

Proceedings of the State Environmental Impact Assessment Authority Kerala-

(Present Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member, Dr. Nivedita P. Haran IAS, Member Secretary & Additional Chief Secretary to Government (Environment Department)
Sub: Madeena Granites, Elamkulam Village, Perinthalamanna Taluk, Malappuram District,
Kerala - Environmental Clearance - Accorded

DISPATCHED

Environmental Clearance

Date: 16/12/14

No. 305/SEIAA/KL/1572/2014

dated, Thiruvananthapuram 05.12.2014

- Ref:- 1. Application dated 05.04.2014 submitted by the Managing Partner of Madeena Granites, Elamkulam Village, Perinthalamanna Taluk, Malappuram District, Kerala
2. Minutes of the 29th meeting of SEAC held on 2nd & 3rd May 2014
3. Minutes of the 32nd meeting of SEAC held on 12th & 13th August 2014
4. Minutes of the 34th meeting of SEIAA held on 31.10.2014

ORDER



Sri. K.B. Abdul Rahiman (Managing Partner), Madeena Granites, Elamkulam Village, Perinthalamanna Taluk, Malappuram District, Kerala, vide his application received on 05.04.2014, has sought Environmental Clearance under EIA Notification, 2006 for the building stone quarry project in Sy. No. 1/1 (P) at Elamkulam Village, Perinthalamanna Taluk, Malappuram District, Kerala for an area of 7.6315 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II(M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Name of project		Building Stone Quarry of M/S Madeena Granite
Brief description of the project		Open cast mining
Category/Subcategory & Schedule		"B" Category, 1(a)
Location Sy no/ district, Taluk/ village etc.		Sy.No-1/1 (P), Elamkulam village, Perinthalamanna Taluk, Malappuram District of Kerala State.
CPS co ordinates		Longitude: 76° 15' 30.75" E to 76° 15' 45.93" E Latitude: 10° 54' 38.93" N to 10° 54' 49.66" N
for Mining projects	Extent of area (in hectares)	7.6315 Ha
	Minimum and maximum height of excavation (MSL)	40m MSL- Minimum and 140m MSL- Maximum
	Life of mine proposed	16 years
	Ultimate depth of mining (in MSL)	40m above MSL
	Distance from the adjacent quarry	Adjacent towards NE
	Capacity of production	4,11,000 tonns/year
	Details of Project Cost	Total Project Cost Rs 2.85 Crores
	CRZ recommendations	Not Applicable as no part or whole of the lease area fall under CRZ

Forest clearances	Not Applicable as no part or whole of the lease area fall under forest.
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ABOUT THE PROJECT	
Environmental parameters	Mitigation Measures
WATER	
Water requirement & sources	Domestic consumption –1.00KLD- Bore well water Dust suppression:20 KLD- well & rain water
RWH units proposed	Rain water harvesting ponds are proposed during post mining extending over an area of 0.763Ha.
Facilities for liquid waste treatment	Liquid wastes from toilet and office will be treated in septic tank and soak pit
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Nil
Does it have provisions for use of recycled water	Yes
LAND	
Proximity to forest lands	No forest within 15 km
Access road to the site –Width & Condition	7m- Tarred, SE
Storage of explosives /hazardous substances	Explosives will be procured, stored, transported, handled and used in accordance with Indian Explosive Act 1884, MSIHC Rules 1989, Mines Act, 1952 and regulations there under
Facility for solid waste mgmt	Solid waste will be utilized for levelling / paving of roads and construction works
Topographic features/ slope	Elongated hill trending N50 ⁰ W – S50 ⁰ E with a dip amount of 75 ⁰ -80 ⁰ in N40 ⁰ Lenght of the ore body: Ranging from 360-500m (Average 430m) Width of the ore body: Ranging from 60-240m (Average 150m) Depth of the ore body:40 m MSL

Top soil, overburden etc.	Topsoil – 64,834.5 tonnes
	The total amount of topsoil is existing within the leasehold is calculated below: Area: 43,223 sq.m X Depth 1 m X Bulk density 1.5 = 64,834.5 tonnes. Overburden – 1,85,000 tonnes
AIR	
Air quality meeting requirements	Air quality monitored and analysed both in core & buffer zone and results found within the limits.
Noise level meeting requirements	Noise level survey carried out both during the activity in the quarry area and nearby villages.
Likely emissions affecting environment	Due to quarry activity and operation of heavy earth moving machinery generation of dust, noise is likely. However, mitigative measures are proposed accordingly in

