

F No. J-11011/119/2009- IA II (I)  
Government of India  
Ministry of Environment and Forests  
(I.A. Division)

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Dated 6<sup>th</sup> July, 2009

To, ✓  
Vice President (Mfg.)  
M/s Madras Cements Ltd  
Ramasamy Raja Nagar Post  
District Virudhunagar-626 204, Tamil Nadu

E-mail : [nrs@madrascements.co.in](mailto:nrs@madrascements.co.in) / [mcl\\_rrn@yahoo.com](mailto:mcl_rrn@yahoo.com) ; Fax No. : 04562-256268 ;

**Subject :** Modernization and expansion of Ramasamy Raja Nagar Cement Plant (1 MTPA to 2 MTPA) at S.F. Nos. 4-16 Parts, Village Tulukkappatti, Taluk & District Virudhunagar, Tamil Nadu by M/s Madras Cements Ltd. – Environment clearance reg.

**Ref. :** Your letter no. nil dated 3<sup>rd</sup> February, 2009.

Sir,

Kindly refer your letter no. nil dated 3<sup>rd</sup> February, 2009 alongwith project documents including Form I, draft TOR and Pre-feasibility Report and subsequent clarifications furnished vide communications dated 13<sup>th</sup> March, 2009 regarding above mentioned cement project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that the proposal is for modernization and expansion of Ramasamy Raja Nagar Cement Plant (1 MTPA to 2 MTPA) at S.F. Nos. 4-16 Parts, Village Tulukkappatti, Taluk & District Virudhunagar, Tamil Nadu by M/s Madras Cements Ltd. Existing cement plant is located in 37.47 ha. and no additional land will be required for the expansion. No national Park/wild life sanctuary/reserve forest is located within 10 km radius of the project site. Total cost of the proposed expansion and modernization is Rs. 177.00 Crores. Existing and proposed production capacities will be as given below:

Line	Existing			Proposed		
	Kiln Capacity (TPD)	Clinker (MTPA)	Cement (MTPA)	Kiln Capacity (TPD)	Clinker (MTPA)	Cement (MTPA)
Line-I	1200	0.39	0.55	1800	0.61	0.90
Line-II	1000	0.32	0.45	1400	0.48	0.70
					0.28*	0.40
Total		0.71	1.00		1.37	2.00

\* Clinker from other units of M/s Madras Cements Ltd. or imported.

3.0 Proposed modernization and expansion will involve:

- i. Replacement/up gradation of old line-I by replacing 1,200 TPD kiln with 1,800 TPD kiln.
- ii. Modernization of line-II by up gradation of pre-heater cyclone and cooler ESP and replacement of kiln ESP with Reverse Air Bag House
- iii. Cement production enhancement (1.0 MTPA to 2.0 MTPA) by addition of a 0.30 MTPA cement mill and concrete clinker silos to control fugitive emissions.
- iv. Raw mill VRM pre-grinder introduction.
- v. VRMP optimization measures.
- vi. Truck unloading facility with truck tippler arrangement.
- vii. Packers and wagon loading improvement measures and cement bulk loading arrangements.
- viii. Addition of cement mill (0.3 MTPA) for cement grinding enhancement
- ix. Increasing the plant operational hours from 322 days to 345 days to achieve 2.0 MTPA Cement production.
- x. Enhancement of cement production to 2.0 MTPA by increasing the blended cements in the total production
- xi. Installation of captive DG set (1x7 MW) for stand-by usage.

4.0 Electrostatic precipitators (ESPs) to clinker cooler, bag house to kiln/raw mill, coal mill, cement mill etc. shall be provided to control air emissions  $< 50 \text{ mg/m}^3$ . Bag filters and dust suppression measures will be provided to control fugitive emissions. Total water requirement from Arjuna River will be 900 KLD and permission for the drawl of 1,500 KLD water has been accorded vide Tamil Nadu State Government's G.O. No. 1446/PWD dated 04.10.1975. The water will also be sourced from MCL's mine pits in Pandalgudi region. All the treated effluent from the cement plant will be recycled/reused for cooling, dust suppression and green belt development. Dust collected from the various air pollution control devices shall be recycled in the process.

