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Validity expires on 28/11/2022

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 quarry project in Sy. No. 831/2 (P) 831/3(P), 832/5(P), 833/12, 833/2, 833/3, 833/6, 834/2 (P), 834/3 (P), 834/4 (P) 834/5 , 834/6 (P), 834/7 (P), 835/3 (P), 835/4 (P), 835/5, 836/2 (P), 836/3 (P) & 836/5 (P) at Thayyoor Village, Velur Panchayath, Talappilly Taluk, Thrissur District, Kerala by Sri. P. Bhasi, Managing Director, M/s Three star granites - EC granted – Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No. 1027/SEIAA/EC1/147/2016

Dated, Thiruvananthapuram 29/11/2017

- Ref:
1. Application dated 8/01/2016 from P.C.Bhasi, Managing Director of M/s. Three Star Granites Pvt.Ltd, Peramangalam.P.O., Thrissur – 680 545.
 2. Minutes of the 64th meeting of SEAC held on 16th & 17th November, 2016.
 3. Minutes of the 72nd meeting of SEAC held on 08th & 09th May 2017.
 4. Minutes of the 74th SEIAA meeting held on 9th October 2017.
 5. Affidavit received on 10/11/2017 from P.Bhasi, Managing Director of M/s Three Star Granites Pvt.Ltd

ENVIRONMENTAL CLEARANCE NO.88 /2017

Mr. P. Bhasi, Managing Director, M/s Three Star Granites, Padikkal House Peramangalm P.O Thrissur District Pin 680 545, vide his application dated 8/1/2016 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 831/2 (P), 831/3(P), 832/5(P), 833/12, 833/2, 833/3, 833/6, 834/2 (P), 834/3 (P), 834/4 (P), 834/5 , 834/6 (P), 834/7 (P), 835/3 (P), 835/4 (P), 835/5, 836/2 (P), 836/3 (P) & 836/5 (P) at Thayyoor Village, Velur Panchayath, Talappilly Taluk, Thrissur District, Kerala for an area of 04.9156 hectares. The project comes under Category B, Activity 1(a), (i) as per the

Schedule of EIA Notification 2006 (since it is below 5 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.

BASIC INFORMATION OF QUARRY
(To be filled in by the Project Proponent)
PART A

Project details	
File No.	1027/SEIAA/EC1/147/2016
Name /Title of the project	M/s Three Star Granites
Name and address of project proponent.	Mr. P. Bhasi Managing Director Padikkal House Peramangalm P.O Thrissur Ditric Pin 680 545
Owner of the land	Mr. P. Bhasi
Survey No. District/Taluk/ and Village etc.	831/2 (P), 831/3(P), 832/5(P), 833/12, 833/2, 833/3, 833/6, 834/2 (P), 834/3 (P), 834/4 (P), 834/5 , 834/6 (P), 834/7 (P), 835/3 (P), 835/4 (P), 835/5, 836/2 (P), 836/3 (P) & 836/5 (P) Thayyoor Village, Talappilly Taluk, Thrissur Dist. Kerala State
Details of period of lease or permit with number including the beginning and expiry date of lease/permit period (Copy to be attached)	Permit expiry 20-03- 2016
Present Status of the project Date & Year of starting the work of the quarry project. whether the quarry is working at present or not ? If stopped working since when?	Currently not working. As per the court judgment quarry has stopped working on 06 Dec 2016 (since a rule was released quarry can work only with environmental clearance)
Date of submission of	8/1/2016

