

No.J.13011/15/93-IA-II(T).

तार :

Telegram : PARYAVARAN,
NEW DELHI

दूरभाष :

Telephone : 4360478

टेलिक्स (द्विभाषीय) :

Telex : (bi-lingual) : W-66185 DOE IN

FAX : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन, सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAVAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

September 24, 1997.

Subject : Setting up of 2 x 275 MW Coal Based Thermal Power Project as Stage-I of 1000 MW Plant at Tamnar in Raigarh District, Madhya Pradesh by M/s Jindal Power Limited - Environmental Clearance reg.

The undersigned is directed to refer to communication No.JPL/RTPP/RKS/2.5/204 dated 26th February, 1996, No.JPL/RTPP/RKS/2.5/426 dated 12th June, 1996 and No.JPL/RTPP/RKS/2.5/1071 dated 11th February, 1997 from M/s Jindal Power Limited regarding the above mentioned project.

2. The proposal regarding setting up of 1000 MW Raigarh Thermal Power Project has been examined from environmental angle on the basis of information submitted by the proponents. Environmental Clearance is hereby accorded to Stage-I of 2 x 275 MW subject to implementation of following terms and conditions :-

- i) All the conditions stipulated by the Madhya Pradesh Pollution Control Board vide their letter No.2077/TS/EZ/MPPCB/96 dated 7th February, 1997 should be strictly implemented.
- ii) A bi-flue stack of height 275 mts and internal diameter 4.75 mts with continuous monitoring facility should be installed for Phase-I. For adequate dispersal of gaseous pollutants, exit velocity will be maintained at 25 mts/sec by installing ID fans and continuous record of exit velocity shall also be maintained and submitted to the Ministry on a yearly basis.
- iii) Electro-static Precipitator having efficiency of not less than 99.8% should be installed. It should be ensured that particulate emission would not exceed the prescribed limit of 150 mg/Nm³.
- iv) Closed Circuit Cooling Device should be provided and it should be ensured that only minimum water is drawn for makeup purposes. The requirement of water for the project will be met by constructing 18 mt high dam across Kurkut River involving a cost around Rs.48 crores. The forest area coming under submergence shall be identified and separate clearance under the Forest (Conservation) Act shall be obtained by the project authorities prior to commissioning the work on the project.

Divisional Forest Officer
Raigarh Division, Raigarh

- v) Adequate space should be provided for installation of the gas desulphurisation plant in future for control of sulphur-di-oxide.
- vi) Acquisition of land should be restricted to 614 ha with the following break-up :-

Power Plant	360 ha
Ash Dyke	198 ha
Colony	56 ha

614 ha

No additional area will be acquired for Phase-II including requirement for fly ash disposal.

- vii) Noise level should be limited to 85 dBA and regular Maintenance of equipments be undertaken. For people working in the area of generator halls and other high noise areas, ear pluggs should be provided.
- viii) For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured.
- ix) A green belt of 100 mt width will be created all along the plant boundary. Green belt will also be created along the ash disposal area. A norm of 1500-2000 trees per ha should be followed. A detailed proposal for green belt creation including aftercare, gap filling, monitoring etc. should be prepared alongwith financial requirements and submitted to the Ministry by 31st December, 1997.
- x) Continuous monitoring of ground water should be undertaken in project impact area by establishing good network of observation wells in consultation with the Central Ground Water Board. Results and data collected should be analysed to ascertain the status of water quality and findings should be submitted.
- xi) All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant and treated to ensure adherence to specified standards of discharge.

Divisional Officer
Raigarh Division, Raigarh

- xii) Provision shall be made for collection of fly ash in dry form. Close Conveyor System with dust suppression mechanism shall be used for transport of coal from the Mine and for carrying the ash to the disposal areas. Adequate provision should be made for sprinkling of water at strategic locations to ensure that fly ash does not get air borne.
- xiii) Ash Pond area should be provided with impervious lining and suitable drainage provision should be made around the coal stock yard.
- xiv) Fly ash generated will be fully utilised within 10 years starting with 20% utilisation from the year of operation of the project with additional utilisation of 10% every year.
- xv) Detailed survey of flora and fauna along Kurkut river/Submergence area shall be carried out in consultation with the institutions like BSI, ZSI, WLI, Dehra Dun, Local recognised Universities, Institutions etc. and the report should be submitted within six months.
- xvi) Project affected people should be adequately compensated and rehabilitated as per the State Govt norms in consultation with the State authorities. The final R&R Programme and package should be submitted within six months. The project colony should be located 6-8 kms away from the plant site to avoid direct impact of the project.
- xvii) Adequate financial provision should be made for implementation of environmental mitigative measures with adequate scope for its enhancement, if required, in future.
- xviii) Regular monitoring for SPM, SO₂ and NO_x around the power plant may be carried out and records maintained. The data so collected should be properly analysed and submitted to the Ministry every six months.
- xix) Full cooperation should be extended to the Scientists/Officers from the Regional Office of the Ministry at Bhopal/the CPCB/the SPCB who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the Management Plans should be forwarded to the Regional Office/the CPCB/the SPCB for their use during monitoring.

Divisional Forest Officer
Raigarh Division, Raigarh

xx) Monitoring Committee should be constituted for reviewing the compliance to various safeguard measures by involving recognised local NGOs, Pollution Control Boards, Institutions, Experts etc.

3. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.

4. 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 conditions imposed and to add additional environmental protection measures required, if any.

5. 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, the Public Liability Insurance Act, 1991, the Impact Assessment Notification of January, 1994 and its amendments.

N Bhat

(Nalini Bhat)
Additional Director

Shri R.K. Saraf,
President,
Jindal Power Limited,
28, Najafgarh Road,
New Delhi-110015.

S
Divisional Forest Officer
Raigarh Division, Raigarh