

BY SPEED POST

F. No. J-13011/8/2009-IA.II(T)
Government of India
Ministry of Environment & Forests

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

Dated : 29th Aug, 2009

To

M/s Adhunik Power and Natural Resources Ltd.
14, N.S Road, 2nd Floor,
Kolkata- 700 001

Subject: 270 MW TPP at villages Padampur, Srirampur, Kendudih and Birbans, Dist. Saraikela-Kharswan, Jharkhand by M/s Adhunik Power & Natural Resources Ltd.- Environmental clearance regarding.

Sir,

The undersigned is directed to refer to your communication no. Nil dt. 26.3.2009 regarding the subject mentioned above. Subsequent information furnished vide letter dated 12.5.2009, 9.6.2009 and 13.7.2009 have also been considered.

2. It is noted that the proposal is for grant of environmental clearance for setting up of a 270 MW Coal based thermal power project at villages Padampur, Srirampur, Kendudih and Birbans, Dist. Saraikela-Kharswan, Jharkhand. Land requirement is 119 ha. Water requirement will be 1059 m³/hr and will be met from downstream of Chandil Dam on river Subernarekha. Coal requirement will be 1.41 MTPA. Dalma Wildlife Sanctuary is reported as 7-10 km and two Elephant corridors named Dalma-Rugai and Dalma- Chandil corridors within 10 km of the project site. It was also informed by PP that Regional Wildlife Conservation plan is under preparation by the State Forest Department. Public hearing was conducted on 7.03.2009. Total cost of the project is Rs. 1226.182 crores which includes Rs. 225.05 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) No additional land in excess of 119 ha shall be acquired for any activity/ facility of this project.

- (ii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the Competent Authority.
- (iii) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.
- (iv) Project proponent should contribute @ Rs. 20,000/ha for project area as proportionate cost to the Regional Wildlife Conservation Plan and a copy of the Plan should be submitted to the Ministry.
- (v) Sulphur and ash contents in the coal to be used in the project shall not exceed 0.45 % and 46 % respectively at any given time. In case of variation of coal quality at the time of issuance of LOA, a fresh reference shall be made to MOEF for suitable amendments to environmental clearance conditions wherever necessary.
- (vi) A single stack of 220 m height shall be provided with continuous online monitoring equipments for SO_x, NO_x and Particulate matter. Exit velocity of flue gases shall not be less than 25 m/sec. Mercury emissions from stack may also be monitored on periodic basis.
- (vii) High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³.
- (viii) 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.
- (ix) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from 4th year onwards. Unutilized 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.
- (x) Ash pond shall be lined with impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.
- (xi) Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.
- (xii) No ground water shall be extracted for project work at any stage.
- (xiii) Natural drainage system within the project site should not be disturbed.
- (xiv) The treated effluents conforming to the prescribed standards 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.

- (xv) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.
- (xvi) 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.
- (xvii) 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 at Bhubaneswar.
- (xviii) Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Deptt. 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.
- (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) First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xxii) 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.
- (xxiii) Regular monitoring of ground level concentration of SO₂, 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 website of the company.
- (xxiv) 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 structures to be removed after the completion of the project.

- (xxv) 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>.
- (xxvi) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad /Municipal Corporation, urban local Body and the Local NGO, is 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.
- (xxvii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (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, SO₂ and NO_x (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 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 EC conditions and shall also be sent to the respective Regional Offices of MOEF by e- mail.
- (xxxi) Regional Office of the Ministry of Environment & Forests located at Bhubaneswar will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along

with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels (Stack & ambient levels of NOx) will be displayed at the main gate of the power plant.

- (xxxii) 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.
- (xxxiii) 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.
- (xxxiv) Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bhubaneswar/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 operations by the power plant.

6. 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.

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 (Environment & Forests), Government of Jharkhand, Ranchi.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delhi-110066.
4. The Chairman, Jharkhand Pollution Control Board, TA Building, HEC Complex, P.O. Dhurwa, Distt. Ranchi- with a 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, Eastern Regional Office, Ministry of Environment & Forests, A/3, Chandrasekharpur,, Bhubaneswar-751023.
7. The Director (EI), MOEF.
8. Guard file.
9. Monitoring file.


(LALIT KAPUR)
DIRECTOR