

Validity expires on 26.02.2023

Proceedings of the State Environment Impact Assessment Authority Kerala

*Present: Prof. (Dr.) K.P. Joy, Chairman; Dr. J. Subhashini, Member and
Sri. P.H.Kurian, I.A.S., Member Secretary.*

Sub: SEIAA- Environmental Clearance for the quarry project in Sy. No. 274/2, 274/3, 282/1, 282/2, 274/1-2, 273/3, 273/2, 273/1-2, 273/1-3 at Mazhuvannoor, Village, Kunnathunad Taluk, Ernakulam District, Kerala by Sri. Gowtham V. Pavithran, M/s Megha Granites - Granted – Orders issued.

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, KERALA

No. 542/SEIAA/KL/3886/2014

Dated, Thiruvananthapuram 27.02.2018

- Ref:
1. Application dt.22.07.2014 from Sri. V. N. Pavithran (Owner), M/s Megha Granites, Vattappara House, Karattupallikkara, P.O. Perumbavoor, Ernakulam- 683 542
 2. Minutes of the 53rd meeting of SEAC held on 25th & 26th February, 2016.
 3. Minutes of the 60th meeting of SEAC held on 28th and 29th July, 2016
 4. Minutes of the 63rd meeting of SEAC held on 04th October, 2016.
 5. Minutes of the 67th Meeting of SEAC held on 27th January 2017.
 6. Minutes of the 67th meeting of SEIAA held on 28th April 2017
 7. Minutes of the 71st meeting of SEIAA held on 20th July 2017.
 8. Minutes of the 76th meeting of SEIAA held on 16th November 2017
 9. Certificate from the Tahsildhar, Kunnathunad vide Letter No.G3-14677/2016 dt.23.01.2018
 10. Affidavit dt.11.12.2017, 26.12.2017, 27.12.2017 & 29.12.2017 received from Sri.Gowtham V. Pavithran

ENVIRONMENTAL CLEARANCE NO.27/2018

Sri. V. N. Pavithran (Owner), M/s Megha Granites, Vattappara House, Karattupallikkara, P.O. Perumbavoor, Ernakulam District - 683 542, vide his application dated 22/07/2014, has sought Environmental Clearance under EIA Notification, 2006 for the proposed expansion of Stone Quarry in Sy. No. 274/2, 274/3, 282/1, 282/2, 274/1-2, 273/3, 273/2, 273/1-2, 273/1-3 at Mazhuvannoor, Village, Kunnathunad Taluk, Ernakulam District, Kerala for an area of 9.7 Hectares. Consequent to the death of the applicant, his Son

Gowtham V Pavithran has requested to grant Environmental Clearance in his name and has produced necessary documents to this effect. 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 Notification No.S.O.141 (E) dt.15.01.2016 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Details of the project as furnished by the applicant are as follows;

**BASIC INFORMATION OF QUARRY PROJECT
PART A**

Project details	
File No:	542/SEIAA/KL/ 3886/2014
Name /Title of the project	M/s Megha Granites
Name and address of project proponent.	Mr. V. N Pavithran M/s Megha Granites Vattappara House, Karattupallikkara Post, Perumbavoor Ernakulam-683 542
Owner of the land	Land belongs to V. N Pavithran and Bindu Pavithran
Survey No. District/Taluk/ and Village etc.	Sy. Nos. 274/2, 274/3, 282/1, 282/2, 274/1-2, 273/3, 273/2, 273/1-2, 273/1-3 of Mazhuvannoor Village , Kunnathunad Taluk, Ernakulam District
Details of period of lease or permit with number including the and expiry of lease/permit (Copy to be attached)	Lease No 648/2011-2012/5692/M3/2011 Dated 23-12-2011 Area-4.1800 Ha in Sy. No.273/1-2,273/1-3,23/2, 273/3, 282/1, 282/2, 273/1-2 (pt) valid up to 03-01-2024
Present Status of the project a. Date & Year of starting the work of the quarry project. b. whether the quarry is working at present or not ? c. If stopped working since when?	04-01-2012 Quarry is currently working based on the quarry lease sanctioned from DMG through order No 648/2011-2012/5692/M3/2011 Dated 23-12-2011 for an arca-4.1800 Ha in Sy. No. 273/1-2,273/1-3,23/2, 273/3, 282/1, 282/2, 273/1-2 (pt)valid up to 03-01-2024
Date of submission of Application	14/08/2014
Brief description of the	Open cast Semi mechanized mining, B2

