

F. No J-11011/892/2008-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated 5th January, 2010

To,

Sri K A Ramaraju, Vice President
M/s Anjani Portland Cement Ltd.
Sitha Nilayam, 153, Dawarakapuri Colony
Punjagutta, Hyderabad- 500082, A.P.
E-mail : info@anjanicement.com

Subject : Expansion of Cement Plant (0.594 MTPA to 3.85 MTPA), Clinker (0.40 MTPA to 2.31 MTPA), Lime Stone Mining (0.6 MTPA to 3.00 MTPA) and setting up of Coal based Power Plant (16 MW) at Chintapalem Village, Nalgonda District, Andhra Pradesh by M/s Anjani Portland Cement Limited - Environment clearance req.

Ref. : Your letter no. AN/U-1/PROJ/09-10/LTR/19 dated 18th June, 2009.

Sir,

Kindly refer your letter no. AN/U-1/PROJ/09-10/LTR/19 dated 18th June, 2009 alongwith project documents including Application in Form I, Pre-feasibility Report, EIA EMP report alongwith public hearing report 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 expansion of Cement Plant (0.594 MTPA to 3.85 MTPA), Clinker (0.40 MTPA to 2.31 MTPA), Lime Stone Mining (0.6 MTPA to 3.00 MTPA) and setting up of Coal based Power Plant (16 MW) at Chintapalem Village, Nalgonda District, Andhra Pradesh by M/s Anjani Portland Cement Limited. Limestone mine is located at Chintalapalem Village, Mellachervu Mandal, Nalgonda District, Andhra Pradesh. Out of 57.54 ha, 36 ha will be utilized for mining purposes. 12 ha is already broken up and is utilized for mining. Mining lease is approved by the Govt. of Andhra Pradesh vide letter dated 14th November, 1990 and is valid upto 14th June, 2010. Indian Bureau of Mines has also approved the mining scheme vide letter dated 21st February, 2009. Total project area for the cement plant and mine lease area is 86 ha. and 57.54 ha, respectively. No eco-sensitive areas are located within 15 km periphery of the plant. Total cost of the project is Rs. 700 Crores.

3.0 Opencast mechanized mining method will be adopted in the proposed mine. Limestone requirement of 3.0 MTPA will be met from the proposed mine and at this production rate the mine will last for a period of about 10 years. Water requirement for the mine from mine pit will increase from 20 m³/day to 60 m³/day. Top soil from the mine will be used for plantation. Green

belt will be developed in 18 ha (8 ha already developed) out of total mine area of 57.54 towards the end of mine life. Lime stone, clay, bauxite, iron ore, gypsum, fly ash, coal will be used as raw material in the cement plant.

4.0 Electro static precipitator, bag house, bag filters, stacks of adequate height, dust suppression system etc. will be provided to control emissions. The total water requirement for the cement plant from River Krishna and the mine pit harvested rain water will be 250 m³/day. No waste water will be generated from the cement plant. Wastewater generated from domestic use will be treated in septic tanks followed by soak pits.

5.0 Public Hearing / Public Consultation meeting was held on 9th June, 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. No construction work at the proposed project site shall be started without obtaining prior clearances / approvals for the linked mining component from the Indian Bureau of Mines (IBM) and State Govt. of Andhra Pradesh. A copy of the mining lease approval renewed time to time from the Indian Bureau of Mines (IBM) and State Govt. of Rajasthan shall be submitted to the Ministry and its Regional Office at Bangalore before initiating any construction work at site related to mining.
- ii. Continuous monitoring system to monitor gaseous emissions shall be provided and limit of SPM shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system. Stack of adequate height will be installed to control SO₂ and NO_x emissions as per statutory requirement. The monitoring data collected for 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.
- iii. As proposed, kiln and cooler of new line II shall be provided with a bag house and electrostatic precipitators (ESPs) to control emissions within 50 mg/Nm³. Bag filters and dust collectors shall be provided at all other emission sources and maintained properly to achieve standards as prescribed by the APPCB or under (E(P) Act which ever are more stringent.
- iv. 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.
- v. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vi. Ambient air monitoring shall be carried out in the nearby villages and efforts shall be made to control and minimize the particulate matters to bare minimum. The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. 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.

- vii. 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. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- viii. 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.
- ix. Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. Secondary emissions from the drilling, blasting, excavation, loading and transportation operations shall be controlled by water sprinkling and other dust suppression methods.
- x. 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 should not be overloaded. Vehicular emissions shall be regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.
- xi. Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony and mine site. Besides, company must also harvest the rainwater from the rooftops and storm water drains to recharge the ground water. The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement pressure from the river. The Company shall construct the rain water harvesting and groundwater recharge structures outside the plant premises also in consultation with local Gram Panchayat and Village Heads to augment the ground water level. An action plan shall be submitted to Ministry's Regional Office at Bangalore within 3 months from date of issue of this letter.
- xii. Total ground water requirement from River Krishna and the mine pit harvested rain water shall not exceed 250 m³/day. All the treated wastewater from the workshop of mines shall be treated for oil and grease removal and used in the process and/or for dust suppression, 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.
- xiii. 'Permission' for the drawl of water from River Krishna and the mine pit harvested rain water shall not exceed 250 m³/day and prior permission shall be obtained from the concerned department. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent shall be discharged from the mine to any water body or nearby river.
- xiv. Domestic wastewater will be treated in septic tanks followed by soak pits and treated domestic effluent shall be used for green belt development within the plant premises.