Application	
Brief description of the project.	<p>The proposed building stone quarry project is situated at Sy. No. 831/2 (P), 831/3 (P), 832/5(P), 833/12, 833/2, 833/3, 833/6,834/2 (P), 834/3 (P), 834/4 (P), 834/5 , 834/6 (P), 834/7 (P),835/3 (P), 835/4 (P), 835/5, 836/2 (P), 836/3 (P) & 836/5 (P) in Thayyoor Village, Talappilly Taluk, Thrissur Dist. Kerala State The Proposed lease area consists of 4.9156 ha, which is Private Patta land and present land use is quarrying activities. It is a mining project for excavation of building stone. Production will be 240,000 tons/ 240 days = 1000 tons per day.</p>
Details of Authorized Signatory and address for correspondence	<p>Mr. P.Bhasi Managing Director Padikkal House Peramangalm P.O Thrissur Ditriect Pin 680 545</p>
Land Details	
Extent of area in hectares	4.9156
Is the property forest land/Govt. land/own land/patta land	Private Patta Land
Quantity of top soil/over burden produced and managed	25136 tonnes
Latitude and Longitude	<p>10° 5' 35.8" to 10° 5' 30.19" 76° 41' 36.27" to 76° 41' 24.14"</p>
Topography of land and elevation	<p>The topography of the surrounding of the quarry area is a part of elevated terrain with undulating topography comprising of native trees, shrub, herb, climbers, bushes & grass etc. The topography of the lease area is hilly terrain. The highest elevation of the lease area is 95 m MSL and lowest is 46 m MSL. The gradient is towards the south west and there is no proper perennial drainage pattern visible in the proposed quarry premises.</p>
Slope analysis	<p>The exploitation of mineral is being done from 190 m to 145 in conceptual phase. Considering the stability of rocks the slope or say ultimate pit slope is proposed 45° from vertical.</p>
Will there be any significant land	No

	disturbance resulting in soil erosion, subsidence & natural drainage.	
	Access road to the site width and condition	Proposed site is well connected to Kunnamkulam - Wadakkancherry road with access road of 7 meters width.
	Will there be any adverse impact on the aesthetics of the proposal site	No
Mining details		
	Minimum and Maximum height of excavation.	95 mRL & 46 mRL
	Life of mine proposed.	12 years
	Underground mining if any proposed	No
	Method of Mining	Open cast semi-mechanized method of mining
	Distance from the adjacent quarry	More than 15 Km
	Cluster condition if any	No
	Has "No cluster certificate" submitted?	Yes
	Distance from nearby habitation	beyond 200 mts
	Distance from nearby forest, if applicable	NA
	Distance from protected area, Wildlife Sanctuary, National Park etc.	More than 15 Km
	Distance from nearby streams/rivers/National Highway and Roads	28 km
	Is ESA applicable? If so distance from ESA limit	No
	Has approved mining plan, prepared by RQP submitted?	Yes
	Capacity of production in TPA	2,40,000 MTA

Details of mining process	The proposed mining operations will be carried out by open cast semi-mechanized method. The height and width of the bench will be maintained at 5 m respectively. The mining will be done from top to bottom by slicing of 2.5 m thick. The exploitation mineral is being done from 190 m to 145 m MSL in concept phase. Considering the stability of rocks the final slope or ultimate pit slope is proposed 45° from vertical. Haul road will be developed up to point of loading. Transportation of the mineral from pit-mouth to destination will be by tippers/truck (20T capacity).			
Details of Project cost				
Land cost	As fixed by the Revenue Department			
Plant and Machinery	S. No.	Machine Type	Required No. of M/c	Size/Capacity
	1	Excavator	2	50 m ³ per hr
	2	Tippers/Trucks	5	10 T
	3	Jack hammer	3	30-33 mm
Total Cost	Rs 45,00,000 (fourty five Lakhs) land on rent			
Financial Statement including funding source and details of insurance etc.	Own fund			
Management Plan	Air Pollution	The PM 10 and PM 2.5 will be controlled by Dust Suppression mechanism as specified by KSPCB		
	Water Pollution	Water quality meeting requirements after the treatment of water (filtration, disinfection & sedimentation).		
	Noise	Will be under control by KSPCB standards		
	Solid Waste Management	Will be under control by KSPCB standards		
	Eco-restoration	0.8087 Ha area earmarked for safety barrier shall be used for green belt development by planting 1000 local		

		species. Till conceptual stage totally 0.8087Ha area shall be covered under green belt. Apart from this Afforestation shall be done on the haulage road by planting 500 saplings.
Whether Environment Management Plan or Eco restoration Plan satisfactory?	Yes	
Does it suggest mitigation measures for each activity	Yes	
If Pre-Feasibility Report (PFR) satisfactory	Yes	
Does it need public hearing	No	
Details of litigation and Court verdict if any	Not Applicable	
Details of public complaint, if any	Not Applicable	
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		
Details of water requirement per day in KLD	The total water requirement for the proposed activity is 42 KLD	
Water source/sources.	The water required will be sourced from the storm water reservoir. However, the drinking water will be sourced from the open well which will be purified using conventional purifying techniques.	
Expected water use per day in KLD.	42 KLD	
Details of water requirements met from water harvesting.	Sufficient quantity will be maintained from RWH	

