

J-13012/57/2008-IA.II (T) Government of India

Ministry of Environment, Forests and Climate Change

3rd Floor, Vayu Block, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj New Delhi-110003

Dated: 22.10.2019.

Office Order

Sub: 1x600 MW coal Based Thermal Power Plant at Villages Chhote Bhandar, Bade Bhandar, Sarvani and Amli Bhauna, Tehsil Pussore, District Raigarh, Chhattisgarh by M/s Korba West Power Company Limited- reg. transfer of Environmental Clearance.

The undersigned is directed to refer to your online application no. IA/CG/THE/115273/2019 dated 27.8.2019 on the above mentioned subject.

- 2. It has been noted that Environmental Clearance for the above mentioned project has been issued vide Ministry's letter dated 20.5.2010 infavour of M/s Korba West Power Company Ltd. It has also been noted that a temporary permission for a period of three years for transportation of coal by road or till the commissioning of railway siding whichever is earlier, has been issued vide Ministry's letter dated 16.4.2015 to M/s Korba West Power Company Ltd.
- 3. It has been further noted that the company assets of M/s Korba West Power Company Ltd. have been admitted to National Company Law Tribunal (NCLT) under Insolvency Resolution Process. NCLT vide Orders dated 24.6.2019 has approved the resolution plan submitted by M/s Adani Power Ltd. It has been informed that M/s Adani Power Ltd. has taken over management of M/s Korba West Power Company Ltd. (M/s KWPCL) w.e.f. 20.7.2019 and holds 100% equity of M/s KWPCL.
- 4. As the company asset has been admitted under Insolvency Process by lenders, the requirement of NOC from the Transferee under Para 11 of the EIA Notification may not be required. It has been informed that after the equity of M/s KWPCL has been acquired, the company name has been changed to M/s Raigarh Energy Generation Ltd. which is the 100% subsidiary of M/s Adani Power Ltd. The Registrar of Companies vide certificate dated 20.8.2019 changed in the name of the company from M/s Korba West Power Company Ltd to M/s Raigarh Energy Generation Ltd.
- 5. The application has been examined in the Ministry. In view of the above, the Ministry hereby transfers the Environmental Clearance dated 20.5.2010 and permission dated 16.4.2015 in the name of M/s Raigarh Energy Generation Ltd. subject to the same terms and conditions prescribed in the Environmental Clearance.
- 6. All other conditions mentioned in this Ministry's letters of even no. dated 20.5.2010 and 16.4.2015 shall remain the same, as applicable.

This issues with the approval of the Competent Authority.

(Dr. S. Kerketta) Director, IA.I

M/s The Raigarh Energy Generation Limited

First Floor, E-122, Patel Nagar, City Centre, Site No.2, Gwalior, Madhya Pradesh.

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भारत सरकार

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
इंदिरा पर्यावरण भवन, जोर बाग रोड,
अलीगंज, नई दिल्ली-110 003

INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, ALIGANJ, NEW DELHI-110 003 Website: moef.nic.in

> 2nd Level, JAL Block Date: 16th April, 2015

No.J-13012/57/2008-IA.II (T)

To

M/s Korba West Power Co. Ltd.

(A subsidiary of Avantha Power & Infrastructure Ltd.) 6th & 7th Floor, Vatika City Point M.G. Road Gurgaon- 122 002 Haryana Tel. No. 0124-4392000/01; Fax: 0124-4376496

Subject: Coal Based Thermal Power Plant of 600 MW (1x600 MW) at Villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in Raigarh in Chhattisgarh by M/s. Korba West Power Company Ltd.—Amendment in EC regarding temporary permission for transportation of coal by road.

Sir.

This has reference to your letters dated 09.04.2014 and 03.07.2014 requesting for **temporary permission for transportation of coal by road for** the above mentioned power plant. It is noted that the Environmental Clearance for the said project was accorded by MoEF on 20.05.2010.