Domestic waste from colony and STP shall be segregated into bio-degradable and non-biodegradable. Bio-degradable waste shall be composted and non-biodegradable waste shall be land filled at identified sites.

- xv. Detailed hydrological study shall be carried out and implementation of recommendations of the detailed hydrological study shall be ensured.
- xvi. The project proponent shall ensure that no natural water course shall be obstructed due to any mining operations.
- xvii. The project proponent shall also take appropriate mitigative measures to prevent pollution of nearby River and other surface water body, if any.
- xviii. Suitable conservation measures to augment ground water resources in the area shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- xix. Garland drains shall be constructed to arrest silt and sediment flows from soil. The water so collected shall be used for watering the mine area, haul roads, green belt development etc. The drains shall be regularly de-silted and maintained properly.
- xx. Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon and maintained properly. Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drain and desilted at regular intervals.
- xxi. Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year- pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office, Bangalore, Central Ground Water Authority and State Ground Water Board.
- xxii. Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rainfall data.
- xxiii. All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust for pollution control devices shall be recycled and reused in the process and used in cement manufacturing. The sludge from STP shall be used as manure for green belt development. Waste/spent oil shall be sold to authorized recyclers / reprocessors only.

- xxiv. An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.
- xxv. Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.
- xxvi. 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 Pozzollona Portland Cement (PPC).
- xxvii. Mechanized open casting shall be adopted and no change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.
- xxviii. Digital processing of the entire lease area using remote sensing technique shall be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bangalore.
- xxix. Top soil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas. No top soil shall be used to reclaim the mined out area by backfilling limestone mine.
- xxx. The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the over all slope of the dump shall be maintained to 28° . The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office at Bangalore on six monthly basis.
- xxxi. The area for external over burden dump shall be reduced by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28° .
- xxxii. Wet drilling blasting method and provision for the control air emissions during blasting using dust collectors etc. shall be used.
- xxxiii. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented. 'No objection certificate' from the Chief Controller of Explosives shall be obtained.
- xxxiv. Bench height, width and slope for individual bench shall be properly assessed and implemented. Adequate measures shall be adopted to stabilize the slope before abandonment. The fencing around the reservoir shall be provided to prevent accidents.
- xxxv. As proposed, green belt shall be developed in at least 33 % in cement plant and all the mined out area except used for reservoir by planting the native species around (2-

mining lease area, over burden dumps, around water body, roads etc. in consultation with the local DFO / Agriculture Department. Plantation already done in mine area shall be properly maintained and suitably replaced time to time. At least, 1,500 trees per year shall be planted with a tree density of 2,000 trees per ha. An action plan shall be submitted in this regard.

- xxxvi. The void left unfilled in the mining area shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.
- xxxvii. The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28° .
- xxxviii. Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Bangalore. A final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
- xxxix. 'Permission' and 'Recommendations' of the State Forest Department regarding impact of cement plant and mining activities on the surrounding reserve forests, if any, 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.
- xl. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional office within 3 months from the date of issue of this letter.
- xli. The company shall obtain necessary clearances / approval from the concerned Departments i.e. Indian Bureau of Mines, State Government, MoEF etc. for the linked mining component before undertaking any construction activity at the project site.
- xlii. 'Consent to Operate' shall be obtained from APPCB before starting enhanced production from the mine.
- xliii. Rehabilitation and Resettlement Plan for the project affected population including tribals as per the policy of the State Govt. in consultation with the State Govt. of Andhra Pradesh shall be implemented. Compensation paid in any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy 2007.

- xliv. All the safety norms stipulated by the Director General, Mine & Safety (DGMS) shall be implemented.
- xl. Acoustic enclosures shall be provided to control noise wherever necessary. Mine machine shall be provided with silencers. Noise shall also be controlled from cooler fans, compressor house, cement mill and raw mill, cement plant and drilling machines, excavator, blasting at mine site using appropriate noise control measures.
- xlvi. A separate budget shall be kept for the occupational health surveillance within and outside the campus in the nearby villages.
- xlvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement Plants shall be implemented.
- xlvi. The company shall comply with the commitments made during public hearing held on 9th June, 2009 and a separate budget shall be allocated for implementing the same and information submitted to the Ministry's Regional Office at Bangalore.

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 shall undertake eco-development measures including community welfare measures in the project area.
- 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 Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- vii. 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.
- viii. A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.

- ix. 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.
- x. Adequate funds 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.
- xi. 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.
- xii. 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.
- xiii. 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.
- xiv. 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 / APPCB shall monitor the stipulated conditions.
- xv. 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.
- xvi. 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.

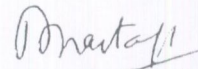
- xvii. Project authorities shall inform the Regional Office at Bangalore as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

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.

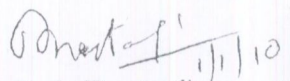
10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public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