

17 SEP 2009

719107

U-7/2009 show file  
1/8/09  
DDC  
ENV.

BY SPEED POST

F. No. J-13011/24/2007-IA.II (T)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan  
CGO Complex, Lodi Road  
New Delhi-110 003

Dated: 31<sup>st</sup> August, 2009

To

10/28  
8/9/09  
M/s Patni Energy Pvt. Ltd.  
S-1A, F-1, Irani Market Compound  
Yerawada, Pune- 411 006

Sub: 405 MW ( 2x135 MW+1x135 MW) Thermal Power Plant at Vill. Madhekar, Taluk Alibagh, District Raigad, Maharashtra by M/s Patni Energy Pvt. Ltd-  
Environmental Clearance Regarding.

Sir,

The undersigned is directed to refer to your communication no. PEPL/RV/MoEF/MTPS/416-1 dated 16.4.2007 regarding the subject mentioned above. Subsequent information furnished by the proponent have also been considered. The information furnished vide letter no. CRZ-2008/1529/CR-129/TC-2 dated 29<sup>th</sup> Nov, 2008 from Department of Environment, Government of Maharashtra has also been taken into consideration.

2. It is noted that the proposal is for grant of environmental clearance for setting up of a 405 MW (2x135 MW + 1x135 MW) thermal power project at vill. Madhekar, taluk Alibagh, Distt. Raigad. CFBC boilers with lime injection will be provided. Total land required for the project is 70.26 ha. Imported coal requirement will be 1.5 MTPA at the maximum. Water requirement will be 5755 m<sup>3</sup>/hr from sea and 165 m<sup>3</sup>/hr from KT weir on Amba River. There will be a captive jetty for the project, however, presently coal will be transported through PNP jetty to project site through trucks. No national Park/Wildlife sanctuary is reported within 7 Km radius from plant boundary. Public hearing was held on 28.3.2007. Total project cost will be Rs. 1204.00 Crores including Rs. 63.00 Crores for environmental protection measures.

3. The proposal has been considered by the Expert Appraisal Committee for Thermal Power and Coal Mine projects and Ministry of Environment & Forests hereby accords environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions:-

- (i) Prior CRZ clearance for the activities/ facilities to be located in the CRZ area shall be obtained before start of the work on the project.



- (ii) The total land requirement for all the activities of the project shall not exceed 70.26 ha
- (iii) To avoid impact on mangroves, the inlet pipeline should be shifted near to the outlet pipeline location maintaining a minimum required distance.
- (iv) A monitoring cell shall be constituted by the project proponent with an Ecologist, Water Quality Specialist and one Mangroves Specialist in the project. In addition, a three member committee be formed to oversee the conservation of mangroves. The Committee should comprise of representatives from Bombay Natural History Society, National Institute of Oceanography and Environment Department of Mumbai University. The expenditure in this regard shall be borne by the project proponent.
- (v) Ash contents in the imported coal to be used in the project shall not exceed 5% and sulphur 1.75% respectively at any given time.
- (vi) A multi-flue stacks of 220 m height shall be provided with continuous online monitoring equipments for Sox, NOx, Particulate matter and Hg. Exit velocity of flue gases shall not be less than 22.5 m/sec.
- (vii) High efficiency Electrostatic Precipitator (ESP) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm<sup>3</sup>.
- (viii) Space provision shall be kept for retrofitting of FGD system, if required at a later date.
- (ix) 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.
- (x) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be achieved within 4 years. Unutilized fly ash and bottom ash shall be disposed off in the ash pond.
- (xi) Ash pond shall be lined with impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
- (xii) Cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.
- (xiii) The treated effluents conforming to the prescribed standards only shall be discharged from cold water side in the Creek. The temperature of the discharged effluents shall not exceed 3<sup>0</sup> C over and above the ambient water temperature of Creek water. The temperature of the discharged water shall be monitored continuously and records maintained.
- (xiv) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.
- (xv) Rain water harvesting should be adopted. Central Groundwater 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.



- (xvi) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season.
- (xvii) Storage facilities for auxillary liquid fuel such as LDO and/ HFO/ LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place. Sulphur content in the liquid fuel will not exceed 0.5%.
- (xviii) Provision shall be made for the housing of 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 care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.
- (xix) Regular monitoring of ground water in and around the 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. The data so obtained should be compared with the baseline data so as to ensure that the groundwater quality is not adversely affected due to the project.
- (xx) A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of the project area preferably with local species.
- (xxi) An amount of Rs. 10 crore for capital (including corpus fund of Rs. 4 crore for maintenance of RR colony) and Rs. 2.0 crore towards recurring expenses for undertaking activities under CSR should be kept.
- (xxii) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xxiii) 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.
- (xxiv) Regular monitoring of ground level concentration of SO<sub>2</sub>, NO<sub>x</sub>, Hg,SPM and RSPM 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.



- (xxv) Periodic reports shall be submitted to the Regional Office of this Ministry. The data so monitored shall also be put on the website of the company.
- (xxvi) 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, / office of Municipal Corporation/Gram Panchayat concerned and on the company's web site 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.nlc.in>.
- (xxvii) 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, 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.
- (xxviii) 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, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- (xxix) 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.
- (xxx) The environmental statement for each financial year ending 31<sup>st</sup> 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.
- (xxxi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxxii) Regional Office of the Ministry of Environment & Forests located at Bhopal 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.

(xxxiii) 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.

(xxxiv) 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.

(xxxv) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bhopal /the CPCB/the 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. MOEF may 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 of production operations by the power plant.

6. In case of any deviation or alteration in the project proposed 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.

7. 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 .




8. 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.

(LALIT KAPUR)  
DIRECTOR

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
2. The Secretary, Department of Energy and Environment, Govt. of Maharashtra, Mantralaya, Mumbai-400032, Maharashtra.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
4. The Chairman, Maharashtra Pollution Control Board, Kalptaru point 3<sup>rd</sup> & 4<sup>th</sup> Floor Sion Matunga Scheme Road No. 8, opp. Cine Planet Cinema, near Sion Circle, Sion(East), Mumbai-400022 - with request to display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office for 30 days.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- ✓ 6. The Chief Conservator of Forests, Western Regional Office, Ministry of Environment & Forests, E-3/240, Arera Colony, Bhopal-462016.
7. Director (EI), MOEF
8. Guard file.
9. Monitoring file.

  
(LALIT KAPUR)  
DIRECTOR