		the EMP.
ENERGY		
	<i>Energy requirement</i>	Power supply is required for office, canteen Which is from KSEB Quarry operations are mainly by HEMM which are operated by HSD.
	<i>Energy Sources</i>	No energy is required for quarry operation, since quarry operation is carried out by HEMM which are operated by HSD. About 30 litres/Hour of HSD is required in a day
BIODIVERSITY		
	<i>Presence of any endangered species or red listed category</i>	There are no endangered or rare species in the area.
	<i>Loss of native species and genetic diversity</i>	There will not be any loss of native species of genetic diversity as the quarry already exists and continuation of the same will not affect or loss of native species in general.
SOCIAL ASPECTS		
	<i>Proximity to nearest habitation</i>	110m towards East
	<i>CSR components suggested</i>	The detailed list of proposed CSR activities are given below: <ul style="list-style-type: none"> • Donation of Rs 1,50,000/Yearly towards Pain and Palliative Care Society, Perinthalmanna • Donation of Rs 1,00,000/ Yearly towards MIC Orphanage, Cherukara • Conducting medical camp and providing financial assistance for the high ailment diseases for the poor people of Elamkulam Panchayath – Rs 2,50,000.00 • Financial assistance for marriage of poor people of Elamkulam Panchayath – Rs 3,00,000.00 • Financial assistance to poor students of VRVP School, Muthukurussi & Govt Higher secondary school, Kunnakavu by providing study materials- Rs 1,50,000/ Yearly
		• Supply of construction material free of cost with delivery for needy local people of Elamkulam Panchayath- Rs 2,00,000/Yearly
GENERAL		
	<i>Does it propose environment management plan</i>	Yes
	<i>Does it have eco restoration programmes</i>	Yes
	<i>Litigation/court cases, if any, against the project (provide details)</i>	There are no litigations against the project



	Details of Authorised Signatory	Sri. K.B Abdul Rahiman, Managing Partner M/s Madeena Granite Kokkath House Kunnakkavu P.O., Cherukara Malappuram – 679340.
	Details of NABET approved EIA consultant Organisation	METAMORPHOSIS, 143, 2nd Floor, 39th Main, 4th Cross, Behind Silk Board, BTM Layout, II Stage, Bengaluru - 560068 QCI/NABET Accreditation serial no. NABET/EIA/1215/14

2. The proposal was placed in the 29th meeting of SEAC held on 2nd & 3rd May 2014 as item No. 29.14. The project proponent attended the meeting and made a brief presentation before the Committee. The Committee noticed that there is thick overburden in some places of the project site and asked the proponent whether they could set aside those areas without quarrying. To this end the proponent stated that those areas are not fertile and hence is not suitable for any other land use. The proponent is directed to provide a sketch showing the entire lease area in which the proposed mining area is marked.

3. The Committee noticed the following shortcomings/discrepancies in the application submitted by the proponent:

- (i) Consent given to the proponent by the owners of land bearing Sy. No. mentioned in the proposal is provided, but the consent is given to apply for EC for quarrying activity.
- (ii) Google image dt. 18.04.2013 provided but the co-ordinates of the image does not fall within the co-ordinates given in the application.

Considering the above, the item is deferred for site visit and seeking the following additional clarifications for further consideration of the proposal:

1. Sketch showing the entire lease area in which the proposed mining area is marked.
2. Clarification on items (i) and (ii) above.

~~4. A subcommittee of SEAC inspected the site on 19th June 2014 and made the following observations:~~

This is an active quarry with crusher unit falling in Elamkulam village, Perinthalmanna Taluk. The quarry is approachable from Muthukurussi-Aliparamba road. The general trend of the hillock is SE-NW and the slope is moderately steep towards southwest. The main rock type is foliated charnockite. Weathering is moderate mostly limited to the flat topped crestal portions while the slopes expose rock outcrops. Pockets of thick OB are also noticed on the eastern part. Rubber is the dominant crop in the vicinity. Streams are not seen in the premises, but Thootha puzha is about 0.5 km to the east. Main haulage lines are ill defined though the road inside to the crusher is hard topped. The crusher unit is encased with minimum dust emission. Settlement and buildings are observed by the side of the main

road but beyond 100 m. Steep faces of old quarry workings are noticed in the lower part of the hill ridge. Based on the site observations, following points may be taken into consideration:-

1. Steep cuttings are seen in the active and old quarried faces. Bench formation is introduced in the presently active working area on the top but need planning with a main haulage leading to the top. Hence the steeply cut faces on the lower/bottom region must be fenced and provided with danger signs.
2. Pockets of OB are seen in the elevated crestal part and in the eastern flanks. This is now stored in the low lying SW part of the area but not in designated places. Sheet flow of rainwater is found to carry soil from this area. There is a need to preserve overburden for restoration of the quarry during the closure. Care must be taken when the overburden is removed from the steep slopes.
3. Mechanism provided to channelise the water, arrest soil movement, desiltation and clarification of water do exist. The old pit in proximity to the crusher unit on the lower slope is used to harvest rainwater. The entire flow from the quarry face is directed to this pit. The water exiting from this area is not provided with silt traps and lined channels though planned. A proper silt trap mechanism and clarification mechanism must be provided.
4. There is no separate stock yard for the finished products from their crusher unit. Presently production is just based on local demand.
5. 100 m buffer distance must be provided from the dwelling units.

