

F. No. J-11011/821/2008- IA II (I)

Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
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New Delhi - 110 003

E-mail : pb.rastogi@nic.in
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Dated 26th November, 2009

To,

✓ M/s Jaypee Cement Ltd.
JS House, 63 Basant Lok
Vasant Vihar, New Delhi

E-mail : sunny.gaur@jalindia.co.in; Fax No. : 011-26145389 ;

Subject : Cement Plant (Cement 5.0 MTPA, Clinker 3.6 MTPA) alongwith Captive Power Plant (50 MW) at Survey Nos. 82/1, 82/2, 82/3, 83/3, 84/1, 85/1, 85/2, 86-90, 93, 97-102, 105/4, 105/5, 105/10, 313/2, 314/2, 315, Village Budawada, Mandal Jaggayyapeta, District Krishna, Andhra Pradesh by M/s Jaypee Balaji Cement Plant (A Unit of Jaiprakash Associates Ltd.) - Environment clearance reg.

Ref. : Your letter no. JCL/MOEF/AP/Industry/2009 dated 25th August, 2009.

Sir,

Kindly refer your letter no. JCL/MOEF/AP/Industry/2009 dated 25th August, 2009 alongwith project documents including Application in Form I and Pre-feasibility Report and subsequent clarification furnished vide communication 26th September, 2009 regarding above mentioned project.

2.0 The Ministry of Environment and Forests has examined your application. It is noted that the proposal is for the Cement Plant (Cement 5.0 MTPA, Clinker 3.6 MTPA) alongwith Captive Power Plant (50 MW) at Survey Nos. 82/1, 82/2, 82/3, 83/3, 84/1, 85/1, 85/2, 86-90, 93, 97-102, 105/4, 105/5, 105/10, 313/2, 314/2, 315, Village Budawada, Mandal Jaggayyapeta, District Krishna, Andhra Pradesh by M/s Jaypee Balaji Cement Plant (A Unit of Jaiprakash Associates Ltd.). Total project area is 120 ha. of which 117 ha is already acquired. Additional 23.88 ha waste land and 8 ha land is under acquisition from the Government of A.P. Budavada RF and Jaggayyapeta Extension RF are located within 10 km radius. Total cost of the project is Rs. 1,650.00 Crores.

3.0 State of the Art 6-stage pre-heater / pre-calciner kiln with Vertical Roller Mills (VRMs) will be installed. Pozollona Portland Cement (PPC) will be manufactured. Cement manufacturing process will involve crushing, grinding, blending of raw material, coal crushing and fine coal grinding, pre-heating of raw material and calcinations in the six stage pre-calciner string, clinkerization in the kiln, slag grinding and mixing, clinker cooler and storage, cement grinding and mixing. Limestone (6 MTPA) will be sourced from Captive mine (704.75 ha.) at Village Budawada located at 3 km. Laterite and bauxite (0.25 MTPA) from Rajahmundry, A. P.; Fly ash (1.15 MTPA) from nearby power plants; gypsum (0.25 MTPA) from Vizag; Coal (0.6 MTPA) from Singaheni Collieries Co. Ltd (CCCL), Adilabad, A. P. will be sourced. Mine is located at 1.5 km from the cement plant.

4.0 Electrostatic precipitator (ESP), glass bag house, bag filters, dust extraction / dust suppression system will be provided to control air emissions. Total water requirement from Krishna River will be 4,500 m³/day. Air-cooled condensers will be provided to reduce water consumption. All the treated wastewater will be utilized for green belt development, dust suppression and in the cement manufacturing process. Dust collected in the air pollution control equipment will be recycled back to the process. Treated domestic effluent and solid waste will be used as manure for green belt development. Fly ash will be used in cement manufacturing process. Bio-degradable waste will be composted and used as manure. Hazardous liquid wastes and solid waste will be used in the kiln. Green belt development will be 40 ha. (33 %) area out of total 120 ha.

5.0 Public Hearing / Public Consultation meeting was held on 1st July, 2009.

6.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance to the following specific and general conditions:

A. SPECIFIC CONDITIONS :

- i) Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided. After expansion, particulate matter from the cement plant and captive power plant shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system viz. Glass bag house, Electrostatic precipitator (ESP), bag filters etc. Data on ambient air, fugitive and stack emissions shall be submitted to the Ministry's Regional Office at Bangalore, A.P. Pollution Control Board (APPCB) and CPCB regularly.
- ii) An action plan shall be prepared and submitted to the Ministry's Regional Office at Bangalore for the control of SO₂ emissions from the captive power plant.
- iii) Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional Office at Bangalore within 3 months from the date of issue of the letter.
- iv) As proposed, Electrostatic precipitator (ESP) to clinker cooler and captive power plant and glass bag house to raw mill / kiln. shall be provided to control emissions within 50 mg/Nm³. Bag filters shall also be provided at transfer points to control fugitive emissions. Water sprinklers shall be provided to control dust emissions in cement plant area.
- v) Ambient air monitoring shall be carried out in and around the project site and efforts shall be made to control and minimize the particulate matters to bare minimum. One ambient air quality monitoring station shall be installed in downwind direction. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this regard.
- vi) The company shall install adequate dust collection, extraction / dust suppression system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. to minimize air pollution. Crusher shall be operated with high efficiency bag filters. All conveyers shall be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored

in silos. Pneumatic system shall be used for fly ash handling. Dust suppression system shall be provided to the coal stock pile. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM particularly in mine area and other vulnerable areas.

