <td>2</td><td>Health and Sanitation</td></tr> <tr> <td>3</td><td>Employability & Employment</td></tr> <tr> <td>4</td><td>Entrepreneurship</td></tr> <tr> <td>5</td><td>Social and Financial Inclusion</td></tr> <tr> <td colspan="2">Total (Rs Lakh)</td><td>137.18</td></tr> </tbody> </table>	CSR Expenditure FY 24-25			Sr. No	Thrust Area/Programs	Amount (Rs Lakh)	1	Education	137.18	2	Health and Sanitation	3	Employability & Employment	4	Entrepreneurship	5	Social and Financial Inclusion	Total (Rs Lakh)		137.18
CSR Expenditure FY 24-25																						
Sr. No	Thrust Area/Programs	Amount (Rs Lakh)																				
1	Education	137.18																				
2	Health and Sanitation																					
3	Employability & Employment																					
4	Entrepreneurship																					
5	Social and Financial Inclusion																					
Total (Rs Lakh)		137.18																				
(xxiii)	Provision shall be made for the housing of the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health structures to be removed after the completion of the project.	Complied.																				
(xxiv)	The project proponent shall be advertised 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 the web site of the Ministry of Environment and Forests at http://envfor.nic.in	Complied. Advertisement was published in the Hindustan Times, The Times of India (English) Daily and Dainik Jagran and Amar Ujala (Hindi Daily) on 7 th Oct. 2009 immediately after receipt of EC.																				
(xxv)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad, Municipal Corporation, Urban Local Body and the Local NGO is 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.	Complied Copy of the clearance letter has already been sent to the concerned departments as prescribed.																				
(xxvi)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Complied. Separate Environment department is functioning.																				
(xxvii)	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their	Compliance of EC condition is being submitted on time. Last report was submitted on 19.04.2024.																				

	website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely SPM, RSPM SO ₂ , NO _x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Data of stack and ambient air is displayed at main gate of the company. Please refer Annexure – 9 .
(xxviii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective regional office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Being complied. Last report was submitted on 19.04.2024.
(xxix)	The environment statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MOEF by e-mail.	Being complied. Environment statement for FY 2023-2024 was submitted on 22.06.2024. Please refer Annexure – 10 .
(xxx)	Regional office of the Ministry of Forests located at Lucknow will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with 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 the same from time to time at least six monthly basis. Criteria pollutants levels (stack & ambient levels of NO _x) will be displayed at the main gate of the power plant.	Complied. EIA/EMP report, DPR and other relevant documents have already been submitted to the Regional Office of MOEF at Lucknow. Data of stack and ambient air is displayed at the main gate of the plant.
(xxxi)	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.	Complied. Separate fund is available for environmental protection measures. Expenditure incurred for Environment protection measure during FY 24-25 is attached as Annexure – 11 .
(xxxii)	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 dates of start of land development work and commissioning of plant.	Financial closure was obtained on 06.07.2010 and the construction activity for the project was started in Aug. 2010. All the three units are commissioned and in operation.
(xxxiii)	Full cooperation shall be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bangalore/the CPCB/the	Agreed.

Status of Compliance conditions stipulated in extension of validity letter no J-13011 / 60 / 2008 - IA.II (T) dated 23.03.2015 is as under:

S.No.	<u>Stipulated Conditions</u>	<u>Compliance Status</u>
xxxiv	Harnessing solar power within the premises of the plant particularly at available rooftops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half –yearly monitoring report.	PPGCL has installed a total capacity of 265 kW roof top solar power at School & Hospital roof and roof top solar heater at guest houses. Solar based street and garden lights have also been installed in Plant Township.
xxxv	A long-term study of radio activity and heavy metals contents on coal to be used for the power plant shall be carried through a reputed institute and results there of analyzed every two years 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.	Radioactivity test report carried out by BRIT-BARC, Mumbai for Coal, Bottom Ash, and Fly Ash. Analysis report of heavy metals in Fly ash and Bottom ash is enclosed as Annexure-12.
xxxvi	Space for FGD shall be provided for future installation as may be required.	Space for FGD has already been provided for installation. Current FGD Status (Up to Sept-24): - Installation of FGD is under progress. Till date 70% work has been completed.
xxxvii	Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land in the vicinity, if any.	Complied. Dust extraction and dust suppression system has been installed to control fugitive emission.
xxxviii	Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media so 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 a reputed institute and accordingly clay lining of adequate thickness shall be provided. This shall be carried out in close co-ordination with State Pollution Control Board who shall ensure that clay lining of appropriate thickness is provided.	MoEF&CC vide OM dated 28 th August 2019 has permitted use of fly ash in abandoned mines / low lying areas / soil conditioner in agriculture.
xxxix	No water bodies including natural drainage system in the area shall be disturbed due to activities associated with setting up / operation of the power plant.	Noted.
xxxx	Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.	We have planted 29,018 saplings in the Financial Year 2024-25.

		Suitable local native species of sapling have been planted such as Neem, Seesham, Karanj, Pipal, Bargad, Kadam, Alstonia, Gulmohar, Bamboo, Ashoka. Other species include Imli, Amla, Mango, Guava, Bougenvillia, Champa and Kanail. Photographs of green belt is attached as Annexure – 5.
xxxxi	For proper and periodic monitoring of CSR activities, a CSR Committee or a Social Audit Committee or a 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.	PPGCL has a CSR committee.
xxxix	An Environmental Cell comprising of at least one expert in environmental science / engineering, ecology, occupational health and social science, shall be established preferably at the project site itself and shall be headed by an officer of appropriate level 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 / mitigations.	Environment cell has been established with qualified manpower.
xxxix	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.	PPGCL has a well laid Environment Policy.

**Status of Compliance Additional conditions stipulated vide letter no
IV /ENV/P/THE/-39 / 311 / 2009 / 1173 dtd 16.11.2011 is as under:**

S.No	<u>Stipulated Conditions</u>	<u>Compliance Status</u>
(i)	Continuous monitoring of stack and ambient air to be carried out.	Continuous monitoring of ambient and stack is being carried out.
(ii)	Display of monitoring data in public domain (main gate).	Data of stack and ambient air is being displayed at main gate.
(iii)	To put up monitoring data and six-monthly monitoring report on their website	Monitoring data and six-monthly monitoring report is periodically uploaded on the Company website.

**Status of Compliance Additional conditions stipulated vide
File No.: J-13011/60/2008-IA. II(T) dtd 08.02.2024 is as under:**

S.No	<u>Stipulated Conditions</u>	<u>Compliance Status</u>
1.1	Periodic epidemiological study shall be conducted (Once in a year) within 5 km range of the power plant through reputed expert government/private institution (empanelled by the State Government/Central Government for the purpose) and observations /recommendations of the study shall be submitted to IRO in 6 monthly compliance report along with action plan for implementation of the recommendations.	We have awarded the work order dated- 04.05.2024 enclosed as Annexure-13 of periodic epidemiological study to M/s CSIR IITR Lucknow. The study is under progress and report will come by 30.11.2024.
1.2	PP is required to submit the application for Transfer of EC dated 08th September 2009, in terms of the provisions of EIA Notification 2006 & as amendment and Ministry's OM dated 03rd November 2023, in the prescribed format through PARIVESH	Agreed
1.3	All other conditions of the Environmental Clearance letter dated 8th September 2009 for the project 3 x 660 MW Thermal Power Project located at Bara, Prayagraj in favour of M/s Prayagraj Power Generation Company Limited shall remain unchanged.	Agreed