- 2. Your request was placed before the Expert Appraisal Committee (Thermal Power) in its 16th Meeting held during 1st & 2nd July, 2014. In acceptance of the recommendation of the EAC and in view of the information/clarification submitted by you with respect to the implementation of the above mentioned power project, the Ministry hereby accords temporary permission for transportation of coal by road for a **limited period of three years** subject to compliance of the following conditions:
 - (i) The coal shall be transported on road through mechanically covered trucks.
 - (ii) Avenue plantation of 2/3 rows all along the road for transportation of coal shall be carried out by the project proponent at its own expenses in consultation with the State Government Authorities.



- (iii) Periodic maintenance of the roads used for transportation of coal shall be carried out by the project proponent at its own expenses and shall also facilitate the traffic control on the roads in consultation with the State Government Authorities.
- 3. Further, under Para no.4 of the said EC dated 20.05.2010, after the specific condition no. (xxiv), the following conditions shall be added for compliance:
 - (xxv) Harnessing solar power within the premises of the plant particularly at available roof tops shall be undertaken and status of implementation shall be submitted periodically to the Regional Office of the Ministry.
 - (xxvi) A long term study on radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. 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.
 - (xxvii) Mercury emissions from stack shall also be monitored on periodic basis.
 - (xxviii) Fugitive emissions shall be controlled to prevent impact on agricultural or non-agricultural land.
 - (xxix) Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be undertaken from an institute of repute and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.
 - (xxx) Green belt shall also be developed around the Ash Pond over and above the Green Belt around the plant boundary.
 - (xxxi) An Environmental Cell comprising of at least one expert in environmental science/ engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be 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.
 - (xxxii) 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.

- 4. All other conditions mentioned in this Ministry's EC letter of even no. dated 20.05.2010 shall remain the same.
- 5. This issues with the approval of the Competent Authority.

Yours faithfully,

(Sanchita Jindal)

Scientist 'F' & Director (T)

Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110 001.
- 2. The Secretary (Environment), Environment Department, Government of Chhattisgarh, Raipur.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110 066.
- 4. The Chairman, State Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh 421 001.
- 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi- 110 032.
- 6. The Chief Conservator of Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Ravishankar Nagar, Bhopal 462 016, Madhya Pradesh.
- 7. The District Collector, Raigarh District, Chhattisgarh.
- 8. Guard file/ Monitoring File.

(Sanchita Jindal)

Scientist 'F' & Director (T)





J 13012/57/2008-IA.II (T) Government of India Ministry of Environment & Forests

Paryavaran Bhawan CGO Complex, Lodi Road New Delhi-110 003 Dated: May 20, 2010.

To

M/s Korba West Power Company Ltd. 2nd Floor, Centrum Plaza. Golf Course Road. Sector -53, Gurgaon- 122 002.

Sub: 1x600 MW Coal Based Thermal Power Plant of, at villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in Tehsil & Distt. Raigarh, in Chhattisgarh – Reg. Environmental Clearance.

Sir.

The undersigned is directed to refer to you letter dated 15.12.2009, 05.01.2010 and 18.01.2010 on the subject mentioned above. The Ministry of Environment & Forests has examined the application seeking environmental clearance under the provisions of EIA Notification, 2006.

- 2. It has been noted that the proposal is for setting up of 1x600 MW Coal Based Thermal Power Plant at villages Bade Bhandar, Chote Bhandar, Sarvani & Amali Bhona, in Tehsil & Distt. Raigarh, in Chhattisgarh. The proposal was earlier for 2x300 MW but subsequently changed to 1x600 MW. Land requirement for the proposed plant will be 487 acres, which constitutes govt. and private land. Water requirement will be 18.2 mcm, which will be obtained from Mahanadi River, Govt. of Chhattisgarh has accorded water linkage for 20 mcm. Coal will be sourced from SECL. There are no national parks, wildlife sanctuaries, biosphere/tiger, reserves, heritage sites efc. within 10 km of the plant. A stack height of 275 m (bi-flue) will be installed. PM emission shall not exceed 50 mg/Nm3. Mandi River flows at a distance of 3.0 km is the south west of the plant boundary, Mahanadi River flows at a distance of 5.0 km in the south. Public hearing was held on 3.10.2009. Cost of the project will be Rs, 2900.00 Crores.
- 3. The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated September 14, 2006.
- 4. "Based on the information submitted by you, your consultant J.M. Environment (Pvt.) Ltd., Gurgaon in the meeting of Expert. Appraisal Committee (Thermal) held during 19-20 March, 2010, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:

