

DR. H.MALLESHAPPA ,I.F.S.,
MEMBER SECRETARY



STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT AUTHORITY,
TAMILNADU,
3rd Floor, Panagal Maaligai,
No.1 Jeenis Road, Saidapet,
Chennai-15.

Letter No. SEIAA / TN/EC/1(a)/03/F- 307/ 2012/ dt. 24. 09.2012

To

The Assistant Vice President(Operations),
M/s.Chettinad Cement Corporation limited,
Expansion of Unjini Lime stone Mines(Captive),
S.F.No.37-40,43-48,54,56 & 57 parts,
Unjini Village,Ariyalur Trichy Road,
Keelapalur Post,Ariyalur District-621707

Sir,

Sub: SEIAA, TN-Expansion Proposal of Unjini Lime stone Mines
(Captive), of M/s.Chettinad Cement Corporation limited, located at
S.F.No. 37-40, 43-48, 54, 56 & 57 parts ,Unjini Village, Sendurai
Taluk,Ariyalur District - Environmental Clearance - Reg.

1. This has reference to your application No. Nil dated 11.1.2010 submitted to the State Level Environment Impact Assessment Authority, Tamil Nadu seeking Environmental Clearance under the Environment Impact Assessment Notification, 2006. The proposal has been appraised by the State Level Expert Appraisal Committee in its meetings held on 24th of December 2010 and 11th & 12th of February 2011 as per the prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application Viz., the Application Form-1, Pre-feasibility report with proposed TOR and the additional clarifications furnished by the proponent.

2. The proposal is for enhancement of production of limestone from 0.012 million TPA to 0.3 million TPA for use in their cement plant. The earlier environment clearance was granted by the Ministry of Environment and Forest Department, Government of India, vide their Lr.No.1-11015/68/2004-IA.II (M) dt 11.3.2005. Mine lease area is 20.965 ha and there is no change in the extent of mine lease area. No forestland is involved. Mine lease issued is up to 26.02.2026. Mine working will be opencast mechanized involving drilling and blasting. Ultimate

working depth will be 15 m bgl. Groundwater table is reported to be fluctuating from 20m bgl to 25m bgl during Post monsoon and pre monsoon seasons. Present depth of mine pit is 3.5m bgl and the ultimate depth is 15m bgl. Mine working will not intersect groundwater table. Life of the mine will be 10 years. The water requirement is estimated as 20 kld, which will be obtained from own bore well and mine pit seepage water. It has been reported that there will be a generation of top soil to the tune of 15633 t and overburden of 18759 t during mine plan period. The removed top soil and overburden are proposed to be stacked as dumps of size 350x100x9m in an area earmarked in the southern side (non mineralized area) of the mine lease area. The OB will be backfilled after the mine reaches ultimate depth and top soil will be spread as top capping in the reclaimed area to develop afforestation in the backfilled area. At the end of the mine life, the post land use of mine will be as follows:- Mining pit -17.5 ha; Back filled area -1.5ha; Green belt cover-1.5 ha; Roads and allied services-0.465ha. It is proposed to convert the excavated mine pit as artificial pond to store rain water and ground seepage.

3. No National Park / Wildlife Sanctuary / Biosphere Reserve is reported within 10 km of the mine lease. No perennial water course is reported to be flowing through mine lease area. It was reported that there is no court case pending against the project. Budget allocation under CSR activities will be Rs.6.0 lakhs. EMP cost will be Rs. 1.50 lakhs. Project cost will be Rs. 2.0 Crores for expansion activity.

4. The project activity is covered in 1(a) of the Schedule and is of 'B' category. The terms of reference for the project were issued on 08.5.2010 for preparation of EIA and EMP. The Public hearing was held on 27.8.2010 at Meeting hall, Taluk office of Ariyalur Taluk, Ariyalur District by the Tamil Nadu Pollution Control Board. Modified Mining Scheme was approved by IBM on 5.06.2009.

5. The SEAC after due consideration of the relevant documents submitted by the Project Proponent and additional clarifications furnished in response to its observations has recommended to the SEIAA, Tamil Nadu to grant Environmental Clearance to this project. The proposal was considered by the SEIAA, Tamil Nadu in its meeting held on 12.09.2012 and hereby accords Environmental Clearance to the expansion proposal of existing lime stone mines of M/s. Chettinad Cement

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Corporation limited, located at S. F. No. 37-40, 43-48, 54,56 & 57 parts ,Unjini Village, Sendurai Taluk, Ariyalur District under the provisions of EIA Notification dated 14th September, 2006 based on the recommendations of the SEAC subject to the strict compliance of the terms and conditions stipulated below:

