



भारत सरकार

GOVERNMENT OF INDIA

पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE

Regional Office (South Eastern Zone),

1st & 2nd floor, HEPC Building, No.34, Cathedral Garden Road,
Nungambakkam, Chennai - 600034



Dated: 02-02-2015

EP. R. 8 / Msc-I / RO/EN / 2014 / 5

To,

Shri M. Srinivasan
Sr. Vice President(Mfg)
The Ramco Cements Limited
Auras Corporate Centre, V Floor
98-A, Dr. Radhakrishna Salai, Mylapore,
Chennai-600004

Subject:1- 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, Tamilnadu by M/s. Madras Cements Ltd.

2- Expansion by addition of 1x25 MW imported Coal Based Captive Power Plant of M/s. Madras Cements Ltd. At village Thammanayakkanpatti, in Virudhunagar Taluk, in Virudhunagar Dist, in Tamil Nadu.

Reference: 1. EC Letter No. J-11011/119/2009-IA II (I) dated 06.07.2009

2. EC Letter No. J-13012/112/2011-IA II (T) dated 06.02.2012

3. Your letter dated 10.12.2014

Sir,

With reference to the above mentioned subjects, please find enclosed herewith copies of the certified compliance report.

Yours faithfully

Dr. C. Kaliyaperumal
Director (S)

Dr. C. KALIYAPERUMAL, M.E., PhD
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HEPC Building 1000 California Gardens Road
Berkeley, CA 94720-1300
Department of Energy, Environment & Climate Change
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ALAN E. PINE

Certified copy of Compliance Report

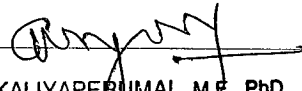
Date of Monitoring: 23.12.2014

Sub: 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, Tamilnadu by M/s. Madras Cements Ltd.

Ref: F.No.J-11011/119/2009-IA II (I) dated 6.7.2009

Specific conditions

S.No	Conditions	Compliance
1	<p>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 mg/Ncum by installing adequate air pollution control system. Electrostatic precipitators (ESPs) to clinker cooler, bag house to kiln/rawmill, coalmill, cementmill etc. shall be provided to control air emissions <50 mg/cum. 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 Tamilnadu Pollution control Board (TNPCB) regularly</p>	<p>Continuous on line stack monitoring system is provided for Kin I & II Stack, Coal Mill I & II Stack, Kiln I & II Cooler ESP Stack, Rawmill Stack and Thermal Power Plant Stack</p> <p>Air pollution control system such as Electrostatic precipitators (ESPs) to clinker cooler, bag house to kiln/rawmill, coalmill, cementmill etc. has been provided to control air emissions <50 mg/cum.</p> <p>Monitoring of ambient air quality and stack emissions are carried out regularly in consultation with TNPCB and data are submitted to the Ministry's Regional office at Bangalore, CPCB and Tamilnadu Pollution control Board (TNPCB) regularly.</p> <p>In addition to this the stacks monitoring data and ambient air quality monitoring data are connected to CARE AIR CENTRE of TNPCB, Chennai. The stack emission levels are below 50mg/Nm³ and the monitored data are displayed at the main gate.</p>