project.	
Details of Authorized Signatory and address for correspondence	Mr. Gowtham V. Pavithran, S/o V.N.Pavithran M/s Megha Granites Vattappara House, Karattupallikkara Post, Perumbavoor, Ernakulam-683 542 Phone : 9447988727
Land Details	
1. Extent of area in hectares	9.7000 Ha
2. Is the property forest land/Govt. land/own land/patta land	Own land
3. Quantity of top soil/over burden produced and managed	Top soil – 36,752 CuM, Over burden -99,717 CuM,
4. Latitude and Longitude	10° 02' 44.50" N to 10° 02' 51.56" N 76° 28' 44.01" E to 76° 28' 54.04" E
5. Topography of land and elevation	The topography of the lease area is hilly. The highest elevation of the lease area is 83 m MSL and lowest is 60m MSL.
6. Slope analysis	Considering the stability of rocks, ultimate pit slope proposed is 45°
7. Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	Nil
8. Access road to the site width and condition	7 m tarred road
9. Will there be any adverse impact on the aesthetics of the proposal site	No
Mining details	
a) Minimum and Maximum height of excavation.	Highest 83 m above MSL Lowest 45 m above MSL
b) Life of mine proposed.	18 years
c) Underground mining if any proposed	Not applicable
d) Method of Mining	Open cast mining
e) Distance from the adjacent quarry	Adjacent

f) Cluster condition if any	No		
g) Has "No cluster certificate" submitted?	Yes		
h) Distance from nearby habitation	300 m, towards South East		
i) Distance from nearby forest, if applicable	No forest land within 5 km radius from the mine site		
j) Distance from protected area, Wildlife Sanctuary, National Park etc.	No protected area, Wildlife Sanctuary, National Park with in 10 km radius from the mine site		
k) Distance from nearby streams/rivers/National Highway and Roads	Periyar River-8.6 Km-NNW Periyar Valley Canal-1.63 Km-NW		
l) Is ESA applicable? If so distance from ESA limit	Not applicable		
m) Has approved mining plan, prepared by RQP submitted?	Yes		
n) Capacity of production in TPA	1,50,000		
o) Details of mining process	The quarry is proposed to work with conventional open cast with bench system method with semi - mechanized mode of operation. Based on the mode and method, taking into the consideration of geological parameters of the charnockite body, the quarry pit will be so designed such that the height of the bench is kept about 5.00 m max.		
Details of Project cost			
a) Land cost	6 Crore		
b) Plant and Machinery	19 Crore		
c) Total Cost	25 Crore		
V. Financial Statement including funding source and details of insurance etc.	Bank Loan		
Management Plan	<table> <tr> <td>Air Pollution</td><td>No significant air pollution is expected as the mining operation is in wet stage. However during the summer water spraying suppresses the dust on roadways. The improvement of haulage road is the main</td></tr> </table>	Air Pollution	No significant air pollution is expected as the mining operation is in wet stage. However during the summer water spraying suppresses the dust on roadways. The improvement of haulage road is the main
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		<p>remedy to suppress dust during transportation. Water sprinklers are provided to check the dusty road in the mining area.</p> <p>Dust released due to mining activity will be suppressed periodically by sprinkling of water, by engaging water tankers</p>
	Water Pollution	<p>Garland drains are provided at the mine site to regulate monsoon water and direct the same to the settling ponds / mine pit to contain the mine wash off and to avoid the same joining the adjoining surface water bodies / water courses.</p>
	Noise	<p>Plantation will be carried out all along the lease periphery, which acts as acoustic barrier for noise transmission.</p>
	Solid Waste Management	<p>Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.</p>
	Eco-restoration	<p>At the end of life of mine, the excavated pit will be 4.414 Ha, in which 2.0850 Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation</p>
VI.	Whether Environment Management Plan or Eco restoration Plan satisfactory?	Yes
VII.	Does it suggest mitigation measures for each activity	Yes
VIII.	If Pre-Feasibility Report (PFR) satisfactory	Yes
IX.	Does it need public hearing	No
X.	Details of litigation and Court verdict if any	Nil
XI.	Details of public complaint, if any	No
XII.	Details of statutory sanction required	Not Applicable
XIII.	If CRZ recommendation applicable?	Not Applicable

