

### Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: SEIAA- Environmental clearance for the proposed quarry project in Sy.Nos.147/2 (pt), 149/1(pt), 149/2 (pt), 150/1, 150/3(pt), 151/1(pt) & 151/2(pt) at Urangattiri Village, Eranad Taluk, Malappuram District, Kerala by Sri. Mohammed Nisar (Partner), M/s Majestic Granites - EC granted - Orders issued.

### STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

#### No. 1021/SEIAA/EC1/01/2016

Dated, Thiruvananthapuram. 29.05.2017

Ref:

- 1. Application dated 01-01-2016 from Sri.Mohammed Nisar (Partner), M/s Majestic Granites, Athani Tower, Room No: MP 7/1/1672-G&H, Mukkom (P.O), Near bus stand, Kozhikkode, Kerala -673602
- 2. Minutes of the 63<sup>rd</sup> meeting of SEAC held on 04<sup>th</sup> October 2016
- 3. Minutes of the 67<sup>th</sup> Meeting of SEAC held on 27<sup>th</sup> January 2017
- 4. Minutes of the 65th meeting of SEIAA held on 22nd March 2017

## **ENVIRONMENTAL CLEARANCE NO.37/2017**

Sri.Mohammed Nisar (Partner), M/s Majestic Granites, Athani Tower, Room No: MP 7/1/1672-G&H, Mukkam (P.O), Near bus stand, Kozhikkode, Kerala -673602, vide his application received on 01-01-2016, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 147/2 (pt), 149/1(pt), 149/2 (pt), 150/1, 150/3(pt), 151/1(pt) & 151/2(pt) at Urangattiri Village, Eranad Taluk, Malappuram District, Kerala for an area of 3.9509 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 18<sup>th</sup> May 2012 of Ministry of Environment and Forests.

The proposed project site falls within 11° 14'51.42" N to 11° 15'01.41" N&76° 05'21.26"E to 76° 05' 31.12" E. The land use classification as per revenue records is private own land with rubber plantation. The present land use is rubber plantation. The proposed project is for quarrying of 2,00,000 MTA of building stone.

# BASIC INFORMATION OF QUARRY PROJECT PART A

Project details			
File No.		1021/SEIAA/EC1/001/2016	
Name /Title of project	the	Majestic Granites	

Name and address of project proponent.	Room No: MP 7/1/1672-G&H Mukkam (Po) Near bus stand Kozhikode District-673602
Owner of the land	As per the records, the entire area is a private property owned by company and other who have given consent to company
Survey No. District/Taluk/ and Village etc.	Urangattiri Village
Nature of the proposal  — lease or permit with evidence.	
Date of submission of Application	01/01/2016
Brief description of the project.	Open cast Semi mechanized mining, B2
Details of Authorized Signatory and address for correspondence	Athani Tower
Extent of area in hectares	3.9509 На
Is the property forest land/Govt. land/own land/patta land	Own land
Quantity of top soil/over burden produced and managed	Top soil –44,631 tons, Over burden -29,000 tons,
a) Latitude and Longitude	11 <sup>0</sup> 14'51.42" N to 11 <sup>0</sup> 15'01.41" N 76 <sup>0</sup> 05'21.26"E to 76 <sup>0</sup> 05' 31.12" E
Topography of land and elevation	The topography of the lease area is hilly. The highest elevation of the lease area is 110 m MSL and lowest is 60 m MSL.
Slope analysis	Considering the stability of rocks, ultimate pit slope proposed is 45°
Will there be any significant land disturbance resulting in soil erosion, subsidence & natural	Nil

drainage.	
Access road to the	The public road leading to the quarry has a width of about 7 m
Will there be any adverse impact on the aesthetics of the proposal site	No
	Mining details
Minimum and Maximum height of excavation.	110 m above MSL. 60 m above MSL.
Life of mine proposed.	30 years
Underground mining if any proposed	Not applicable
Method of Mining	Open Cast Mining
Distance from the adjacent quarry	No Quarry within the 500 m radius
Cluster condition if any	No
Has "No cluster certificate" submitted?	Yes
Distance from nearby habitation	101m NE
Distance from nearby forest, if applicable	No forest land within 5 km radius from the mine site
Distance from protected area, Wildlife Sanctuary, National Park etc.	No protected area, Wildlife Sanctuary, National Park with in 15 km radius from the mine site
Distance from nearby streams/rivers/National Highway and Roads	Chaliyar River – 2.8 Km- S
Is ESA applicable? If so distance from ESA limit	Not applicable
Has approved mining plan, prepared by RQP submitted?	Yes
Capacity of production in TPA	
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.
<u> </u>	Details of Project cost