	What are the impact of the proposal on the ground water?	No impacts noticed
	How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	Proper recycling mechanism will be introduced for utilizing the treated waste water.
	What is the incremental pollution load from waste water generated from the proposed activities?	Not Applicable in the site
	How is the storm water from within the site managed?	With sedimentation tank s per the standard norms
Impact on Biodiversity and Eco restoration Programmes		
	Will the project involve extensive clearing or modification of vegetation (Provide details)	Not applicable
	What are the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantation/ landscaping)	Planting of indigenous trees will be conducted as mitigative measures. the details are specified in the Mining closure plan
	Is there any displacement of fauna – both terrestrial and aquatic. – If so what are the mitigation measures ? Presence of any endangered species or red listed category (in detail)	Not Applicable
Impact on Air Environment		

	What are the mitigation measures on generation of dust, smoke and air quality	Appropriate dust suppression mechanism including sprinklers will be introduced for the mitigative measure.
	Details of internal traffic management of the site.	Traffic will be managed without generating air pollution.
	Details of noise from traffic, machines and vibrator and mitigation measures	The impact of quarrying on the ambient noise level would be hardly noticeable in nearby villages as the nearest village Thayyoor is 2km away from mine.
	Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	This will be as specified by the CPCB standards
	Air quality monitoring in detail	Particulate Matter (PM ¹⁰)- 60.7 µg/M ³ Particulate Matter (PM ^{2.5})- 30.4 µg/M ³ Sulphur dioxide (SO ₂) - 5.1 µg/M ³ Nitrogen dioxide (NO ₂)- 3.8 µg/M ³
Energy Conservation		
	Details of power requirement and source of supply.	No electricity is needed for quarry operations as only diesel operated mining machineries are used.
	Details of renewable energy (non-conventional) used.	Not Applicable
Risk Management		
	Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	No disaster is expected in this small scale of quarrying; however as an emergency the assistance of the hospital, police station and fire brigade will be arranged I war-foot level
	Are proposals for	

	fencing around the quarry satisfactory? Storage of explosives/hazardous substance in detail Facility for solid waste management	Yes, Explosives used is ANFO which will be kept in magazines under the stipulated conditions and standards depicted by the DGMS.				
Socio Economic Impacts						
	Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	No				
	Will the proposal result in any changes to the demographic structure of local population. If so, provide details.	No				
	Are the CSR proposals satisfactory. Give details	Sl. No.	Areas of Intervention	No. of Intervention	Recurring Expenses (Rs) A	Non Recurring Expenses (Rs) B
1		Education	2	1,40,000	75,000.00	
2		Health	2		60,000.00	
3		Promotion of sports	2		25,000.00	
4		Chief Ministers relief fund	1	1,50,000.00		
		Subtotal		2,90,000.00	1,60,000.00	
		Grand Total		A+B = 4,50,000.00		
	What are the projects benefits in terms of employment	The main occupation of the people is farming. There are no major industries in the area. The quarrying operation in such remote places would provide 30 direct & equal number of indirect employment to local people. Hence quarrying				

	potential?	operation will help in improving socio-economic status of the area.
PART C		
	Details of NABET approved EIA Consultant engaged- Their name, address and accreditation details	V. K. ROY, DMG/KERALA/RQP/4/2016 'SARAL, T. C. 27/487(2), SWARAJ LANE, R. C JUNCTION, KUNNUKUZHY, THIRUVANANTHAPURAM – 695 035, KERALA. PHONE : 91-9387 805 668 EMAIL : vkroysaral@gmail.com
Summary and Conclusion		
	Overall justification for implementation of the project.	The project infrastructures can be utilized for the benefit of the local people of the area. The revenue of the State Govt. will be definitely increasing due to the proposed activity by means of CRP as well as the processing fee for appropriate statutory clearances involved in the procedures. The entire project area is devoid of any endangered flora and fauna as specified in the IUCN records and the area is totally far from any other protected areas under the Wildlife Protection Act as well as the Forest Act. It is proposed to reclaim the land and develop green cover for eco-restoration with native species to a maximum extent as far as possible.
	Explanation of how adverse impact have been mitigated.	a. The pit shall be fenced. b. Proper and adequate security at the entrance to the mine to prevent entry of unauthorized person with proper gates under lock. c. All the above will be examined by manager once in a week to ensure that they are in order.

