## F. No. J-11011/436/2009-IA-II (I) Government of India Ministry of Environment and Forests (I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003 E-mail: ms.industry-mef@nic.in Tele/fax: 011 – 2436 3973 Dated: 4<sup>th</sup> October, 2011

To,

The President
M/s Jaypee Chunar Cement Products
(A unit of M/s Jai Prakash Associated Limited)
"JA House" Sector 134, Wazirpur,
Noida - 201 304, Uttar Pradesh

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Fax: 0120- 4516 101

Sub: Asbestos Cement Sheets Manufacturing Plant (1,00,000 TPA) at Village Chunar, District Mirzapur, Uttar Pradesh by M/s Jaypee Chunar Cement Products (A unit of M/s Jai Prakash Associates Limited) - regarding Environmental Clearance

Sir.

This has reference to your letter no. JAL/MOEF/ACSP/2011 dated 3.05.2011 along with copies of final EIA/EMP and public hearing reports seeking environment clearance under the provisions of EIA Notification, 2006.

- 2. The Ministry of Environment and Forests has examined the proposal. It is noted that M/s Jaypee Chunar Cement Products (A Unit of M/s Jai Prakash Associates Limited) have proposed for the Asbestos Cement Sheets Manufacturing Plant with a capacity of 1,00,000 TPA at Village Chunar, District Mirzapur in Uttar Pradesh. The unit will be set up within the existing plant premises of 156.218 ha. The proposed plant will require 8 ha of land which is available in the premises of Chunar Cement grinding unit. Green belt will be developed in 33% of plant area. The proposed site is located with in the premises of existing cement grinding unit and the area falls under Seismic Zone III. There is no national park/wild life sanctuary within 10 km radius of the project site. Machharmara RF is close to the project site. There are hills in between the cement plant and the reserve forest. Ganga River flows at a distance of 4.7 km from the proposed site in the NW direction. Total cost of the project is Rs. 37.0 Crores, of which Rs. 5.0 Crores has been earmarked towards environmental pollution control measures.
- 3. Chrysotile Asbestos fibre (15 TPD), Cement (120 TPD), Pulp (2.5 TPD) and Fly ash (170 TPD) will be used as raw materials. Cement will be sourced from adjoining cement grinding unit. Fly ash will be sourced from Renusagar, Shaktinagar, Anpara and Obra Thermal Power plants. Asbestos fibre will be imported in closed pressure packed bags. Pulp will be made available from indigenous source. The power requirement will be 950 KW and will be met from the UPPCL/existing Captive Power Plant.
- 4. It is noted that asbestos fibre section will have a dedicated bag filter to control dust emission during operation. The whole bag opening and shredding operations will be maintained under negative pressure with the help of bag filters and a centrifugal fan. Bag filters will be provided to control fugitive emissions from raw material handling and at all the dust emission points like cement / fly ash storage. Asbestos fibre bags will be opened in an enclosed bag-opening device, which will be connected to dust collector. The empty bags will be shredded and used in the process. Wet drilling will be deployed.

- Water requirement of 100m³/day will be met from the existing bore wells. Permission for withdrawal of 3000m³/day of water of which 2750m³/day of water has been obtained for operation of cement grinding unit / cement plant. No effluent will be discharged outside the plant premises. The treated waste water will be recycled to achieve zero discharge Process water and spillages will be recycled back into the system through backwater trenches, settling pit, slurry recycle pump and cone tanks. Domestic waste water will be treated in existing Sewage treatment plant (STP) and treated water from STP will be used for greenbelt development. The roof top rain water harvesting will be adopted to recharge the ground water.
- 6. Solid waste in the form of rejected / defective sheets along with off cuts and rejects will be reclaimed at dry waste grinding system and recycled/reused in the process. Dust from the cyclones will be mixed with water and the slurry will be used in the process. Sludge from the process will be recycled / reused. Waste oil and grease will be used for plant maintenance. STP sludge will be used as manure.
- 7. The asbestos milling and asbestos based products manufacturing units have been listed at SI. No. 4(c) in Category 'A' of Schedule of EIA Notification, 2006 and are appraised by the Expert Appraisal Committee-1 (Industry) in the Ministry.
- 8. The proposal was considered by the Expert Appraisal Committee-1 (industry) in its 25<sup>th</sup> meeting held during 29<sup>th</sup> -30<sup>th</sup> June, 2011. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public hearing for the project was held on 14.12.2010.
- Based on the information submitted by you and presentation made by you and the Consultant M/s EST Consultants Pvt. Ltd., Delhi, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14<sup>th</sup> September 2006 subject to strict compliance of the following Specific and General conditions:

## A. SPECIFIC CONDITIONS:

- i. The project proponent shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc. Raw materials like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in pelletized form in impermeable bags and under compressed condition.
- ii. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.
- iii. There shall be no manual handling/opening of asbestos fiber bags. The company shall install fully automatic asbestos fiber debagging system before commissioning the unit. Mechanized mixing of the raw materials shall be explored.
- iv. Fugitive emissions shall be controlled by bringing cement in closed tankers, fly ash in covered trucks and asbestos in impervious bags opening inside a closed mixer. Dust collectors shall be provided to Fibre mill, Bag opening device (BOD), Cement and Fly ash silos to control emissions. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle it into the process. Fugitive emissions generated from hopper of Jaw crusher and Pulverizer shall be channelized through hood with proper suction arrangement, bag filter and stack.
- v. The Company shall comply with total dust emission limit of 2 mg/Nm³ as notified under the Environment (Protection) Act, 1986. Adequate measures shall be adopted to control

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the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fiber/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.