	a) Land cost	3.5crore		-
	b) Plant and		· · · · · · · · · · · · · · · · · · ·	
	Machinery	2.5 crore		
-	c) Total Cost	6 Crore		
	V. Financial	0.000		
	Statement			
	including			
	funding			
	sourceand	Own fund		
	details of			
	insurance			
	etc.			
		Air	No significant air pollution is expected as the	
		Pollution	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 remedy to suppress	
			dust during transportation. Water sprinklers	
			are provided to check the dusty road in the	
			mining area.	
			Dust released due to mining activity will be	
			suppressed periodically by sprinkling of	
	•		water, by engaging water tankers	
	·	Water	Garland drains are provided at the mine site to	
		Pollution	regulate monsoon water and direct the same to	
	Management	-	the settling ponds / mine pit to contain the	
	Plan		mine wash off and to avoid the same joining	
	1 1411		the adjoining surface water bodies / water	
			courses	i
		Noise	Plantation will be carried out all along the	
			lease periphery, which acts as acoustic barrier	
			for noise transmission	
		Solid Waste	Solid waste will be stacked at designated	
		Management	places during the quarry operations and will	
			be utilized for reclamation work during mine	
			closure plan.	
		Eco-	At the end of life of mine, the excavated pit	
		restoration	will be 3.3370 Ha, in which 2.9443 Ha will be	
			reclaimed with stacked dumping and	
			overburden and rehabilitated by plantation	
	VI. Whether			
	Environment	· ·		
	Management	Yes		
	Plan or Eco	163		
	restoration Plan			
	satisfactory?			
	VII. Does it	Yes		
	suggest			

	·		
	mitigation measures for		
	each		
	activity		
	VIII. If Pre- Feasibility Report (PFR) satisfactory	Yes	
	IX. Does it need public hearing	No	
	X. Details of litigation and Court verdict if any	Not Applicable	
:	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	
	Environ	ment Impact Assessment and Mitigation Measures	
ļ	<del></del>	Impact on water	
Details of water requirement per day in KLD		1 2	
Water source/sources.			
Expected water use per day in KLD.		per The total water requirement for the proposed project has been estimated to be around 4.7 KLD. About 1.2 KLD is required for domestic consumption, 2 KLD is required for dust suppression and 1.5 KLD	
l I			

	mater harmostine	
	water harvesting.	The ground water level measured from the nearest well is about
	1871	
	What are the impact of	8 m below the ground level.
	the proposal on the	The ultimate depth of the working of the quarry is 30m MSL.
	ground water?	Since the working is above the
		general ground water table, it does not affect the ground water.
	How much of the	
	water requirement can	
	be met from the	
	recycling of treated	Not Applicable
	waste water?	
	(Facilities for liquid	· ·
	waste treatment)	·
	What is the	
	incremental pollution	
1	load from waste water	Not Applicable
	generated from the	·
	proposed activities?	
	proposed activities:	Storm water drains with silt traps will be suitably
-		constructed all along the periphery of the pit area
	TT 2 18	(Garland drains) to collect the run-off from the lease
	How is the storm water	area and divert into the storm water pond/tanks
	from within the site	proposed within the complex.
	managed?	Appropriate channelization of storm water with
		channels of sufficient width
	· .	All measures will be taken not to disturb the existing
		drainage pattern adjacent to the other property.
	Impact on	Biodiversity and Eco restoration Programmes
	Will the project	
	involve extensive	Til 11 4 h h C
	clearing or	There will not be any loss of native species of genetic diversity
	modification of	as the quarry already exists and continuation of the same will
	vegetation (Provide	not affect or loss of native species in general.
	details)	
	What ate the measures	It is proposed to develop green belt to about 80 % which
	proposed to minimize	includes areas like along mine lease boundary (7.5 m width), all
	the likely impact on	along the periphery of the mine lease area and the reclaimed
	vegetation (details of	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
	1 1	fertilized and planted with local species. The characteristics of
	plantation/	
<u> </u>	landscaping)	this vegetation will resemble that of the natural environment
. ;	Is there any	
.	displacement of fauna	This region does not have any endemic or endangered species,
	– both terrestrial and	so any development activity in the region does not have any
	aquatic. – If so what	direct bearing or significant influences in the ecosystem
	are the mitigation	stability or biodiversity
	measures?	beautiful or orough
	Presence of any	

