

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. 267/1(pt), 267/2(pt), 269/1(pt), 270/1, 270/2(pt), 270/3(pt), 270/4(pt), 270/5(pt), 270/6(pt) & 276/1(pt) by Sri.Muhammed Haneefa at Nediyiruppu Village, Kondotty Taluk, Malappuram District, Kerala State for an area of 7.3685 Ha - EC granted Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No.730/SEIAA/KL/02/15

Dated, Thiruvananthapuram 16/08/2017

1. Application received on 01/01/2015 from Sri Sri. Muhammed Haneefa, Ref: S/oMuhammed Kutty Haji. Kari House, Chiravil (PO) Kondotty (via), Malappuram District.

- 2. Minutes of the 57th Meeting of SEAC held on 16th &17th June 2016.
- 3. Minutes of the 56th meeting of SEIAA held on 23^{td} July 2016.
 4. Minutes of the 62nd SEAC meeting held on 6th & 7th September 2016.
- 5. Minutes of the 60th meeting of SEIAA held on 27th October 2016.
- 6. Letter dated on 08.03.2017 of Smt VidyalakshmiVipin, Advocate
- 7. Minutes of the 65th meeting of SEIAA held on 22nd March 2017
- 8. Minutes of the 67th meeting of SEIAA held on 28th April 2017
- 9. Affidavit from Shri.Muhammed Haneefa dated 06/07/2017.

ENVIRONMENTAL CLEARANCE NO. 52 /2017

Sri.Muhammed Haneefa, S/o Muhammed Kutty Haji, Kari House, Chirayil (PO), Kondotty (via), Malappuram District, Kerala-673 638, vide his application received on 01-01-2015, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 267/1(pt), 267/2(pt), 269/1(pt), 270/1, 270/2(pt), 270/3(pt), 270/4(pt), 270/5(pt), 270/6(pt) & 276/1(pt) of Nediyiruppu Village, Kondotty Taluk, Malappuram District, Kerala State for an area of 7.3685 Ha. The project comes under Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 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/BUILDING PROJECT (To be filled in by the Project Proponent)

	PART A	
	Project details	
1. File No.	730/SEIAA/KL/02/2015	

2.	Name /Title of the project	Mr.Muhammed Haneefa
3.	Name and address of project proponent.	Mr. Muhammed Haneefa (Owner) S/o Muhammed Kutty Haji, Kari House , Chirayil (po) Kondotty (via) Malappuram District, Kerala 673638
4.	Owner of the land	As per the records, the entire area belongs to Mr. Muhammed Haneefa and other people, who have given consent to Mohammed Haneefa
5.	Survey No. District/Taluk/ and Village etc.	Re. SyNos 267/1(pt), 267/2(pt), 269/1(pt), 270/1, 270/2(pt), 270/3(pt), 270/4(pt), 270/5(pt), 270/6(pt) & 276/1(pt) Nediyiruppu- Village, Kondotty -Taluk, Malappuram- District
6.	Details of period of lease or permit with number including the and expiry of lease/permit (Copy to be attached)	Permit NO-1- 114/2015-2016/GR/ DOM/ M-1606/2015 Permit NO-2- 115/2015-2016/GR/DOM/M-1607/2015 Permit NO-3-04/2016-2017 /GR/DOM/M-1634/2016 37.46 ares
7.	a. Date & Year of startingthe work of the quarry project. b. whether the quarryis working at present or not? c. If stopped working since when?	Presently quarry is not working. Quarry worked up to 03-12-2016 based on quarry permit provided by DMG

	8. Application	01/01/2015
	Brief description of the project. 9.	Open cast Semi mechanized mining, B1
	Details of Authorized Signatory and address for correspondence	Mr. Muhammed Haneefa (Owner) S/o Muhammed Kutty Haji, Kari House, Chirayil (po) Kondotty (via) Malappuram District, Kerala 673638
		Land Details
	Extent of area in hectares	7.3685На
	Is the property forest land/Govt. land/own land/patta land	Private land.
	Quantity of top soil/over burden produced and managed	Top soil-49,276 MT
, ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	Latitude and Longitude	11° 96'54.53" N to 11° 07'08.10"N 75°59'27.33" E to 75° 59' 43.17" E
	Topography of land and elevation	Minimum height of excavation (MSL)-40m above MSL maximum height of excavation (MSL)-150m above 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 drainage.	Nil
	Access road to the site width	The public road leading to the quarry has a width of

