No. J-I 1015/131/2011-IA.II (M)

Government of India
Ministry of Environment and Forests
Impact Assessment Division

Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi-110 003

Dated the 10th May, 2013

To

M/s Madras Cements Ltd.

Auras Corporate Center, 5th Floor No.-98-A, Dr. Radhakrishnan Salai, Mylapore, Chennai - 600 004.

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Sub.: Alathiyur Limestone Beneficiation Plant of M/s Madras Cements Ltd. at Villages - Manakudayan & Adanakurichi, Taluk - Sendurai, Ariyalur District, Tamil Nadu State (10.926 ha; Capacity - 2.40 MTPA) - Environmental Clearance regarding.

This has reference to your letter no. nil dated 09.07.2012 on the subject mentioned above. The project was prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 20.09.2011 for undertaking detailed EIA study for the purpose of obtaining environmental clearance.

- 2. The proposal is for setting up of Alathiyur Limestone Beneficiation Plant, located at Villages- Manakudayan & Adanakurichi, Taluk –Sendurai, District-Ariyalur, Tamil Nadu within limestone mining lease area for capacity of 2.40 million TPA (throughput). The proposed beneficiation plant is based on wet process and comprising various stages viz. feeding, screening & scrubbing, dewatering & thickening, water recirculation and separation of products and rejects. The total water requirement for the project is 1652 m³/day. The required water will be obtained from bore well and mine sump water. The Project proponent has obtained NOC for Ground Water withdrawal for 1652 m³/day vide letter no. 21-4-(304)/SECR/CGWA/2012-4385, dated 29.08.2012 from the Central Ground Water Authority.
- 3. The proposed Limestone Beneficiation Plant has the capacity of 2.40 million TPA of feed, out of this 1.44 million TPA comes out as the product and remaining 0.96 million TPA as a waste. Further, out of 0.96 million TPA waste, 0.64 million TPA are screened rejects waste and 0.32 million TPA of finer/tailing rejects. The screened rejects will be separately collected and backfilled in to the mined out void. The tailing rejects of 0.32 MTPA generated through thickener will be disposed off in the tailing pond, from where it will be desilted and backfilled into mine voids.

The waste water from the beneficiation plant will be stored in tailing pond and the supernatant will be reused in the plant.

- 4. The area of Mine Lease is 89.875 ha in Adanakurchi and Manakudayan. The Mine Scheme has been approved by the IBM vide letters no. TN/ALR/LST/MS-515-SZ, dated 29.08.2009 and 08.10.2012 for production of 1.0395 Million tonnes. The latitude and longitude of the Mine Lease area is 11° 21′ 3.3″- 11° 21′ 11.80″ N and 79° 14.4′ 58″ 79° 14.16′ 75″ E respectively. The total land requirement for the project is 10.926 ha. Out of the total land, 8.7 ha will be used for tailing pond and 2.22 ha for beneficiation plant. The latitude and longitude of the plant area for beneficiation is 11° 21′ 07″ N and 79° 14′ 07″ E respectively. No National Parks/Wild-Life Sanctuaries within 10 km radius of the project site is reported.
- 5. The public hearing of the project was held on 02.05.2012 for proposed Limestone Beneficiation Plant with throughput capacity of 2.40 million TPA. The capital cost of the project is Rs. 30 Crores and a budget for environmental protection measures is Rs. 249 lakhs towards capital investment and Rs. 32 lakhs towards recurring expense/annum.
- 6. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Limestone Beneficiation Plant with throughput capacity of 2.40 million TPA of M/s Madras Cement Limited subject to implementation of the following conditions and environmental safeguards.

A. Specific Conditions

- i. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- ii. The raw material shall be transported through road on dumpers/trucks covered with tarpaulin.
- iii. Effective safeguard measures such as conditioning of material with water, regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- iv. The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- v. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground

Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bangalore, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

- vi. The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any operations.
- vii. The decanted water from the beneficiation plant and slime/tailing pond shall be re-circulated within the mine and there shall be zero discharge from the mine.
- viii. Regular monitoring of water quality upstream and downstream of adjoining water bodies shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional Office, Bangalore, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.
 - ix. The screened rejects will be separately collected and backfilled in to the mined out void. The tailing rejects of 0.32 MTPA generated through thickener will be disposed off in the tailing pond, from where it will be desilted and backfilled into mine voids. The waste water from the beneficiation plant will be stored in tailing pond and the supernatant will be reused in the plant.
 - x. The main source of raw material shall be from limestone available in the captive limestone leases M/s Madras Cement Limited.
- xi. The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Tamil Nadu and effectively implement all the conditions stipulated therein.
- xii. As part of ambient air quality monitoring during operational phase of the project, the air samples shall also be analysed for their mineralogical composition and records maintained.
- xiii. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bangalore on six monthly basis.
- xiv. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point and transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- xv. Appropriate mitigative measures shall be taken to prevent pollution of Vellar River and other water bodies in consultation with the State Pollution Control Board.

- xvi. The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water for the project.
- xvii. Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.
- xviii. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral from mine face to the beneficiation plant. The vehicles shall be covered with a tarpaulin and shall not be overloaded.
- xix. Mineral handling plant shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- xx. Sewage treatment plant shall be installed for the colony. ETP shall also be provided for workshop and wastewater generated during mining operation.
- xxi. Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bangalore.
- xxii. Regular monitoring of ambient air quality including free silica shall be carried out and records maintained.
- xxiii. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

B. General Conditions

- (i) No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of limestone and waste should be made.
- (iii) At least four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e., ${\rm PM}_{10})$ and ${\rm NO}_{\rm X}$ monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. The data so recorded should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months.

- (iv) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (v) There will be zero waste water discharge from the plant.
- (vi) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- (vii) Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
- (viii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (ix) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bangalore.
- (x) The project authorities should inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xi) The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xii) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions 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, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental 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 Ministry of Environment and Forests, Bangalore, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
- (xiii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ 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 website of the Company by the proponent.

- (xiv) 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.
- (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 along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bangalore by e-mail.
- (xvi) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bangalore.
- 7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- 9. The above conditions will 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 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Tamil Nadu and any other Court of Law relating to the subject matter.
- 10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Dr. Saroj) Director

Copy to:

- 1). The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2). The Secretary, Department of Environment, Government of Tamil Nadu, Chennai.
- 3). The Secretary, Department of Forests, Government of Government of Tamil Nadu, Chennai

- 4). The Secretary, Department of Mines and Geology, Government of Tamil Nadu, Chennai
- 5). The Chief Conservator of Forests, Regional Office (SZ), Kendriya Sadan, 4th Floor E&F, Wings 17th Main Road, 1 Block, Koramangala, Bangalore-560 034.
- 6). The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 7). The Chairman, Tamil Nadu Pollution Control Board, 76, Mount Salai, Guindy, Chennai- 600 032, Tamil Nadu.
- 8). The Member Secretary, Central Ground Water Authority, A2, W- 3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- 9). The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- 10). District Collector, Ariyalur District, State of Tamil Nadu.
- 11). Guard File

(Dr. Saroj) Director