

F. No. J-11011/506/2006- 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 : [pb.rastogi@nic.in](mailto:pb.rastogi@nic.in)  
Telefax : 011: 2436 7668



Dated 17<sup>th</sup> July, 2009

To,

M/s Chettinad Cement Corporation Ltd.  
Puliyur Cement Factory  
Puliyur, District Karur  
Tamil Nadu

E-mail : [contact@chettinadmail.com](mailto:contact@chettinadmail.com) / [ariyalur@chettinadmail.com](mailto:ariyalur@chettinadmail.com) /  
[chtdmids@vsnl.com](mailto:chtdmids@vsnl.com) / [cccl@sancharnet.in](mailto:cccl@sancharnet.in) ; Fax No.: 04324-251320 ;

**Subject : Expansion of Cement Plant (Cement, 5.0 MTPA to 5.5 MTPA) alongwith Captive Power Plant (15 MW) at SF. Nos. 6-11, 25, 27-29, 38, 40-45, 49, 51-52, 89-91, 93, 95, 97-98, 101, 118, 119, 123, 125-126, 128, 134 parts, Village Kilapaluvur, Taluk & District Ariyalur, Tamil Nadu by M/s Chettinad Cement Corporation Ltd. – Environment clearance reg.**

**Ref. : Your letter no. CCCL/ARIYALUR/Expn/EC/0108 dated 13<sup>th</sup> April, 2009.**

Sir,

Kindly refer your letter no. CCCL/ARIYALUR/Expn/EC/0108 dated 13<sup>th</sup> April, 2009 alongwith project documents including Form I, draft TOR, Project Report and EIA/EMP report and subsequent clarifications furnished vide communications dated 29<sup>th</sup> May, 2009, 3<sup>rd</sup> & 5<sup>th</sup> June, 2009 regarding above mentioned cement 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 (Cement, 5.0 MTPA to 5.5 MTPA) alongwith Captive Power Plant (15 MW) at SF. Nos. 6-11, 25, 27-29, 38, 40-45, 49, 51-52, 89-91, 93, 95, 97-98, 101, 118, 119, 123, 125-126, 128, 134 parts, Village Kilapaluvur, Taluk & District Ariyalur, T. N. by M/s Chettinad Cement Corporation Ltd. Existing plant is located in 87.215 ha. and no additional land will be required for proposed expansion. No national park/wild life sanctuary/ reserve forest is located within 10 km radius of the project site. Environmental Clearance for the Cement Plant (2.5 MTPA) and Captive Power Plant (2x15 MW) vide letter dated 28<sup>th</sup> August, 2007 and for further expansion of the Cement Plant (2.5 MTPA to 5.0 MTPA) has been accorded by the Ministry vide letter dated 7<sup>th</sup> May, 2008 and 4<sup>th</sup> August, 2008. Total cost of the proposed expansion is Rs. 50.00 Crores.

3.0 Cement production will increase from 5.0 MTPA to 5.5 MTPA due to change in the grinding capacity of the cement mills due to non-availability of 350 TPH cement mill and proposed installation of 375 TPH cement mill. There will be no change in the clinker production. Following are the details of existing and proposed production capacities:

Production	Production capacity (MTPA)		
	Existing	Proposed Addition (due to change in cement mill specifications)	Cumulative after expansion
<b>Clinker</b>		--	
Line-I	1.45	--	1.45
Line-II	1.45	--	1.45
Total	2.90		2.90
<b>Cement</b>			
Line-I	2.50	0.25	2.75
Line-II	2.50	0.25	2.75
Total	5.00	0.50	5.50
Power (CPP)	2x15 MW	1x15 MW	3x15 MW

4.0 All the raw material requirement will remain the same except increase in slag by 1,296 TPD due to increase in slag cement production. Imported coal (140 TPD) / Indigenous coal (210 TPD) / Lignite (320 TPD) will be used in proposed captive power plant (Fluidized Bed Combustion, 15 MW). Clinker (50%), Gypsum (5%) and Slag (45%) will be grinded in the cement mill to produce Portland Slag Cement (PSC).

5.0 Electrostatic precipitator (ESP), bag filters, dust extraction and dust suppression system will be provided to control gaseous and fugitive emissions. Additional 90 KLD ground water will be required. Cooling tower and boiler blow down water from the proposed power plant will be neutralized in the neutralization pit and treated effluent will be utilized for dust suppression and green belt development. 'Zero' effluent discharge will be maintained. All the cement dust collected from pollution control devices like ESPs, bag house, bag filters, etc. shall be recycled and reused in the process for cement manufacturing.

6.0 Public hearing/consultation is exempted as per Section 7 (ii) of EIA Notification, 2006. 'Consent for Establishment' (CFE) for the Cement Plant (5.0 MTPA) is obtained from TNPCB vide consent order no. 4664 & 4720 (Expansion) dated 27<sup>th</sup> November, 2008. Public hearing/consultation for the existing project was conducted by TNPCB on 3<sup>rd</sup> May, 2007.