PART B		
Environment Impact Assessment and Mitigation Measures		
Impact on water		
a) Details of water requirement per day in KLD	About 1.0 KLD is required for domestic consumption, 3.0 KLD is required for dust suppression and 2.0 KLD is required for green belt development	
b) Water source/sources.	The required water will be met from open well and also from water pond.	
c) Expected water use per day in KLD.	About 1.0 KLD is required for domestic consumption, 3.0 KLD is required for dust suppression and 2.0 KLD is required for green belt development	
d) Details of water requirements met from water harvesting.	Around 5.0 KLD is required for dust suppression & Plantation will be met from water harvesting pond	
e) What are the impact of the proposal on the ground water?	The ground water level measured from the nearest well is about 10 m below the ground level. The ultimate depth of the working of the quarry is 45 m MSL. Since the working is much above the general ground water table, it does not affect the ground water	
f) How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	Not Applicable	
g) What is the incremental pollution load from waste water generated from the proposed activities?	Not Applicable	
h) How is the storm water from within the site managed?	<ul style="list-style-type: none">Storm water drains with silt traps will be suitably constructed all along the periphery of the pit area (Garland drains) to collect the run-off from the lease area and divert into the storm water pond/tanks proposed within the complex.Appropriate channelization of storm water with channels of sufficient widthAll measures will be taken not to disturb the existing drainage pattern adjacent to the other property.	
Impact on Biodiversity and Eco restoration Programmes		
a) Will the project involve extensive clearing or modification of	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.	

	vegetation (Provide details)	
b)	What are the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantation/ landscaping)	It is proposed to develop green belt to about 80 % which includes areas like along mine lease boundary (7.5 m width), all along the periphery of the mine lease area and the reclaimed area. Grass and bushes will be planted in areas prone to erosion especially at the foot of the mine lease area. Other areas will be fertilized and planted with local species. The characteristics of this vegetation will resemble that of the natural environment
c)	Is there any displacement of fauna – both terrestrial and aquatic. – If so what are the mitigation measures ?	This region does not have any endemic or endangered species, so any development activity in the region does not have any direct bearing or significant influences in the ecosystem stability or biodiversity
d)	Presence of any endangered species or red listed category (in detail)	
Impact on Air Environment		
a)	What are the mitigation measures on generation of dust, smoke and air quality	<ul style="list-style-type: none">• Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.• To avoid the dust generation from the drilling operations, wet drilling method will be adopted.• Drill machines will be equipped with dust collectors.• Use of appropriate explosives for blasting and avoiding overcharging of blast holes.
b)	Details of internal traffic management of the site.	<ul style="list-style-type: none">• In case of long transportation the trucks after loading will be covered with tarpaulin sheets.• Speed of the vehicles will be maintained within the prescribed limits.• Trucks will not be over loaded and will be maintained to the body level.
c)	Details of noise from traffic, machines and vibrator and mitigation measures	<ul style="list-style-type: none">• Proper maintenance of machinery, equipment's and improvement on design of machines.• Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.• Creation of wide green belt of dense foliage between mine areas and residential colonies
d)	Impact of DG sets and other equipments on noise and vibration	<ul style="list-style-type: none">• Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.• To avoid the dust generation from the drilling operations,

	and ambient air quality around the project site and mitigation measures	wet drilling method will be adopted. <ul style="list-style-type: none">• Drill machines will be equipped with dust collectors.• Use of appropriate explosives for blasting and avoiding overcharging of blast holes.• Controlled blasting techniques will be adopted.
e)	Air quality monitoring in detail	Air quality is monitored from four different corners of the project site and results are found within the limits.
Energy Conservation		
a)	Details of power requirement and source of supply.	No electric Power required for Quarry operation.
b)	Details of renewable energy (non conventional) used.	Not Applicable
Risk Management		
a)	Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	Yes
b)	Are proposals for fencing around the quarry satisfactory?	Yes
c)	Storage of explosives/hazardous substance in detail	
d)	Facility for solid waste management	
Socio Economic Impacts		
1)	Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	Nil
2)	Will the proposal result in any changes to the demographic	Nil

