



भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT & FORESTS  
क्षेत्रीय कार्यालय (दक्षिण वलय)  
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F. No. EP/12.1/436/Tamil Nadu  
10<sup>th</sup> July 2013

To

Mr. M. Anandharaja,  
Asst. General Manager (Geology),  
Madras Cements Limited,  
Pandalgudi, Aruppukotai Tk,  
Virudhunagar District, Tamilnadu-626113

Subject: Request for the current status of compliance of the environmental clearance of Maravarperungudi Limestone Mine (207.38ha) of M/s. Madras Cements Ltd., located in Village Maravarperungudi, Tehsil Aruppukottai, District Virudhunagar, Tamil Nadu issued vide MoEF Ref No. J-11015/185/2005-IA. II (M), Dt: 17-10-2005.

Sir,

This is in response to your letter dated 18<sup>th</sup> June 2013 requesting for a certified copy of the compliance report to the existing above said environmental clearance; the undersigned is directed to enclose herewith the recent monitoring report of this project monitored by this office on 28<sup>th</sup> June 2013, for necessary action at your end.

Encl: as above

Yours faithfully,

(Dr. U. Sridharan)  
Scientist "F"/Director  
Ph: 25502577 (O) 26493485 (R) Fax: 080-25537184

GOVERNMENT OF INDIA  
Ministry of Environment and Forests  
(Regional Office, Southern Zone)  
Bangalore-34

**PART I**

F. No. EP/12.1/436/Tamil Nadu

1	Name of the projects	Maravarperungudi Limestone Mine (207.38ha) of M/s. Madras Cements Ltd., located in Village Maravarperungudi, Tehsil Aruppukottai, District Virudhunagar, Tamil Nadu.
2	Clearance letter No.& date	J-11015/185/2005-IA.II(M), Dt: 07.10.2005.
3	Location: District & State / UT	Taluk Aruppukottai, Dist Virudhunagar, Tamil Nadu.
4	Address for correspondence:	Mr. M. Anandharaja, Asst. General Manager (Geology), Madras Cements Limited, Pandalgudi, Aruppukotai Tk, Virudhunagar District, Tamilnadu-626113 Email: <a href="mailto:adminrm@madrascements.co.in">adminrm@madrascements.co.in</a> Phone: 04562-256201,02,03 Fax: 04562-256268
5	Date of site visit for this report	28 <sup>th</sup> June 2013
6	Date of previous visit(s) if any	11-03-2009
7	Brief on the project along with the present status:	

The site visit was made to this lime stone mine was made along with Shri. N. Ravi Shankar, Senior Vice President, Mr Dinesh, Manager of this mine and other senior officers of the company.

The Maravarperungudi Limekankar Lime stone mining is different than the other mines where the deposits are shallow and located below the black cotton soil. Here mining is happening in patches and the mined out areas are refilled side by side. This area is said to be of secondary origin, i.e. precipitated from carbonate solutions originating from country rock. The voids in the kankar also indicate the solution activity. These voids are filled with black cotton soil. The total area of Maravarperungudi Limekankar-Lease II covered by the lease is 207.38.0 Hectares.

The mining lease is located in Maravarperungudi Village, Aruppukottai Taluk, Virudhunagar District, Tamilnadu State. The mine is falling in the limits of Maravarperungudi village. The mine is presently in operation. The Project Proponent have obtained two mining leases in the Name of Maravarperungudi Limekankar Mine Lease-II in Maravarperungudi village and Maravarperungudi Limekankar Mine Lease-III in Suddhamadam & Salukkuvarpatti Village, Aruppukottai Taluk, Virudhunagar District, Tamil Nadu. Their Environmental clearance has been obtained from Ministry of Environment & Forest in 07.10.2005 for Maravarperungudi Limekankar Mine-Lease-II (Go Ms-333 dated 23.12.1994) and Environmental clearance has been obtained from Ministry of Environment & Forest vide their letter No- J-11015/69/2008-IA.II(M) dated 26.03.2009 for Maravarperungudi Limekankar Mine-Lease-III.


The lease deed was executed on 05.06.1995. The mining lease is valid up to 05.06.2015. The mine has obtained Approved Mining Scheme vide Indian Bureau of Mines approval No. -



TN/VRD/LST/MS-563.MDS DATED 07.04.2011, valid for the period 2010 – 2015. The mining lease is under operational since 1995 and it expires in the year 2015.