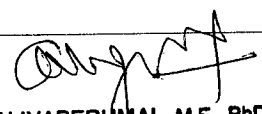


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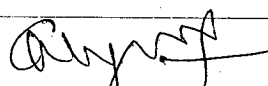
2	Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry and its Regional office at Bangalore within 3 months from the date of issue of the letter.	The study has been conducted to utilize the waste heat from the kilns, and found that it is not feasible and the same was informed to RO as stated.
3	Data on ambient air quality stack emissions and fugitive emissions shall be up loaded on the company's website and also regularly submitted on-line to the Ministry's Regional office at Bangalore, TN Pollution Control Board and central pollution control Board (CPCB) as well as hard copy once in six months. Data on SPM, So2 and NOx shall also be displayed prominently outside the premises at the appropriate place for the information of general public.	Data on ambient air quality stack emissions and fugitive emissions are uploaded on the company's website. Hard copy of the same, once in six months is being submitted regularly to Ministry's Regional office at Bangalore, TN Pollution Control Board and Central Pollution Control Board (CPCB). Electronic Online Display board has been provided at the main entrance gate for the information of general public.
4	The company shall install adequate dust collection and extraction system to control fugitive 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.	The company has installed dust collection and extraction system to control fugitive emissions. Bag filters are provided at all the transfer points. The fugitive emissions during loading and unloading are controlled. Fugitive emissions from raw material handling areas, loading/unloading points, hoppers, storage silos, weigh feeders, grinding mill and packing machines are controlled by providing silos and covered sheds for storage of raw materials (except gypsum), fully covered conveyors for transportation of materials etc., Water sprinkling on a regular basis is done to control fugitive emissions. Regular monitoring is also being carried out.
5	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.	Maximum of the internal roads are concreted and road sweepers are used to sweep the concrete roads. Secondary fugitive emissions are controlled by using water sprinklers regularly and the same is monitored regularly and are within the prescribed limits.



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சென்னை, 03.08.2017
 கி. கலியாப்பெரும்புலி
 இயக்குநர் (ச)
 ம. சூழல், காடுகள் & காலநிலை மாற்றம்
 ம. சூழல், காடுகள் & காலநிலை மாற்றம்
 ம. சூழல், காடுகள் & காலநிலை மாற்றம்

6	<p>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 over loaded. Vehicular emissions shall be regularly monitored.</p>	<p>As informed that all the raw materials including fly ash are transported in the closed containers only and not over loaded. Vehicular emissions are regularly monitored. The limestone also transported by Tarpaulin covered trucks only.</p>
7	<p>Total water requirement from Arjuna river and mine pit after expansion shall not exceed 900 Cum/day as per permission accorded vide Tamilnadu 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.</p>	<p>Total water requirement is met from Arjuna river and mine pit after expansion did not exceed 900 Cum/day. No ground water is used. No trade effluent is generated. They have provided oil and grease trap for the workshop. The sewage is treated in the sewage treatment plant and the treated sewage is used for green belt development purpose. No liquid effluent is discharged outside the premises and Zero' discharge is followed.</p>
8	<p>Solid waste viz. dust collected from the air pollution control equipments (ESP, baghouse, bagfilters 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</p>	<p>The dust generated from the various air pollution control equipment is being recycled and reused in the process.</p> <p>The spent oils collected, stored and disposed to authorized recyclers. As proposed, solid waste from the Sewage treatment plant is used for vermi composting and also used as manure for green belt development.</p>



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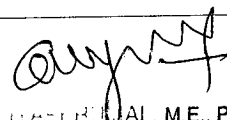
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	recommended by the Tamilnadu pollution control board vide Authorization No.2906/HWM/VNR/07 dated 04.07.2007	
9	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be accordingly.	Presently they are using 35% petcoke for kiln firing. Provision has been made to use municipal plastic waste, paint sludge, cut tyre etc for firing in kiln in Co-Processing system and also an authorization was obtained from PCB.
10	Efforts shall be made to use low-grade lime, more flyash and solid waste in the cement manufacturing.	Efforts are made to use low-grade lime stone and solid waste in the cement manufacturing. The entire ash generated from power plant is utilized for cement manufacturing.
11	All the flyash shall be utilized as per Fly Ash Notification, 1999 subsequently amended in 2003. Efforts shall be made to use flyash maximum in making Pozzolana Portland Cement (PPC)	The generated fly ash is fully utilized for cement manufacturing.
12	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 and effects of air emissions as per the CPCB guidelines in consultation of local DFO in a time bound manner.	So far an area of 19.3 ha brought under green belt development in the factory and township area. The work and survival are good. However there is still vacant land in between the power plant and colony is available and they were directed to take up plantations in these areas.
13	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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	The company has provided housing for construction labour within the project site with all the necessary facilities during construction time and the temporary houses has been removed after completion of the project.