structure of local population. If so, provide details.					
3) Are the CSR proposals satisfactory. Give details	Sl.No	CSR Activities	Recurring Activity	Non Recurring Activity	
	1	Construction of Bus waiting shelter	-	1,50,000	
	2	Construction of Toilet at Govt.UP School, Valamboor	-	2,00,000	
	3	Uniform and study material to Govt. LP School, Govt U.P School, Valamboor, Govt UP School, Muzhuvannoor	1,00,000	-	
	4	SC colony- Kandattukunnu Road Maintenance	1,00,000	-	
	5	Medical help to poor family around Cheenikuzhy	1,00,000	-	
	6	Charitable Payment to poor orphans disabled	1,00,000	-	
	7	Repair of Cheenikuzhy-Valamboor Road	1,25,000	-	
	8	Repair of Cheenikuzhy-Ottathany Road	75,000	-	
		Total	6,00,000	3,50,000	
4) What are the projects benefits in terms of employment potential?	The quarrying activity will benefit local villages in both directly and in-directly. Direct beneficiary will be those who get employed in Quarry as skilled and unskilled workers				
PART C					
Details of NABET approved EIA Consultant engaged- Their name, address and accreditation details		Anacon Laboratories Pvt Ltd, Nagpur NABET/EIA/1316/RA005			
Summary and Conclusion					
a) Overall justification for implementation of the project.		It is predicted that socio-economic impact due to this project will positively bring prosperity and improvements in physical and social infrastructure in the area. It will increase the chance of more employment to local people. There is no resettlement and rehabilitation involved in this project. Revenue of the state			

	government and central government will be increased through collection of various taxes. The entire project area is devoid of any endangered flora and fauna. It is proposed to reclaim the land to a maximum possible extent by providing green belt in refilling and surrounding areas. In addition to this 10% of the total area is converted to water pond. Thus the proposed project is not likely to affect the environment or adjacent ecosystem adversely.
b) Explanation of how adverse impact have been mitigated.	<ul style="list-style-type: none"> • All working places will have safe means of access, safe working platform and exit. Persons working in hazardous dust prone area will be provided with dust mask. • Personal protective equipment's like respirators, ear plug, noise muff, helmet etc. Will be provided to the workers. • Proper unit design and engineering controls in order to protect workers, including by control of process and fugitive emissions. • Adequate arrangement of drinking water will be done. • Education & training will be provided to the workforce about facilities, protective equipment, risk associated, potential health effects, etc. • Display board will be provided showing the hazards associated and recommend precautionary measures.

2. The proposal was placed in the 53rd meeting of SEAC Meeting, Kerala, held on 25th and 26th February, 2016. The proponent made a brief presentation about the project proposal. The Committee reviewed the project in detail and expressed the opinion to revise the CSR making it more realistic to the local needs. The proposal was deferred for field visit.

The site visit was conducted by Subcommittee of SEAC on 15.07.2016, comprising of Dr. K.G. Padmakumar and Sri. John Mathai. The Proponent Sri. V. N. Pavithran along with his team were present at the site at the time of site visit. The details of which are given below:

The project is located at about 1 km west of Rubber Park at Airapuram. This quarry lease area falling in own land occupy the southern slopes of a hill ridge exposing hard rock. On the southern flank and adjacent area, other quarries are noted. Boundary pillars of the plot are erected and numbered displaying GPS values. The rock type is variants of charnockite. The lease area is currently being worked with leases valid upto 2018 and 2024. In the working area formation of benches, storm water management with water being pumped out of the central pit that functions as RWH structure, dust suppression mechanism etc are seen. However, very steep cuttings are seen in the worked out area without any protective fencing. The water that is pumped out is not clarified. Top soil and OB is not stored in a planned manner. The quarry has a crusher unit. Floral and faunal biodiversity is not observed as the area is cleared of natural vegetation. Green belt is not planned in the non-quarry zone. Dwelling units are not seen within 100 m.

