



भारत सरकार
पर्यावरण एवं वन मंत्रालय
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT & FORESTS
क्षेत्रीय कार्यालय (दक्षिण वलय)

Regional Office (Southern Zone)
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F. No. EP/12.1/173/Tamil Nadu
10th July 2013

To

Mr. V.S. Sambasivam,
Asst. General Manager (Mines),
Madras Cements Limited,
Pandalgudi, Aruppukotai Tk,
Virudhunagar District, Tamilnadu-626113

Subject: Request for the current status of compliance of the environmental clearance of Expansion of M. V. Puram opencast captive limestone mine (capacity from 1, 01,500 tonnes per annum to 4, 06, 300 tonnes per annum) by M/s Madras Cements Limited at Villages Sivalarpatti, District Thoothkudi, Tamil Nadu issued vide MoEF Ref No. J-11015/6/99-IA. II (M), Dated: 22.11.1999.

Sir,

This is in response to your letter dated 11th 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 28th June 2013, for necessary action at your end.

Encl: as above

Yours faithfully,

(Dr. U. Sridharan)
Scientist "F"/Director

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

PART I

F. No. EP/12.1/173/Tamil Nadu

1	Name of the projects	Expansion of M. V. Puram opencast captive limestone mine (capacity from 1, 01,500 tonnes per annum to 4, 06, 300 tonnes per annum) by M/s Madras Cements Limited at Villages Sivalarpatti, District Thoothkudi, Tamil Nadu.
2	Clearance letter No.& date	J-11015/6/99-IA.II(M), Dated: 22.11.1999
3	Location: District & State / UT	Vilathikulam Taluk District Thoothkudi, Tamil Nadu.
4	Address for correspondence:	Mr. V.S. Sambasivam, Asst. General Manager (Mines), Madras Cements Limited, Pandalgudi, Aruppukotai Tk, Virudhunagar District, Tamilnadu-626113 Email: yssm@madrascements.co.in Phone: 04566 261380, Fax: 04562-256268 Cell: 9994442472
5	Date of site visit for this report	28 th 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 SVP, Mr Durai Murugan, Manager of this mine, and other senior officers of the company.

The total lease area of Melavenkateswarapuram mine is 103.53.0 Hectares. The mining lease is located in Pudur, Sennayumpatti and Nadukattur villages, Vilathikulam Taluk, Thoothukudi District of Tamil Nadu. Initially the mining lease was granted for this area for a period of 5 years vide G.O.Ms.No.1033 dated 28.07.1982 and the lease deed was executed on 29.07.1983. Subsequently, the same lease was extended for a period of 20 years from 29.07.1983 vides G.O.Ms.No.497 dated 23.03.1988 and lease deed for the same was executed on 23.03.1988 and is valid up to 28.07.2003. The project authorities have applied for the renewal on 23.07.2002 and presently the lease is under deemed extension and processed at Directorate of Mining & Geology, Chennai. Environmental clearance has been obtained for this mine from Ministry of Environment & Forest vide their letter No-J-11015/6/99-IA-II(M) dated 22.11.1999.

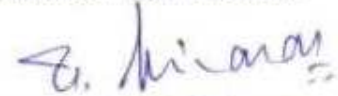
Since the captive consumption of Limestone for their cement plant is increased, they are planning to increase the Melavenkateswarapuram limestone production up to 500000 Tons (Five Lakh tons per annum) per year for which the project authorities have applied for obtaining Environmental Clearance from MoEF. As per the information provided the present

rate of production is 79923 TONS in 2010-11, 53937 TONS in 2011-12 and 52253 TONS in 2012-13

It was informed that the mine has obtained Approved Mining Scheme vide Indian Bureau of Mines approval No. TN/TKD/LST/MS-808-SZ/714 dated 06.06.2013 valid for the period 2013-2018. It was informed that the reserves in mineable depth will be exhausted in about 10 years and further reserves will be explored further to the depth. The project authorities are having plans for the rehabilitation of the mine after exhaustion of the entire reserves and decided to back fill and afforest the part of the pit and keep the remaining area as reservoir and also to plant all along the periphery of the worked out mine. The Tamil Nadu Pollution Control Board Consent to Operate was obtained under Air & Water Act on 22.08.2008. Subsequent renewals were obtained and currently valid up to 30-06-2013 the renewal application is under process at TNPCB.