5.0 Public hearing / consultation is exempted u/s 7(ii) of EIA Notification, 2006.

6.0 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 of 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, limit of SPM shall be controlled within  $50 \text{ mg/Nm}^3$  by installing adequate air pollution control system. Electrostatic precipitators (ESPs) to clinker cooler, bag house to kiln/raw mill, coal mill, cement mill etc. shall be provided to control air emissions  $< 50 \text{ mg/m}^3$ . Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with TNPCB and data submitted to the Ministry's Regional Office at Bangalore, CPCB and Tamil Nadu Pollution Control Board (TNPCB) regularly.
- ii) 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.
- iii) Data on ambient air quality, stack emissions and fugitive emissions shall be uploaded on the Company's website and also regularly submitted on-line to the

Ministry's Regional Office at Bangalore, Karnataka Pollution Control Board (KPCB) and Central Pollution Control Board (CPCB) as well as hard copy once in six months. Data on SPM, SO<sub>2</sub> and NO<sub>x</sub> shall also be displayed prominently outside the premises at the appropriate place for the information of general public.

- iv) The company shall install adequate dust collection and extraction system to control fugitive dust emissions. Bag filters shall be provided at all the transfer points. The fugitive emissions during loading and unloading shall be suitably controlled. Fugitive emissions from raw material handling areas, loading/unloading points, hoppers, storage silos, weigh feeders, grinding mill and packing machines shall be controlled by providing silos and covered sheds for storage of raw materials, fully covered conveyors for transportation of materials etc. Water sprinklers shall also be provided to control fugitive emissions.
- v) 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.
- vi) 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.
- vii) Total water requirement from Arjuna River and mine pit after expansion shall not exceed 900 m<sup>3</sup>/day as per permission accorded vide Tamil Nadu State Government's GO 1446/PWD dated 04.10.1975 for the drawl of water and shall be renewed time to time as deemed fit. Permission of drawl of water from MCL's mine pits in Pandalgudi region shall be obtained from the concerned department, if necessary. No ground water shall be used. The liquid effluent from workshop and reverse osmosis (RO) plant shall be neutralized in neutralization tank and the treated effluent shall be used in cement plant for cooling, dust suppression and green belt development. No liquid effluent shall be discharged outside the premises and 'Zero' discharge shall be strictly followed. Domestic effluent shall be treated in sewage treatment plant (STP) and utilized for green belt development.
- viii) Solid waste viz. dust collected from the air pollution control equipments (ESP, bag house, bag filters etc.) shall be properly recycled and reutilized in the process itself for cement manufacturing. No solid waste shall be disposed off outside the factory premises. As proposed, solid waste from sewage treatment plant (STP) shall be vermin-composted and used as manure for green belt. Spent oil shall be used in the kilns as recommended by the Tamil Nadu Pollution Control Board (TNPCB) vide Authorization No. 2906/HWM/VNR/07 dated 04.07.2007.
- 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) Efforts shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.

- x) 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 Pozzolona Portland Cement (PPC).
- xii) As proposed, green belt shall be developed in 22 ha (34.67%) out of the total 63.45 ha. plant and township area to mitigate the effects of air emissions as per the CPCB guidelines in consultation of local DFO in a time bound manner.
- xiii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xiv) 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 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. Continuous on-line monitors for particulate emissions shall be installed in stacks. 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 monitoring stations (AAQM) stations shall be set up as per statutory requirement in consultation with the TNPCB. 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 shall be carried out regularly in consultation with TNPCB and data submitted to the Ministry's Regional Office at Bangalore, CPCB and TNPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.
- v. 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)
- vi. Rainwater harvesting measures shall be adopted. The company must also 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.

- vii. The company shall undertake eco-development measures including community welfare measures in the project area.
- 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. 1.50 Crores for the air pollution control measures, Rs. 2.50 Crores towards recurring cost/annum for environmental pollution control measures, Rs. 30.00 Lakhs and Rs. 25.00 Lakhs/annum for EMP/green belt development and occupational health measures and Rs. 50.00 Lakhs shall be earmarked for corporate social responsibility and used judiciously 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 submit six monthly report on the status of the implementation of the stipulated environmental safeguards including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office, Bhubaneswar, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment clearance conditions including the results of monitored data on their website and update the same periodically.
- xiv. 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 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.
- xv. 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.
- xvi. The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's Office / Tehsildar's Office for 30 days.

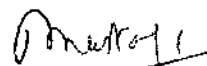
7.0 The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry located at Bangalore.

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

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

10.0 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.

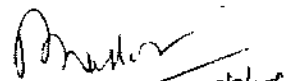
11.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments 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- 560 560, Tamil Nadu.
5. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard File.
7. Monitoring File.
8. Record File.



(Dr. F. B. Rastogi)  
Director