A. Specific conditions:

- i. The proponent shall commence the mining operation only after submitting the certified compliance report of the earlier environmental clearance from the Regional office, MOEF, Bangalore.
- ii. The project proponent shall obtain Consent to Establish and Consent to Operate from the Tamilnadu Pollution Control Board and effectively implement all the conditions stipulated therein.
- iii. Scheduled species of fauna found in the study area shall be monitored closely and a plan shall be prepared and implemented for their conservation.
- iv. The effective safeguard measures shall be taken to control particulate dust level in critical areas, transfer points and the haul road.
- v. Mine working shall be restricted up to above water table. At no point of time, the mine working should intersect groundwater table. For working below water table, necessary prior permission shall be obtained from MoEF for which clearance from CGWA for pumping of groundwater and detailed hydro-geological study will be a pre-requisite.
- vi. Prior permission from Competent Authority for extraction of ground water shall be taken. Report of CGWA on intersection of Ground water table shall be furnished.
- vii. Garland drains, Catch drains, Check dams and siltation ponds of appropriate size shall be constructed around the mine working, soil and mineral dumps to prevent run off of water and flow of sediments. 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 the monsoon, and maintained properly.

- viii. Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation should be based on the rainfall data.
- ix. Greenbelt shall be raised including a 7.5m wide statutory barrier all around the mining lease, reclaimed and rehabilitated areas, around water body, roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The ultimate area to be planted /afforested shall not be less than 1.5 ha. The density of the trees should be around 2000 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
- x. The project authority shall implement suitable conservation measures including suitable rain water harvesting measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- xi. 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 constructing 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.
- xii. 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 within the lease area. The mineral transportation within the mine lease shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- xiii. The optimum charge for blasting shall be determined based on vibration study. Blasting operation shall be carried out only during the daytime. Controlled

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blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.

- xiv. Drills shall either be operated with dust extractors or equipped with water injection system.
- xv. Mineral handling area 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.
- xvi. The company shall stress upon the preventive aspects of occupational health.
- xvii. 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.
- xviii. Provision shall be made for the housing of 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.
- xix. The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM10) and NOX in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically . Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA. II (M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www. envfor.nic.in shall also be referred in this regard for its compliance.

- xx. ¶ The Company shall submit within 3 months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance of EC conditions and (iii) System of reporting of non-compliance /violation of environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xxi. (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.
- xxii. t Depth of water table of the wells located inside the mining area and monitoring wells located around the monitoring area shall be furnished.
- xxiii. Green belt shall be developed in area of 2.565 ha as per the condition of environmental clearance issued on 11.3.2005. This is in addition to green belt development in an area of not less than 1.5.00 ha under the current Environmental Clearance.

B. General conditions

- i. No change in mining technology and scope of working should be made without prior approval of the State Environmental Impact Assessment Authority.
- ii. No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.
- iii. Monitoring of well water levels and water quality of the wells in the locations furnished in the EIA report shall be done during pre-monsoon and post monsoon period and results submitted to the Regional Officer, Bangalore and Ministry of Environment and Forests, Government of India.

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- iv. The proponent shall conduct Ambient Air Quality Monitoring Survey once in 6 months in the location furnished in the Environmental Impact Assessment report and furnish report to the Regional Office, Bangalore and Ministry of Environment and Forests, Government of India.
- v. 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 10micron i.e., PM10) and NOX 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.
- vi. Data on ambient air quality [(RSPM(Particulate matter with size less than 10micron i.e., PM10) and NOX)] 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.
- vii. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- viii. 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.
- ix. Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- x. 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. 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.

- xi. 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.
- xii. 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.
- xiii. 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.
- xiv. 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.
- xv. 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.

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- xvi. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, 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.
- xvii. 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.
- xviii. The project authorities should advertise at least in two local newspapers 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.
6. The Environmental Clearance is valid for 10 years from the date of issue.
7. Environmental Clearance is being issued without prejudice to the action initiated under Environment (Protection) Act, 1986 or any court case pending or any other court order shall prevail.
8. The SEIAA, Tamil Nadu may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
9. 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.
10. 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 Chennai and any other Court of Law relating to the subject matter.

11. 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.
12. 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.

12/3/12
**MEMBER SECRETARY,
STATE ENVIRONMENTAL IMPACT
ASSESSMENT AUTHORITY,
TAMIL NADU.**

Copy to:-

1. Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. Secretary, Department of Environment, Government of Tamil Nadu, Tamil Nadu.
3. Secretary, Department of Mines and Geology, Government of Tamil Nadu, Tamil Nadu
4. Secretary, Department of Forests, Government of TamilNadu, TamilNadu.
5. Chief Conservator of Forests, Ministry of Environment & Forests, (SZ) Kendriya Sadan, IV Floor, E&F Wings, 17th Main Road, Koramangala II Block, Banagalore-560034
6. Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
7. Chairman, Tamil Nadu pollution Control Board, 76, Mount Salai, Guindy, Chennai-32
8. Member Secretary, Central Ground Water Authority, A2, W-3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.

9. Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
10. District Collector, Ariyalur, Ariyalur district
11. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
12. Monitoring File/Guard File/ Record File.