The project authorities are complying with the conditions of the environmental clearance and they are simultaneously involved in the afforestation and reclamation of the mined out area. The Project Proponent is engaging an approved Consultant M/s Ambiente Lab Solutions / Ensyscon, Chennai for season wise environmental monitoring and the monitoring reports are being submitted to MoEF, TNPCB, Indian Bureau of Mines and other authorities periodically. The project authorities have obtained IS/ISO-14001-EMS, IS-18001-OHSMS & IS/ISO-9001-QMS certifications. The Tamil Nadu Pollution Control Board Consent to Operate was obtained under Air & Water Act on 22.04.2006. Subsequent renewals were obtained and current renewal for the period 2013-2015 is under process at TNPCB.

Their compliance status is satisfactory and the point wise compliance status of their clearance is provided in this report.

  
(Dr U. Sridharan)  
Scientist "SF"

### **PART-II**

Status of compliance to the Environmental clearance issued by the Ministry of Environment and Forests for the Maravarperungudi Limestone Mine (207.38ha) of M/s. Madras Cements Ltd., located in Village Maravarperungudi, tehsil Aruppukottai, District Virudhunagar, Tamil Nadu issued vide Ref: No. J-11015/185/2005-IA.II(M), Dt: 07.10.2005.

Compliance status in brief:

S.No.	A. SPECIFIC CONDITIONS	Compliance
i	Top soil to be stacked in earmarked dump sites	Top soil backfilled
ii	OB dumps shall be stabilized and reclaimed by plantation	No generation of OB
iii	Check dams, garland drains has to be made	Being complied
iv	Wet drilling be followed	No drilling blasting
v	Back filling should be continued	Being complied
vi	Water sprinkling be carried out	Being complied
vii	Final mine closure plan be submitted five before mine closure	Agreed to comply
viii	Consent to operate to obtained	Complied
	<b>B. GENERAL CONDITIONS</b>	
i	No change in the mining technology and scope of working	Agreed to comply
ii	No change in the calendar plan	Agreed to comply
iii	AAQ monitoring	Being complied
iv	Data on air quality monitoring	Being complied
v	Adequate measures for fugitive emissions	Being complied
vi	Adequate measures of noise control	Being complied
vii	Industrial waste water be treated properly.	Being complied
viii	Protective devices and Occupational Health Surveillance	Being complied
ix	Fund allocation	Being complied
x	Financial closure and final approval	Internal funding
xi	Co-operation to RO officers	Complied
xii	Copy of the clearance to be marked to Panchayat / NGO	Complied
xiii	Copy of the EC be displayed in PCB's, RO, Collector DIC etc.	Complied
xiv	Paper advertisement be given about EC.	Complied



### PART-III

#### A. Specific Conditions

- i. **Top soil and OB generated from the mined out areas will be used for concurrent backfilling. There shall be no additional external OB dumps**

In this mine simultaneous production and refilling is practiced. Hence reclamation work gets completed after mineral exhaustion of each block and the afforestation over refilled area is completed immediately. The Afforestation details are provided to the regional office.

- ii. **The existing OB dump shall be stabilized and reclaimed by plantation.**

There is no production of OB dump in this mine since each block is refilled immediately after exhaustion of each block and the afforestation over refilled area is completed immediately.

- iii. **Check dams and siltation ponds of appropriate size should be constructed wherever required to arrest silt and sediment flows within the lease area. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted and maintained. Garland Drain and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site.**

The nallahs passing through the lease area is provided with bunds to arrest the breach and safety distance has been provided. There are no any external dumps here since mining, mineral exhaustion, refilling and reclamation with suitable species is being practiced side by side here. Necessary drainage and Safety distances have been provided for Nallas as per their Environmental management Plan & Surface Plan.

- iii. **Drills should be wet operated or with dust extractors.**

This condition does not arise in this mine as no drilling and blasting is practiced here.