7.0. 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 to the following specific and general conditions:

#### A. SPECIFIC CONDITIONS :

- i) On-line continuous stack monitoring facilities for all the stacks and adequate air pollution control systems shall be provided to keep emissions levels below 50 mg/Nm<sup>3</sup>. Electrostatic precipitator (ESP) to cooler and captive power plant. Bag house / filters already provided to existing raw mill/kiln, coal mill, VRM and cement mill shall be properly maintained to control air emissions within < 50 mg/Nm<sup>3</sup> and.



Data on ambient air quality, stack emissions and fugitive emissions shall be regularly submitted to the Ministry's Regional Office at Bangalore, T.N. Pollution Control Board (TNPCB) and Central Pollution Control Board (CPCB) once in six months.

- ii) 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. Dust extraction and dust suppression system like bag filters and water spray system shall be installed in the coal handling system, transfer points etc. Asphaltting/concreting of roads and water spray all around the stockyard and loading / unloading areas shall be carried out to control fugitive emissions. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided. Raw mill, clinker and fly ash shall be stored in silos.
- iii) Secondary fugitive emissions shall be controlled and regularly monitored as per guidelines issued by the CPCB. 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.
- iv) 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.
- v) Total ground water requirement after expansion shall not exceed 1,990 KLD. All the treated wastewater shall be treated in neutralization plant and recycled and reused in the cement plant for cooling purpose 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' effluent discharge shall be adopted. Domestic effluent treated in Sewage Treatment Plant (STP) shall be used for green belt development within the plant and colony area.
- vi) Prior 'Permission' for the excess water required for the expansion project i.e. 90 KLD shall be obtained from the State Ground Water Board and all the recommendations of the State Govt. Water Board shall be followed. A copy submitted to the Regional Office of this Ministry at Bangalore within 3 months of the issue of this letter. Rejects from the Reverse Osmosis plant shall be properly utilized. Waste oil shall be sold to authorized recyclers/reprocessors only.
- vii) All the cement dust collected from pollution control devices like ESPs, bag house, bag filters, etc. shall be recycled and reused in the process and used for cement manufacturing. Slag shall be used in manufacture of Portland Slag Cement (PSC). Organic wastes shall be subjected to vermin composting. Inorganic wastes shall be disposed off in environment-friendly manner. Sludge from sewage treatment plant (STP) shall be used as manure for green belt development.
- viii) 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). Fly ash shall be stored in silos and other materials in covered sheds.

- ix) An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.
- x) As proposed, green belt shall be developed in 29.07 ha (33 %) out of total 87.21 ha., as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO. As proposed, Rs. 10.00 Lakhs shall be earmarked towards green belt development and maintenance.
- xi) The project authorities shall adhere to the provisions stipulated in the Fly Ash Notification of September, 1999 and as amended in August, 2003 in regard to fly ash utilization.
- xii) All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.

**B. GENERAL CONDITIONS :**

- i. The project authority shall adhere to the stipulations made by T.N. Pollution Control Board (TNPCB) 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 T.N. Pollution Control Board. At no time, the particulate emissions from the cement plant shall exceed TNPCB 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. One ambient air quality monitoring station shall be installed in downwind direction. 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 TNPCB and report submitted to the TNPCB 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. Proper house keeping and adequate occupational health programmes shall be taken up.
- ix. A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.
- x. As proposed, Rs. 2.00 Crores and Rs. 0.50 Crores shall be earmarked towards capital cost and recurring cost/annum for environmental pollution control measures and judiciously 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 Regional Office of this Ministry at Bangalore / CPCB / TNPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.
- xii. The 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.
- xiii. 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 T.N. Pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This should 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 shall be forwarded to the Regional office at Bangalore.
- 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 SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (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 respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore / CPCB / TNPCB shall monitor the stipulated conditions.


- xvii. 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 Offices of the MOEF by e-mail.

8.0 The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry located at Bangalore.

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

10.0 Any other conditions or alteration in the above conditions shall have to be implemented by the project authorities in a time bound manner.

11.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

  
(Dr. P. B. Rastogi)  
Director

Copy to:

1. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
2. The Chairman, Tamil Nadu Pollution Control Board, 100, Anna Salai, Guindy, Chennai – 600 032, Tamil Nadu.
3. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IV<sup>th</sup> Floor, E & F Wings, 7<sup>th</sup> Main Road, II<sup>nd</sup> Block, Koramangala, Bangalore- 560 034, Karnataka.
4. The Secretary (Environment), Govt of Tamil Nadu, Fort St. George, Chennai 600 560, Tamil Nadu.
5. The Chief Engineer, WRO, PWD, State Ground and Surface Water, Resources Data Centre, Tharamani, Chennai - 600013, T.N.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File.
8. Monitoring File.
9. Record File.

  
(Dr. P. B. Rastogi)  
Director