- vi. Bags containing asbestos fibre shall be stored in enclosed area to avoid fugitive emissions of asbestos fibre from damaged bags, if any.
- vii. Proper house keeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better house keeping practices shall be adopted for improvement of the environment within the work environment also. These include:
  - (a) All monitoring transfer points shall be connected to dust extraction system.
  - (b) Leakages or dust from machines and ducts shall be plugged.
  - (c) Floor shall be cleaned by vacuum cleaner only.
  - (d) Enclosed belt conveyer shall be used instead of manual transportation of asbestos within the premises.
- viii. Quarterly monitoring of pollutant (PM<sub>10</sub>, asbestos fibre count) in the work zone area and stack(s) shall be undertaken by the Project proponents. In addition, the asbestos fibre count in the work zone area shall be monitored by an Independent monitoring agency like NIOH / ITRC / NCB or any other approved agency and reports submitted to the Ministry's Regional Office at Lucknow, SPCB and CPCB.
- ix. Total water requirement shall not exceed 100 m³/day. All the recommendations of the State Ground Water Department, Govt. of U.P shall be implemented in time bound manner.
- x. As reflected in the Environmental Management Plan, all the treated effluent shall be recycled and reused in the manufacturing process. No process water shall be discharged outside the premises and 'zero' discharge shall be maintained. All the domestic wastewater shall be treated in STP and used for green belt development.
- xi. The Company shall ensure that the entire solid waste generated including process rejects, cement, fly ash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. Process sludge shall be 100% recycled and reused in the process. Hazardous waste shall be ground in dust proof pulverizer with integrated bag filter and recycled back to the process. Asbestos fibres which can not be further recycled due to contamination of iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.
- xii. The cut and damaged fibre bags shall immediately be repaired. Empty fibre bags will be shredded into fine particles in a bag shredder and recycled into the process. Piling of AC sheets shall be done in wet condition only.
- xiii. The Company shall obtain a certificate from the supplier of Chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forests.
- xiv. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, bloat tests for TLC, DLC,

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ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per the directives of the Hon'ble Supreme Court including the recent Kalyaneswari case.

- To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- The company shall also undertake rain water harvesting measures for a storage capacity of minimum 2-3 months after studying the hydrogeology of the area and plan of action shall be submitted to the Ministry's Regional Office at Lucknow within three months.
- xvii. Earth quake and Seismic hazard management plan shall be submitted to the Ministry's Regional Office at Lucknow within three months.
- xviii. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 14<sup>th</sup> December, 2010 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Lucknow.
- xix. Green belt shall be developed in at least 33 % of plant area as per the CPCB guidelines in consultation with the DFO. Green belt development shall be started within 3 months after obtaining EC and completed within three years or before commissioning of the plant whichever is earlier.
- xx. At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on public hearing issues and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program should be ensured accordingly in a time bound manner.
- xxi. The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, 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 authorities must strictly adhere to the stipulations made by the Uttar Pradesh Pollution Control Board and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19<sup>th</sup> May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.
- iv. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry

including its Regional Office at Lucknow and the SPCB/CPCB once in six months.

- v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.
- vi. 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 EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- x. Requisite amount shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at LucknowThe funds so provided shall not be diverted for any other purpose.
- 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.
- xii. 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 at Lucknow. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO<sub>2</sub>, and NOx, (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.
- xiii. 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 SPCB. The Regional Office of this Ministry at Lucknow/ CPCB / SPCB shall monitor the stipulated conditions.

- xiv. 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Lucknow by e-mail.
- xv. 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 SPCB 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 at Lucknow.
- xvi. Project authorities shall inform the Regional Office 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.
- 10. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 11. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 12. 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, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules

(Dr. P.L. Ahujarai)

## Copy to: -

- 1. Secretary, State Department of Environment, Government of Uttar Pradesh, Room No. 13, New Buildings, Vidhan Bhavan, Lucknow -226001, UP.
- The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 3. The Chairman, Uttar Pradesh State Pollution Control Board, 111 Floor, PICUP Bhavan, Vibhuti Khand, Lucknow-226020.
- The Chief Conservator of Forests, Regional Office (Central Region), B-1/72, Sector H, Aliganj, Lucknow-226020.

5. Guard File / Monitoring File / Record File.

(Dr. P.L. Áhujarai) Scientist-F