- iv. **Backfilling should continue concurrently with mining operation and a total of 113 ha of the ML shall be reclaimed by plantation with suitable plant species in consultation with local DFO/ Agriculture department. Plantation should also be raised along the roads, OB dump site, along ML boundary etc. At least 2000 plant species/ ha should be planted. The mined out void of 28 ha shall be converted into a water reservoir. The sides of the void shall be gently sloped and plantation done to stabilise the slopes.**

The maximum mining depth is about two meter. After removing the ore, the area is refilled and taken up for plantation. In almost in all the mined out areas, Jetropha plants and Eucalyptus have been planted. The details of afforestation are provided to the regional office.

- v. **Water sprinkling arrangements to control the fugitive dust generation from the haulage roads and to the crusher.**

The project authorities are sprinkling water through water tankers fitted with sprinklers on all the haul roads used for transportation. The vehicles for transportation are well maintained. Tree plantation is also being done around the mine and along haul roads and outside dumps. Mainly most of their transportation roads are black topped and the ore transporting vehicles are covered



- v. **Data on air quality should be regularly submitted to the Ministry including its Regional office at Bangalore and the State Pollution Control Board/ Central Pollution Control Board Once in Six Months.**

The project authorities have submitted their ambient air quality monitoring to this office along with their six monthly compliance report. Monthly data is being submitted to state pollution control board and half yearly data is being submitted to MoEF.

- v. **Adequate measures for control of fugitive emissions should be undertaken such as water spraying arrangements on haul roads, loading and unloading points and transportation of minerals etc. Fugitive dust emissions from all sources should be regularly monitored and data recorded properly.**

The project authorities are sprinkling water on mine haul roads to control the fugitive emissions through water tankers. Development of plantation around the mines and along haul roads and outside dump inactive slopes is on and it was told that plantation over already mined area would be done after backfilling in future. Moreover, the transportation haul roads were black topped already to control fugitive emissions. Monitoring is regularly conducted through an approved outside agency.

- vi. **Adequate measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operations of HEMM, etc., should be provided with ear plugs/ muffs.**

It was informed that necessary measures are taken to control noise levels. Periodical noise levels monitoring at various locations are being done and the levels are found to be within the limits. Machines are maintained properly to reduce noise and vibration. Workers are provided with ear plugs/ muffs at the required places.

- vii. **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 effluents from the workshop.**

The project authorities are having a common Workshop at Pandalgudi which is being utilized for this mine also. The Industrial waste water is allowed to settle in settling tank having three compartments. The detail of analysis of the water samples is being monitored periodically and the results are submitted.

- viii. **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 and corrective measures taken, if required.**

It was informed that Personal Protective Equipments such as mask, Ear plug, ear muff, Safety Goggles, helmet, safety shoes etc., are supplied to all the employees regularly. Usage of personal protective equipment is being monitored regularly. Periodical medical examinations are being conducted at regular intervals and the details of medical assessment carried out for the year 2012-2013 was provided to the regional office. Also regular training programme are being organized



and certificates are issued for their workers, stressing the importance of safety, environment, personal health, general hygiene, quality of work life and first aid.

- ix. **The funds earmarked for environmental protection measures should be kept in separate account and not diverted for any other purpose. Year wise expenditure should be reported to the Ministry of Environment & Forest.**

It was informed that necessary funds are allotted for the environmental protection measures and are kept separately and expenditure incurred for the same being communicated to MoEF regularly. As per their recent report they have spent a total of 178.08 lakhs in the past one year of which, Rs 97.68 Lakhs for afforestation, Rs 37.2 for pollution control and Rs 43.20 for monitoring.

- 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.**

The project authorities informed that they are using their internal capital for this mine and hence there is no separate financial closure maintained for this mine.

- xi. **The regional office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officers of Regional office by furnishing the requisite data/information/ monitoring reports.**

The project authorities provided necessary assistance for completing the monitoring.

- xii. **A copy of the clearance letter should be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/ representation has been received while processing the proposal.**

It was informed that copy of the clearance letter was marked to all the concerned authorities.

- xiii. **The State Pollution Control Board should display copy of the clearance letter at the Regional office, District Industry Centre and Collectors office / Thasildar's Office for 30 days.**

It was informed that it is a general practice that the TNPCB displays all the clearance letters for a month when ever they receive them.

- xiv. **The project authorities should advertise at least in two local newspapers widely circulated around the project, 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.**

Necessary paper advertisements were already issued by the project authorities.



(Dr U. Sridharan)  
Scientist "SF"