5. Subsequently, the proposal was placed in the 32nd SEAC meeting held on 12th & 13th August 2014 as item No. 32.35. SEAC recommended the proposal as per the following specific condition in addition to the general conditions stipulated for mining projects:

1. Steep cutting portion must be fenced and provided with specific danger sign boards.

6. The proposal was placed in the 34th SEIAA meeting held on 31st October 2014 as item No. KLA/34.53.

The SEIAA has decided to grant E.C subject to the new 5 additional general conditions adapted by the joint meeting of SEAC/SEIAA held on 31.10.2014 and the above special condition as recommended for by SEAC. Validity of the E.C will be 5 years.

~~7. Environmental Clearance under EIA notification 2006 is accorded for the proposed quarry project of M/S Madecna Granites in Sy. No. 1/1 (P) at Elamkulam Village, Perinthalamanna Taluk, Malappuram District, Kerala subject to all the mining features Environmental Management Plans and Environmental Control Measures (Chapter V of report) as undertaken in the EMP submitted to SEIAA which will form part of this proceedings as if incorporated herein, and the following specific conditions, and the general conditions on mining of miner mineral appended hereto:~~

1. Steep cutting portion must be fenced and provided with specific danger sign boards.

8. Validity of this Environmental clearance will be 5 years and it will be subject to review at any stage earlier, if any of the conditions the E.C. are violated, or not duly complied with.

- I. Compliance of the conditions herein will be monitored by the Directorate of Environment and Climate Change or its agencies and also by the Regional office of the Ministry of Environment and Forests, Govt. of India, Bangalore.
- II. Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for Inspection or monitoring.
- III. Instances of violation if any shall be reported to the District Collector, Malappuram to take legal action under the Environment (Protection) Act 1986.




For Member Secretary (SEIAA)

✓ To,
Sri. K.B. Abdul Rahiman,
Managing Partner,
M/s Madeena Granite,
Kokkath House,
Kunnakkavu P.O., Cherukara,
Malappuram – 679340.

Copy to:

- ✓ 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block Koramangala, Bangalore-560034
- ✓ 2. The Addl. Chief Secretary to Government, Environment Dept., Government of Kerala
- ✓ 3. The District Collector, Malappuram
4. The Director, Dept. of Environment and Climate Change, Govt. of Kerala, Tvm – 24.
- ✓ 5. The Director, Mining and Geology Department, Government of Kerala
- ✓ 6. The Secretary, Elamkulam Grama Panchayath, Perinthalamanna Taluk, Malappuram District
- ✓ 7. Chairman SEIAA Kerala
8. Website
9. Stock file
- ✓ 10. O/c

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

- (i) Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- (iv) Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- (v) Sprinklers shall be installed and used in the project site to contain dust emissions.
- (vi) Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- (vii) At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumpings and overburden and planted with indigenous plant species that are eco-friendly.
- (viii) Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
- (ix) *The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine.*
- (x) Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
- (xi) Control measures on noise and vibration prescribed by KSPCB should be implemented.
- (xii) Quarrying activities should be limited to day time as per KSPCB guidelines.
- (xiii) Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- (xiv) A licensed person should supervise/ control the blasting operations.
- (xv) Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- (xvi) Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored.
- (xvii) Height of benches should not exceed 5 m and width should not be less than 5 m.
- (xviii) Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- (xix) *Maximum depth of mining from general ground level at site shall not exceed 10m*
- (xx) No mining operations should be carried out at places having a slope greater than 45°.
- (xxi) Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
- (xxii) The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- ~~(xxiii) Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.~~
- ~~(xxiv) The transportation of minerals should be done in covered trucks to contain dust emissions.~~
- ~~(xxv) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.~~
- (xxvi) Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- (xxvii) Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- (xxviii) *A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided*
- (xxix) 200 m buffer distance should be maintained from forest boundaries.
- (xxx) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.
- (xxxi) All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- (xxxii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by

this Authority.

- (xxxiii) The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (xxxiv) The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- (xxxv) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- (xxxvi) A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- (xxxvii) The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (**both in hard copies as well as by e-mail**) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
- (xxxviii) The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public.
- (xxxix) The proponent should provide notarized affidavit (*indicating the number and date of Environmental Clearance proceedings*) that all the conditions stipulated in the EC shall be scrupulously followed.
- (xl) The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project




Member Secretary, SEIAA Kerala

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