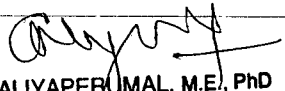
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சென்னை மாநகராட்சி
 துறைமுகப் பகுதி
 கட்டிடப் பகுதி
 கட்டிடப் பகுதி
 கட்டிடப் பகுதி

General Conditions

Sl.No	Condition	Compliance.
1	The project authority shall adhere to the stipulations made by T.N. Pollution Control Board (TNPCB) and State Government.	The TNPCB's stipulations are being implemented.
2	No further expansion or modification of the Plant shall be carried out without prior approval of this Ministry.	Further they are going to install 120 TPH packing plant and for that only they have requested certificate compliance report
3	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 the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.	Continuous online stack monitoring equipment has been provided to all major stacks and the monitored data has been connected to the Care Air Centre of TNPCB, Chennai. Inter locking facility has been provided in the pollution control equipments.
4	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 from time to time.	Six numbers of Ambient Air Quality Monitoring Stations has been set up in the core and buffer zone area and AAQ as well as noise levels are monitored regularly. The monitored data are being submitted to the Regional Office, Bangalore once in six months and to TNPCB regularly. The instruments used for Ambient air quality monitoring has been calibrated from time to time as informed.
5	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	Acoustic enclosure has been provided in DG sets and Compressors to reduce the noise level. The ambient noise levels are monitored during day time and night time and as per the report the levels are within the limit.

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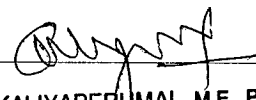
	(day time) and 70 dBA (night time)	
6	Rainwater harvesting measures shall be adopted. The company must also harvest the rainwater from the rooftops and storm water drains to recharge the ground water use the same water for the various activities of the project to conserve fresh water.	Four rainwater harvesting ponds has been created at different locations to collect the the rooftops and storm water.
7	The company shall undertake eco-development measures including community welfare measures in the project area.	The company has undertaken eco-development measures including community welfare measures in and around the project area.
8	Proper housekeeping and adequate occupational health programmes shall be taken up.	They are practicing of Japanese 5S activities to improve the House keeping of the plant. They are maintaining the house keeping. However it needs still improvement. Further they have taken up number of occupational health programmes.
9	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	A separate Environment Management Cell is created which is headed by Senior Officer and he reports directly to the Head of the Organization.
10	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 Laksh/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 Environmental and Forests as well as the State Government. The funds so provided shall not be diverted from any other purpose.	They have spent Rs.1.41 Crores for the air pollution control measures Rs.1.80 Corers towards recurring cost/annum for environmental pollution control measures, Rs 24.00 lakhs and Rs.17.00 Lakhs/annum for EMP/green belt development and occupational health measures and Rs.50.00 Lakhs is earmarked for corporate social Responsibility.


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11	The Regional Office of this Ministry at Bangalore / CPCB / TNPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical.	Six monthly compliance report and the monitored data are submitted to MoEF, RO and monthly to TNPCB regularly .
12	The Project Authorities shall inform the Regional 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.	They used internal fund for this plant and hence the financial closure details did not arise.
13	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, Bangalore, 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.	Six monthly compliance report (hard copy) and the monitored data are submitted to MoEF, RO and monthly to TNPCB regularly. Results of monitored data along with compliance report are uploaded on their website and updated the same periodically.
14	The project Proponent shall inform the public that the project has been accorded environmental clearances 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.	Advertisements were published in two local newspaper in Tamil and English and copies of the same were submitted to RO.



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15	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.	A copy of clearance letter was sent by the proponent to concerned Panchayat as gathered.
16	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/Tahsildar's Office for 30 days.	Reportedly complied.



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