Based on an overall evaluation of the site, following conditions may be fulfilled before it is recommended for EC:

1. A certificate from the District Geologist to be produced on the details of quarries

within 500m of the proposed lease area. The name of quarry and the respective area under permit/lease is to be provided to verify the cluster situation.

- 2. The certificate that the land is not assigned for special purposes.*
 - 3. Top soil and Over burden should be stored in a designated place on the lower slope away from the working area and provided with protective support walls.*
 - 4. The steep cuttings flanking the main haulage should be provided with protective fencing. Proper sign boards are also to be erected as per rules. The main road leading to the working faces to be maintained in a motorable condition.*
 - 5. The water draining into the valley will need clarification. It must be managed by providing a RWH/desiltation structure. The existing bund is only a temporary measure. A catch water drain is needed on the lower slopes leading to the desiltation structure.*
 - 6. Assurance that green belt will be provided especially on the eastern side and close to the entrance. The approach road at the entrance also needs rectification for entry of smaller vehicles.*
 - 7. The CSR activity needs revision addressing the needs of the locality.*
3. The proposal was placed in the 60th meeting of SEAC held on 28th and 29th July, 2016. The Committee appraised the proposal based on mining plan, prefeasibility report, field inspection report and all other documents submitted and decided to deferred the item that the proponent was asked to submit the documents as demanded by the inspection team as suggested above.

The proponent submitted the above details sought by the Committee.

4. The matter was again placed in the 63rd meeting of SEAC held on 04th October, 2016. Committee found that details provided by the proponent are not adequate and also noted that other quarries are working near this quarry. Hence a comprehensive list of quarries presently operating within 500 m of this quarry area in Mazhuvannur village may be sought from the District Geologist for taking a decision in the matter.

The proponent submitted a certificate from the District Geologist (No.DOE/2296/E2/16 dt.04.01.2017) listing the no. of quarries within the 500m radius.

5. The proposal was considered in the 67th Meeting of SEAC held on 27th January 2017. The Committee appraised the proposal based on Form I, Pre-feasibility Report, Mining Plan, field inspection report of the Sub Committee and all other documents submitted with the proposal. The Committee decided to **Recommend for issuance of EC** subject to general conditions in addition to the following specific conditions for mining.

- 1. The steep cuttings flanking the main haulage should be provided with protective fencing. Proper sign boards are also to be erected as per rules. The main road leading to the working faces to be maintained in a motorable condition.*
- 2. The water draining into the valley will need clarification. It must be managed by providing a RWH/desiltation structure. The existing bund is only a temporary measure. A catch water drain is needed on the lower slopes leading to the desiltation structure.*

3. *If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.*
4. *The CSR activity needs revision addressing the needs of the locality.*

6. The proposal was placed in the 65th meeting of SEIAA held on 22nd March 2017. The Authority noted that it appears that the lease area is 9.7 ha with the Lease No 648/2011-2012/5692/M3/2011 dated 23-12-2011. Therefore it needs to be ascertained whether there is violation, since the quarry is reported to be working before 2012. In the light of the Government of India (MoEF) Circular No.804 E dt.14.03.2017 this will be examined thoroughly and placed in the next meeting.

The proponent informed vide e-mail dt.27.04.2017 that the quarry is currently working based on the quarry lease sanctioned from DMG through order No 648/2011-2012/5692/M3/2011 Dated 23-12-2011 for an area-4.1800 Ha in Sy. No. 273/1-2, 273/1-3, 273/2, 273/3, 282/1, 282/2, 273/1-2 (pt) valid up to 03-01-2024.

7. The proposal was placed in the 67th meeting of SEIAA held on 28th April 2017. The Authority decided to issue Environmental Clearance with the above specific conditions in addition to the general conditions as recommended by SEAC subject to obtaining legal opinion as decided in the 66th SEIAA meeting whether quarrying on lease areas without Environmental Clearance also come under the scope of violation.