The project authorities are complying with the conditions of the environmental clearance and they are in the process of developing sufficient afforestation within and outside their mining lease area. The Project Proponent is engaging an approved Consultant M/s Ambiente Lab Solutions / Ensyson, 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.

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 expansion of M.V. Puram opencast captive limestone mine (capacity from 1, 01,500 tonnes per annum to 4, 06,300 tonnes per annum) by M/s Madras Cements Limited at Villages Sivalarpatti, District Thoothkudi, Tamil Nadu issued vide Ref: No J-11015/6/99-IA.II (M), Dated: 22.11.1999.

Compliance status in brief:

S.No.	A. SPECIFIC CONDITIONS	Compliance
i	OB dump to be kept in identified areas	Complied
ii	Top soil to be stacked separately	Complied
iii	Garland drains around the OB be made	Complied
iv	Green belt of 30 m width to be carried out	Being Complied
v	Detailed decommissioning plan to be established to MoEF	Agreed to Comply
vi	Water conservation and harvesting to be done	Being Complied
vii	Fresh vibration study has to be conducted	Complied
viii	REIA to be carried out by Govt. of Tamil Nadu	Complied
	B. GENERAL CONDITIONS	
i	No change in the mining methodology	Agreed to comply
ii	No change in the calendar plan	Agreed to comply

iii	AAQ monitoring stations to be set up	Being complied
iv	AAQ data to be submitted to RO	Being complied
v	Fugitive emission control and monitoring be done	Being complied
vi	Noise level reduction and levels to be less than 85 dBA	Being complied
vii	Personal protection devices to the workers to be provided	Being complied
viii	Separate fund for environment management be made	Complied
ix	Project authorities should extend co-operation to visiting officers	Complied
x	Project authorities should have valid CFO and approval	Complied
xi	Financial closure and final approval should be informed to RO.	Own funds used.

PART-III

A. Specific Conditions

- i. **The OB dumps should be stacked in earmarked dump sites only and should not be kept active for a long period. Inactive OB dumps should be scientifically vegetated with the suitable species to prevent surface run-off.**

Over burden is being stacked at earmarked dump sites. The maximum height of the dump is not exceeding 30 m, each stage is being maintained with 10 m and maintaining the overall slope of the dump with in 28°. It was informed that the OB dump will be backfilled mostly and the OB dump is being vegetated with native species to prevent erosion and surface run off in patches.

- ii. **Top soil should be stacked properly with adequate measures at earmarked site it should be used for reclamation and rehabilitation of mined out areas.**

The project authorities are separately stacking the top soil in the earmarked site and there are 4 dump yards. The dumps are being maintained and one of the dumps has been planted with creepers to make the slope stable. It was informed the dumped top soil will be used for future reclamation.

- iii. **Garland drains of appropriate size should be constructed, to collect surface run-off from the OB & waste dump sites. The collected run-off should be diverted to the sedimentation tank before final disposal.**

The project authorities have developed garland drains as per the specification, all around inactive sides of the existing dumps and mine periphery. The drainage so formed is connected with a separate settling (sedimentation) tank for de-siltation. The water gets recharged to the ground. The garland drains collect surface run-off and mine water to drain into the settling tank. The settling tanks (2 nos.) have a dimension of 90m x 50m x 3m and 60m x 40m x 3m. The Garland drains are constructed for a length of 1.2 km x 2 mts x 2 mts.

- iv. **A greenbelt of 30m width around the ML area by planting the native plant species in an area of 10.0ha should be raised in consultation with the local DFO / agriculture department. The density of the trees should be around 2000 plants per ha.**

Development of a green belt is yet to start in full swing. It was informed that presently about 9.725 Ha. area is covered with plantation / Green belt and native species are selected in consultation with Forest and agriculture departments. It was told that so far 10875 Nos. of saplings are planted as on 01.04.2013 and ultimately about 49.40 Ha area will be covered comprising 30 Ha of green belt in the ML area, 7.5 Ha of dump area and 11.90 Ha of backfilled area will be developed with plantation in phased manner.