I

A. Specific Conditions:

- (i) Detailed hydro-geological study shall be conducted and submitted within six months from an institute/ organization of repute to assess impact of surface water regime. Specific mitigation measures shall be spelt out and action plan for implementation of the same shall be provided. It shall be ensured that the area drainage is not disturbed due to the proposed power plant
- (ii) Hydro-geological study of the area shall be also reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quantity and quality is observed at any stage, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.
- (iii) Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional Office of the Ministry within three months.
- (iv) No ground water shall be extracted for use in operation of the power plant even in lean season.
- (v) 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.
- (vi) COC of 5.0 shall be adopted.
- (vii) Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.
- (viii) 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.
- (ix) Provision for installation of FGD shall be provided for future use.
- (x) A stack 275 m with flue gas velocity of 25 m/s shall be installed.
- (xi) High Efficiency Electrostatic Prebipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.
- (xii) 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.
- (xiii) Utilisation of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.

- (xiv) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 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 as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.
- (xv) Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
- (xvi) For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.
- (xvii) Green Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75 %.
- (xviii) Two nearest village shall be adopted and basic amenitles like development of roads, drinking water supply, primary health centre, primary school etc shall be developed in co-ordination with the district administration.
- (xix) The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for providing fluoride free potable drinking water supply in the near by villages and schools shall be undertaken in a time bound manner.
- (xx) A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months form the date of issue of this letter.
- (xxi) An amount of Rs 6.0 Crores shall be specially earmarked for development activities for tribals of the nearby villages as committed by the project proponent vide its letter dated 23,03,2010. Specific schemes for upliftment of tribal families mentioning sustainable livelihood schemes shall be submitted to the Ministry within three months with time bound implementation and in-built monitoring programme. The above amount shall be over and above the fund earmarked for CSR activities.
- (xxii) Further an amount of Rs 15.0 Grores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent vide its letter dated 23.03.2010. Subsequently a recurring expenditure of Rs 3.0 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.

- (xxiii) While identifying CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills-of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs.
- (xxiv) It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time

B. General Conditions:

- (i) The treated effluents conforming to the prescribed standards only shall be recirculated 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 do not get mixed.
- (ii) A sewage treatment plant shall be provided (as applicable) and the freated sewage shall be used for raising greenbelt/plantation.
- (iii) Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.
- (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 shall be submitted to the Ministry as well as to the Regional Office of the Ministry.
- (v) 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 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.
- (vi) Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg,Cr,As,Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.

- (vii) Monitoring 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 be undertaken.
- (viii) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (ix) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/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.
- (x) Regular monitoring of ground level concentration of SO₂, NOx, PM_{2.5} & PM₁₀ 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 website of the company.
- (xi) 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xii) 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.
- (xiii) A copy of the clearance letter shall be sent by the proportent 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.
- (xiv) A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xv) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional

Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely: SPM, RSPM (PM_{2,5} & PM₁₀), SO₂, 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.

- (xvi) 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) 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.
- (xvii) 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 environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.
- (xviii) 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 update the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.
- (xix) 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.
- (xx) 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.
- (xxi) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.
- 4. The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary

- 5. The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.
- 6. 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.
- 7. 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.
- 8. 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 and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.
- 9. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

Yours faithfully,

(Dr. P.L. Ahujarai) Director

Copy to:

- The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001,
- 2. The Secretary (Environment), Environment, Department, Government of Chhattisgarh, Raipur.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- 4. The Chairman, State Env. Conservation Board : Nanak Niwas, Čivil Lines, Raipur, Chhattisgarh 421 001
- The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBDcum-Office Complex, East Arjun Nagar, Delhi- 110032.
- 6. The Chief Conservator of Forests, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, Arera Colony, Ravishankar Nagar, Bhopal 462016.
- . 7. The District Collector, Raigarh District, Chhattisgarh,
- The Director (EI), MOEF.
- Guard file.
- Monitoring file.

(Dr. P.L. Ahujavai)

7