·		
Y Al- E-ingresort		
Impact on Air Environment		
<ul> <li>Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.</li> <li>To avoid the dust generation from the drilling operations, wet drilling method will be adopted.</li> <li>Drill machines will be equipped with dust collectors.</li> <li>Use of appropriate explosives for blasting and avoiding overcharging of blast holes</li> </ul>		
<ul> <li>In case of long transportation the trucks after loading will be covered with tarpaulin sheets.</li> <li>Speed of the vehicles will be maintained within the prescribed limits.</li> <li>Trucks will not be over loaded and will be maintained to the body level.</li> </ul>		
<ul> <li>Proper maintenance of machinery, equipment's and improvement on design of machines.</li> <li>Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.</li> <li>Creation of wide green belt of dense foliage between mine areas and residential colonies</li> </ul>		
<ul> <li>Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.</li> <li>To avoid the dust generation from the drilling operations, wet drilling method will be adopted.</li> <li>Drill machines will be equipped with dust collectors.</li> <li>Use of appropriate explosives for blasting and avoiding overcharging of blast holes.</li> <li>Controlled blasting techniques will be adopted.</li> </ul>		
Air quality is monitored from four different corners of the project site and results are found within the limits.		
Details of power Floatric power require for office is about		
Electric power require for office is about 2 KW/day which is drawn from KSEB.		
Not Applicable		
Risk Management		
Yes		
i [-		

		·
	risk hazards in case of	
	emergency such as	·
	accident at the site?	
	Are proposals for	
	1 1	·
	fencing around the	
-	quarry satisfactory?	
	Storage of	Yes
	explosives/hazardous	
	substance in detail	
	Facility for solid waste	
	management	
		Socio Economic Impacts
	Will the project cause	Social Economic Impacts
	4 20	
		N.T.1
	local communities	Nil
	disturbance to sacred	·
	sites or other cultural	
	values. What are the	
	safe guards proposed?	<u> </u>
	Will the proposal	NU
	result in any changes	Nil
	to the demographic	
	structure of local	
	population. If so,	
	provide details.	
<u> </u>	provide details.	The proponent should set apart Rs 10 lakhs (non-recurring) and
	A 41 - CSD	
	Are the CSR proposals	5 lakhs per annum (recurring) for next 5 years for CSR
	satisfactory. Give	activities for the welfare of the local community for waste
	details	disposal, scholarship to children, etc. The proponent should
		spend this amount in consultation with the local Panchayath.
:	What are the projects	The quarrying activity will benefit local villages in both
	benefits in terms of	directly and in-directly. Direct beneficiary will be those who
	employment potential?	get employed in Quarry as skilled and unskilled workers
		PART C
	Details of NABET	
	approved EIA	Overseas min-tech Consultants
	Consultant engaged-	501,5 <sup>th</sup> Floor, Apex Tower, Tonk Road, Jaipur-302015
		NABET/EIA/1417/IA003
	Their name, address	NADET/EIA/141//IAVUJ
	and accreditation	
<u> </u>	details	
ļ	I	Summary and Conclusion
		It is predicted that socio-economic impact due to this project
	Overall justification	will positively bring prosperity and improvements in physical
	for implementation of	and social infrastructure in the area. It will increase the chance
	the project.	of more employment to local people. There is no resettlement
	- I I	and rehabilitation involved in this project. Revenue of the state
	l	English and

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. 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 Explanation of how protect workers, including by control of process and adverse impact have been mitigated. 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 proponent has submitted the approved mining plan as per KMMC Rules-2015. In this context the proposal was placed in the 63<sup>rd</sup> meeting of SEAC held on 04<sup>th</sup> October 2016, for appropriate decision. The committee appraised the proposal based on the mining plan (KMMCR-2015), pre-feasibility report and all other documents submitted along with the Form I application. The Committee decided to defer the item for field visit and for the production of more realistic CSR.