- v. **A detailed mine decommissioning plan should be submitted to the MoEF 5 years in advance for approval.**

The project authorities assured that final mine closure plan with details of corpus fund will be submitted to the ministry 5 years in advance of final mine closure for approval.

- vi. **Water conservation scheme should include water harvesting and recharging of the ground water.**

Garland drains around the OB dump were made with a collection pit. This acts as rain water harvesting pit also. The garland drains collect surface run-off and mine water to drain into the settling tank. The settling tank (2 nos) has a dimension of 90m x 50m x 3m and 60m x 40m x 3m. The Garland drainage constructed for a length of 1.2 km x 2 mts x 2 mts.

- vii. **Fresh vibration study should be carried out by the project authorities and report submitted to the Ministry within six months time.**

The project authorities are practicing controlled blasting method. During the visit blasting operations were seen and there was no appreciable impact noticed. They have also submitted the latest blasting vibration report to this office. Also it was informed that scientific study on Impact of Blast induced ground vibrations around the nearby villages has been conducted by Anna University and the reports are available with the project authorities.

- vii. **Regional Environmental Impact Assessment study to be conducted by the Government to assess the cumulative impact of mining activities on environment.**

It was informed that the REIA study was conducted already and the report was submitted to the Ministry.

B. General Conditions

- i. **No change in mining technology and working plan should be made without prior approval of the Ministry of Environment & Forests.**

It was assured that there is no change in their mining methodology and if the need arise; changes will be made only with the prior approval of the Ministry.

- ii. **No change in the calendar plan including excavation, quantum of limestone and wastes / overburden dumps should be made.**

It was informed that there is no change in their calendar plan. They have approached the Ministry for increasing their production capacity.

- iii. **Four ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM, SO₂, NO_x and CO monitoring. Location of the ambient air quality stations should be decided based on the meteorological data, topographical features and environmentally sensitive targets in the consultation with the Tamil Nadu Pollution Control Board.**

The project authorities have established the AAQ monitoring stations around the mine in consultation with TNPCB and periodical monitoring of ambient air quality at the predetermined environmental station is being carried out regularly and the results are within permissible limits. Monthly data are being submitted to state pollution control board and half yearly data are being submitted to MoEF. Apart from that the TNPCB is also carries Bi annual Ambient Air quality survey in their project.

- iv. **Data on ambient air quality should be regularly submitted to this 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. **Fugitive emissions should be controlled, regularly monitored and data recorded properly.**

The project authorities are sprinkling water on mine haul roads to control the fugitive emissions through water tankers. Their drilling system is equipped with dust extraction system during drilling. 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.

- vi. **Adequate measures should be taken for control of noise levels below 85 dBA in the work environment**

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. **Personnel working in dusty areas should wear protective equipment devices. Adequate training and information on safety and health aspects should be provided. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed**

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.

- viii. **Funds earmarked for environmental protection measures should be kept in a separate account and should not be diverted for other purposes and Year-wise expenditure should be reported to the Ministry.**

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 Rs 152.49 Lakhs for afforestation, Rs 60.19 for pollution control and Rs 70.2 for monitoring.

- ix. **The project will be monitored by the Regional Office of this Ministry located at Bangalore. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.**

The project authorities provided necessary assistance for completing the monitoring.

- x. **The project authorities should have valid "Consent to operate" and mining plan approval.**

The project authorities are having valid "Consent to operate" and mining plan approval. The copy of mining plan approval and the Consent under Air & Water Act are provided to the regional office. Their TNPCB consents are valid up to 30-06-2013 and they have already applied for the renewal. It was informed that the mine has obtained Approved Mining Scheme vide Indian Bureau of Mines approval No. TN/TKD/LST/MS-808-SZ/714 dated 06.06.2013 valid for the period 2013-2018.

- xi. **The project proponent should inform the Regional Office located at Bangalore as well as the Ministry, the date of financial closure 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.



(Dr U. Sridharan)
Scientist "SF"