8. In the mean time, a mass petition was received from Mazhuvannoor village residents against the working of the quarry. The complaint was placed in the 71st meeting of SEIAA held on 20th July 2017. The Authority decided to make a visit to ascertain and examine the complaint, before the issuance of EC.

Accordingly the site visit was conducted by the Chairman & Member on 25.10.2017. The report is as follows:

We observed that mining is not done scientifically. There is no bench formation. Overburden is not stacked properly. There is no dust suppression mechanism. The building within 100 m should be demolished. EC may be issued after rectifying all the above drawbacks and an affidavit to this effect has to be produced. A Certificate from a competent authority that all the above conditions are rectified should also be submitted.

9. In the light of the legal opinion the 76th meeting of SEIAA held on 16th November 2017 decided to issue EC for the proposal. The proponent agreed to set apart Rs.10 lakh (non-recurring) and Rs.10 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat. A Certificate from the Tahsildhar, Kunnathunad Taluk is submitted vide reference 9th cited. The proponent has also submitted the affidavit vide reference 10th cited satisfying all the above conditions.

10. Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the proposed quarry project of Sri. Gowtham V. Pavithran, M/s Megha Granites, Vattappara House, Karattupallikkara, P.O. Perumbavoor, Ernakulum District - 683 542 in Sy. No. 274/2, 274/3, 282/1, 282/2, 274/1-2, 273/3, 273/2, 273/1-2, 273/1-3 at Mazhuvannoor Village,

Kunnathunad Taluk, Ernakulam District, Kerala for an area of 9.7 Ha, subject to the specific conditions as in para 5 above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining (items 1 to 61), appended hereto will be applicable and have to be strictly adhered to.

11. The Clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and the undertakings in Chapter 9 (Mining), Chapter 10 (Drilling & Blasting), Chapter 14 (Mines Drainage), Chapter 16 (EMP) Chapter 17 (Mine Closure Plan) of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

12. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.

12. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.

- i. 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.
- ii. Instances of violation if any shall be reported to the District Collector, Ernakulam.
- iii. The given address for correspondence with the authorised signatory of the project is Sri.Gowtham V. Pavithran, M/s Megha Granites, Vattappara House, Karattupallikkara, P.O. Perumbavoor, Ernakulum District - 683 542.

Sd/-

P.H.KURIAN I.A.S,
Member Secretary (SEIAA)

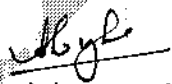
To,

Sri. Gowtham V. Pavithran,
M/s Megha Granites, Vattappara House,
Karattupallikkara, P.O. Perumbavoor,
Ernakulum District - 683 542

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala.
3. District Collector, Ernakulam
4. Director, Mining & Geology, Thiruvananthapuram -4.
5. The Member Secretary, Kerala State Pollution Control Board
6. District Geologist, Ernakulam
7. Tahsildhar, Kunnathunadu Taluk
8. Chairman, SEIAA.
- ✓ 9. Website.
10. S/f
11. O/c

Forwarded/By Order


Administrator, SEIAA



STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. 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.
4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
5. Sprinklers shall be installed and used in the project site to contain dust emissions.
6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
7. 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 dumping and overburden and planted with indigenous plant species that are eco-friendly, if no other specific condition on reclamation of pit is stipulated in the E.C.
8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
9. The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.
10. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14. A licensed person should supervise/ control the blasting operations.
15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
19. Maximum depth of mining from general ground level at site shall not exceed 10m
20. No mining operations should be carried out at places having a slope greater than 45°.
21. 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.
22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
24. The transportation of minerals should be done in covered trucks to contain dust emissions.
25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
26. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
28. 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.
29. 100 m buffer distance should be maintained from forest boundaries.

30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
31. 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.
32. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.
33. 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.
34. 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.
35. 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 State Environment Impact Assessment Authority (SEIAA) office 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.
36. 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.
37. 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 State Environment Impact Assessment Authority (SEIAA) office.
38. 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
39. 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.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul Road, loading and unloading points 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.
46. 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.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
48. 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.
49. The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
50. The Regional Office of MOEF & CC 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.
51. 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.
52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or thisimplementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
54. 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.
55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.



For Member Secretary, SEIAA Kerala