Field visit to the site was carried out on 12 Nov 2016 by Dr. P.S. Harikumar and Dr Khaleel Chovva. The representatives of the proponent were present during the site inspection. The proposed project site falls within 11° 14'51.42" N to 11° 15'01.41" N&76° 05'21.26"E to 76° 05'31.12" E.

The quantity of topsoil to be removed is relatively high and as the application submitted by the proponent it is estimated that, 44,631 tons of soil to be removed.

Regarding the biodiversity, the proponent has not provided a site specific list of species. Proper fencing was not seen around the quarry. The drainage is not proper and found to need improvement.

### Specific Conditions

- 1. Over burden should be stored in the designated places on the lower part and provided with protective support walls.
- 2. The storm water collection should be properly designed and maintained. A settling

- pond should be provided to clarify the water flowing from the site.
- 3. A detailed report on the site specific plant species should be done and the proponent should given an undertaking that all the important and endangered plants should be transplanted and conserved at a suitable location
- 4. The proponent should provide fencing all around the quarry and proper sign boards should be displayed.
- 5. The proponent has to revise the CSR so as to set apart Rs 10 lakhs (non-recurring) and 5 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community for waste disposal, scholarship to children, etc. The proponent should spend this amount in consultation with the local panchayath

In addition to the general conditions the above specific conditions needs to be complied with.'

- 3. The proposal was considered in the 67<sup>th</sup> Meeting of SEAC held on 27<sup>th</sup> 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. 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.
  - 2. The proponent has to revise the CSR so as to set apart Rs 10 lakhs (non-recurring) and 5 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community for waste disposal, scholarship to children, etc. The proponent should spend this amount in consultation with the local Panchayath.
- 4. The proposal was considered by the Authority in its 65<sup>th</sup> meeting held on 22<sup>nd</sup> March 2017. The Authority decided to issue EC subject to the above specific conditions in addition to the general conditions. An affidavit stating that all the premining conditions of the inspection report also have to be implemented and an affidavit to this effect should be submitted before the issuance of EC.
- 5. The proponent has submitted an affidavit stating that all the specific conditions have been fulfilled. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed Quarry project of Sri Mohammed Nisar (Partner), M/s Majestic Granites, Athani Tower, Room No: MP 7/1/1672-G&H, Mukkam (P.O), Near bus stand, Kozhikode, Kerala -673602 in Sy.Nos.147/2 (pt), 149/1(pt), 149/2 (pt), 150/1, 150/3(pt), 151/1(pt) & 151/2(pt) at Urangattiri Village, Eranad Taluk, Malappuram District, Kerala for an area of 3.9509 hectares, subject to the specific conditions as recommended by SEAC in para 2 & 3 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, appended hereto will be applicable and have to be strictly adhered to.

- 6. 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 4 (Mining), Chapter 5 (Blasting), Chapter 6 (Mine Drainage), Chapter 7 (Stacking of Mineral Rejects and disposal of waste) Chapter 11 (EMP) Chapter 12 (Progressive 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.
- 7. 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.
- 8. 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, Malappuram to take legal action under the Environment (Protection) Act 1986.
- iii. The given address for correspondence with the authorised signatory of the project is Sri.Mohammed Nisar (Partner), M/s Majestic Granites, Athani Tower, Room No. MP 7/1/1672-G&H, Mukkam (P.O), Near bus stand, Kozhikode, Kerala -673602

Sd/-

JAMES VARGHESE I.A.S, Member Secretary (SEIAA)

To,

Sri. Mohammed Nisar (Partner), M/s Majestic Granites, Athani Tower, Room No: MP 7/1/1672-G&H, Mukkam (P.O), Near bus stand, Kozhikode, Kerala -673602

### Copy to,

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
- 2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala.
- 3. Director, Mining & Geology, Thiruvananthapuram -4.
- 4. District Collector, Malappuram
- 5. District Geologist, Malappuram
- 6. Secretary, Urangattiri Grama Panchayat, Urangattiri P.O. Malappuram 673 639
- 7. Chairman, SEIAA.
- 8/ Website.
- 9. S/f
- 10. O/c

Forwarded/By Order

Administrator, SEIAA

## STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

## GENERAL CONDITIONS (for mining projects)

- 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.
- 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.
- 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.
- 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°.
- 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.
- 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 proponentshall 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 PM<sub>10</sub> and PM<sub>2.5</sub> 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.
- 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.
- 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.
- 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