2. The proposal was placed in the 64th meeting of SEAC, Kerala, held on 16th & 17th November, 2016. The item was deferred on the request of the proponent. The proponent submitted a request to the Secretary, SEAC to the willingness for presenting the proposal later.
3. The proposal was placed in the 72nd meeting of SEAC held on 08th & 09th May 2017. The Committee appraised the proposal based on the Mining Plan, Pre-feasibility Report and all other documents submitted along with Form1. The proponent agreed to set apart Rs.15 lakh (non-recurring) and Rs.15 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat. The Committee decided to defer the item for field inspection.

Field visit to the above project site was carried out on 07th July 2017 by the sub-committee of SEAC comprising of Er.P.Sreekumaran Nair & Dr.K.G.Padmakumar and submitted report.

4. The proposal was considered in the 76th meeting SEAC held on 25th & 26th July 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 condition for mining.

1. If any rare, endemic and threatened plant species are noticed, they shall be properly protected insitu or transplanted to a suitable site inside the lease area.

5. The proposal was considered in the 74th SEIAA meeting held on 9th October 2017. Authority accepted the recommendation of SEAC and decided to issue EC subject to general condition in addition to the following specific conditions.

If any rare, endemic and threatened plant species are noticed, they shall be properly protected insitu or transplanted to a suitable site inside the lease area.

The proponent should set apart an amount of Rs.15 lakhs (non-recurring) and 15 lakhs (recurring) per year for CSR activities for the welfare of the local community in consultation with the local Panchayat. A notarised affidavit for the commitment of CSR activities and also agreeing all the general and specific conditions should be submitted before the issuance of EC. The proponent has submitted an affidavit vide reference 5th cited, satisfying all the above conditions.

6. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed building stone quarry project of Mr.P.Bhasi, M/s.Three Star Granites Pvt.Ltd , Pazhavor, Erumapetty, Thayyoor.P.O., Thrissur Kerala- 680 584 State for an area of 4.9156 Ha, in Sy No. 831/2(P), 831/3(P), 832/5(P), 833/12, 833/2, 833/3, 833/6, 834/2 (P), 834/3 (P), 834/4 (P), 834/5, 834/6 (P), 834/7 (P), 835/3 (P), 835/4 (P), 835/5, 836/2 (P), 836/3 (P), 836/5 (P), at Thayyoor Village, Velur Panchayath, Talappilly Taluk, Thrissur District, subject to the specific conditions as recommended by SEIAA in para 5th 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.

7. 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 II (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.

8. 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.
9. 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, Thrissur to take legal action under the Environment (Protection) Act 1986.
- iii. The given address for correspondence with the authorised signatory of the project is Mr.P.Bhasi, M/s.Three Star Granites Pvt Ltd, Padikkal House, Peramangala.P.O., Thrissur – 680 545.

Sd/-

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

To,

Mr. P.Bhasi,
Managing Director,
M/s Three Star Granites Pvt.Ltd
Padikkal House,
Peramangalam.P.O.,
Thrissur District- 680 545

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. The Director, Mining & Geology, Thiruvananthapuram -4.
4. The Member Secretary, Kerala State Pollution Control Board
5. The District Collector, Thrissur
6. The District Geologist, Thrissur
7. The Tahsildar, Talappilly
8. Chairman, SEIAA.
9. Website.
10. S/f
11. O/c

Forwarded /By Order


Administrator(SEIAA)

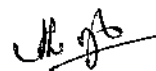
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KERALA

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 proponents 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 this implementation 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