- vii) Asphaltting/concreting of roads and water spray all around the critical areas prone to air pollution and having high levels of SPM and RPM shall be ensured.
- viii) Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.
- ix) Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions shall be regularly monitored.
- x) Total water requirement for cement plant from River Krishna shall not exceed 4,500 m³/day. No ground water shall be used. Air-cooled condenser shall be provided to reduce fresh water consumption. The wastewater from auxiliary cooling water system (ACW), boiler blow down, service water after oil and grease removal and DM plant shall be mixed with each other. After proper treatment, all the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- xi) 'Permission' for the drawl of 4,500 m³/day water from River Krishna shall be obtained from the concerned Department and a copy of the letter shall be submitted to the Ministry's Regional Office at Bangalore within 3 months of issue of the environment clearance.
- xii) All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust from air pollution control devices shall be recycled and reused in the process and used for cement manufacturing. The sludge from sewage treatment plant (STP) shall be used as manure for green belt development. Solid waste from the colony and STP shall be segregated into biodegradable and non-biodegradable type. Bio-degradable waste shall be subjected to vermin composting and used as manure for green belt. Inorganic wastes (papers and other wastes) shall be properly disposed off or sold to rag pickers/scrap dealers. Hazardous liquid and solid waste shall be used in the kiln. Used oil and batteries shall be used in kiln as an alternate fuel and / or sold to authorized recyclers / reprocessors only.
- xiii) An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.
- xiv) Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.
- xv) All the fly ash shall be utilized as per Fly Ash Notification, 1999 subsequently amended in 2003. Efforts shall be made to use fly ash maximum in making Pozollona Portland Cement (PPC). ✓

- xvi) As proposed, green belt shall be developed in at least 40 ha (33 %) out of total 120 ha. in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.
- xvii) Recommendation and permission of the State Forest Department regarding impact of proposed plant on surrounding reserve forests viz. Budavada RF and Jaggayyapeta Extension RF located within 10 km radius of the proposed project shall be obtained and implemented. Further, Conservation Plan for the conservation of wild fauna in consultation with the State Forest Department shall be prepared and implemented.
- xviii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement Plants shall be implemented.
- xix) All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 1st July, 2009 shall be satisfactorily implemented.
- xx) The company shall provide housing for 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.

B. GENERAL CONDITIONS :

- i. The project authority shall adhere to the stipulations made by Andhra Pradesh Pollution Control Board (APPCB) and State Government.
- ii. No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.
- iii. The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the A.P. Pollution Control Board. At no time, the particulate emissions from the cement plant shall exceed APPCB limit. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.
- iv. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with APPCB and report submitted to the APPCB quarterly and to the Ministry's Regional Office at Bangalore half-yearly.
- v. The company must harvest the rainwater from the rooftops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.
- vi. The company shall undertake eco-development measures including community welfare measures in the project area.
- vii. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- viii. All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.
- ix. Proper house keeping shall be taken up. Regular annual medical examination of all the employees shall be carried out from the occupational health point of view and records maintained.
- x. A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.
- xi. Occupational health surveillance programme shall be done on a regular basis and records maintained. The programme must include lung function and sputum analysis tests once in six months.
- xii. As proposed, Rs. 71.15 Crores and Rs. 7.40 Crores shall be earmarked towards the total capital cost and recurring cost/annum for environmental pollution control measures and shall be suitably used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.
- xiii. The company shall provide housing for 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.
- xiv. A copy of 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, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
- xv. The project proponent shall upload the status of compliance of the stipulated environment clearance 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 the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- xvi. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the APPCB. The Regional Office of this Ministry at Bangalore / CPCB / SPCB shall monitor the stipulated conditions.
- xvii. 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 alongwith the status of compliance of environmental conditions and shall also be sent to the Regional Office of the MOEF at Bangalore by e-mail. *N*

xviii. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the APPCB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.

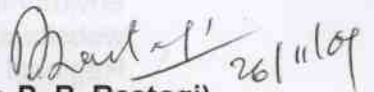
xix. Project authorities shall inform the Regional Office at Bangalore as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

7.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

9.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules


(Dr. P. B. Rastogi)
Director

Copy to:

1. The Secretary, Department of Environment and Forests, Govt. of Andhra Pradesh, Mantralaya, Hyderabad, A.P.
2. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110032.
3. The Chairman, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, A-3, Industrial Estate, Sanathnagar, Hyderabad – 500 018, Andhra Pradesh.
4. The Chief Conservator of Forests (Central), Ministry of Environment & Forest, Regional Office (SZ), Kendriya Sadan, IVth Floor, E & F Wing, 17th Main Road, Koramangla, Bangalore 560 034, Karnataka.
5. Adviser, IAII(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
7. Guard file.
8. Monitoring file.
9. Record file.


(Dr. P. B. Rastogi)
Director