and condition	about 6m
Will there be any adve impact on the aesthetic proposal site	1
	Mining details
Minimum and Maximum height of excavation.	Highest 150 m above MSL Lowest 40 m above MSL
Life of mine proposed.	20 years
Underground mining if any proposed	Not applicable
Method of Mining	Open cast mining
Distance from the adjacent quarry	50m
Cluster condition if any	No
Has "No cluster certificate" submitted?	Yes
Distance from nearby habitation	198m- SW
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/Nationa 1 Highway and Roads	River – Chaliyar- 14 Km –N
Is ESA applicable? If so distance from ESA	Not applicable

limit		
Has approved mining plan, prepared by RQP submitted?	Yes	
Capacity of production in TPA	3,26,000 MTA	
Details of mining process	bench system met Based on the mod geological parame	bosed to work with conventional open cast with hod with semi - mechanized mode of operation. e and method, taking into the consideration of eters of the charnockite body, the quarry pit will be that the height of the bench is kept about 5.00 m
	Detai	ls of Project cost
Land cost	1.5 Crore	
Plant and Machinery	1 Crore	
Total Cost	Rs. 2.5 Crore.	
V. Financial Statement including funding sourceand details of insurance etc.	Own Fund	
Management Plan	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 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 Pollution	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.
,	Noise	Plantation will be carried out all along the lease periphery, which acts as acoustic barrier for noise transmission.
	Solid Waste Management	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.
	Eco-restoration	At the end of life of mine, the excavated pit will be 6.1230Ha,, in which 5.3730Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation
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	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
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PART B

Environment Impact Assessment and Mitigation Measures

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	Impact on water
Details of water requirement per day in KLD	The total water requirement for the proposed project has been estimated to be around 5.4KLD. About 0.4KLD is required for domestic consumption, 3.0 KLD is required for dust suppression and 2.0 KLD is required for green belt development
Water source/sources.	The required water will be met from quarry water pond
Expected water use per day in KLD.	The total water requirement for the proposed project has been estimated to be around 5.4KLD. About 0.4KLD is required for domestic consumption, 3.0 KLD is required for dust suppression and 2.0 KLD is required for green belt development
Details of water requirements met from water harvesting.	Around 3.0 KLD is required for dust suppression will be met from water harvesting pond
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 40 m MSL. Since the working is much 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 waste water? (Facilities for liquid waste treatment)	Not Applicable
What is the incremental pollution load from waste water	Not Applicable

activities?			
How is the storm water from within the site managed?	 Storm water drains with silt traps will be suitable constructed all along the periphery of the pit are (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 width All measures will be taken not to disturb the existing drainage pattern adjacent to the other property 		
Impact on Biodive	ersity and Eco restoration Programmes		
a) Will the project involve	There will not be any loss of native species of genetic		
extensive clearing or modification of vegetation (Provide details)	diversity as the quarry already exists and continuation of the same will not affect or loss of native species in general.		
b) What ate 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? d) Presence of any endangered species or red listed category (in detail)	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		

In	npact on Air Environment
	The state of the s
	 Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.
a) What are the mitigation	To avoid the dust generation from the drilling
measures on generation of dust, smoke and air quality	 operations, wet drilling method will be adopted. Drill machines will be equipped with dust
1	collectors.
	Use of appropriate explosives for blasting and
	avoiding overcharging of blast holes.
	 In case of long transportation the trucks after loading will be covered with tarpaulin sheets.
b) Details of internal traffic	 Speed of the vehicles will be maintained within
management of the site.	the prescribed limits.
	Trucks will not be over loaded and will be
	maintained to the body level.
	• Proper maintenance of machinery, equipment's and improvement on design of machines.
c) Details of noise from traffic,	
machines and vibrator and	and earplugs by workers, who are working in high
mitigation measures	noise generating areas.
#	Creation of wide green belt of dense foliage between mine areas and residential colonies
	Laying of haul road as per the standards, black
	topping of permanent haul road and service road to
d) Impact of DG sets and other	avoid or eliminate air – borne dust.
equipments on noise and	• To avoid the dust generation from the drilling operations, wet drilling method will be adopted.
vibration and ambient air	• Drill machines will be equipped with dust
quality around the project site and mitigation measures	collectors.
	• Use of appropriate explosives for blasting and
	avoiding overcharging of blast holes.Controlled blasting techniques will be adopted
1	Air quality is monitored from four different corners of the
e) Air quality monitoring in detail	project site and results are found within the limits.
#### T	Energy Conservation
a) Details of power	About 14 litera/II. of HCD is now in alice of Day
requirement and source of	About 14 liters/Hr of HSD is required in a Day.
supply.	Not Applicable
b) Details of renewable energy	Not Applicable
(non – conventional) used.	
•	Risk Management

	Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	Yes			·
	Are proposals for fencing around the quarry satisfactory? Storage of	Yes			
d)	explosives/hazardous substance in detail Facility for solid waste				8
<u> </u>	management S	ocio Ec	onomic Impacts		
	Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	Nil			
	Will the proposal result in any changes to the demographic structure of local population. If so, provide details.	Nil			
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	Are the CSR proposals satisfa		Donofician.	Varia	Amount
c) Sl.N			Beneficiary	Year	Amount
	Vo CSR Activities	eople	Beneficiary NediyiruppuVillage	Year Yearly	Amount 70,000.00
Sl.A	No CSR Activities I Delivery of building (free of cost) to poor p in Nediyiruppu area construction of houses.	eople for ls to	· · · · · · · · · · · · · · · · · · ·		

	relief cell Melepparambu		···········		
4	Donation to Melepparate Cultural Union (MCU)	mbu	Melepparambu	Yearly	20,000.00
5		und	GMUPSchool	Yearly	10,000.00
6	Donation to Pariral project, Nediyiru Panchayath		Nediyiruppu Panchayath peopl	le Yearly	5,000.00
7	Financial assistance marriage of poor gir Nediyiruppu	to Is ,	Nediyiruppu	Yearly	20,000.00
8	Donation to Baithurah under Shihabthangal r cell,Chirayil area	í	Chirayil area people	Yearly	20,000.00
9	cell (Distribution of med	to relief dical ased	Melepparambu	Yearly	30,000.00
10	Financial assistance construction / maintenant Othumpara — Chirayil (Janakeeyasamithi)	2012/03/2017	Othumpara chirayil people	Yearly	50,000.00
				Total	3,50,00.000
d)	benefits in terms of	directly	arrying activity wi y and in-directly. Det et employed in Quars	Direct beneficia	ary will be those
		I	PART C		
a e a	Details of NABET pproved EIA Consultant engaged-Their name, address and accreditation letails	HEAD #143,2 4 th Cro B T M	MORPHOSIS OFFICE OFFICE OFFICOR, 39 th M OSS, BEHIND SILK LAYOUT, II STA GALURU – 560 06	K BOARD, AGE,	
	Su	mmary	and Conclusion		
a)	Overall justification for implementation of the		-		

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. 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 Explanation of how to the workers. adverse impact have Proper unit design and engineering controls in been mitigated. 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 first considered in the 57th Meeting of SEAC held on 16th&17th June 2016. The Committee appraised the proposal based on the mining plan, pre-feasibility

report and all other documents submitted along with the Form I application and recommended for issuance of EC for mining subject to the general conditions and the specific condition that the depth of mining shall be limited to 70m. The proponent agreed 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. He also agreed to spend this amount in consultation with the local Panchayath. The committee noted that this is a working quarry and proponent also admitted that the quarry is presently operational based on the permit. The committee found that it is a case of violation. This may be looked into by SEIAA.

3. Hence the proposal was considered in the 56th meeting of SEIAA held on 23rd July 2016 in view of Permit quarries are working based on earlier Government Orders and now on various Orders of High Court. Hon: Supreme Court in S.L.P. No. 33130/15 has ordered status quo in such cases, which has been further clarified on 07-12-2015 that "the state of Kerala shall pending further orders from this Court renew all existing permits for a further period of one year and status quo order shall not be interpreted to mean that the same is an impediment for such renewal".

In view of the permissive sanction of the Hon: Supreme Court action for violation may not be initiated.

- 4. Hence the proposal was again considered in the 62nd SEAC meeting held on 6th & 7th September 2016 and again deliberated on the issue of violation. The Committee pointed out the violation because the proponent himself admitted that the quarry was in operation without EC and recommended that in the light of the facts the SEIAA may take an appropriate decision in the matter.
- 5. In the 60th meeting of SEIAA held on 27th October 2016 the Authority decided to defer the case for legal opinion in the light of the interpretation of SEAC.
- 6. The legal opinion of VidyalakshmiVipin, Advocate & Standing Counsel of SEIAA at NGT dt.07.03.2017 was received in SEIAA Office on 08.03.2017. Her opinion is based on considering the Form I for issuing Environmental Clearance for Building Stone Quarry of Mohammed Haneefa. The extent of existing quarry is 2.632 ha. The new application is for EC for lease Area of 7.3685 ha. Referring several case laws and legal provisions she has opined that "the application for Building Stone quarry of Muhammed Haneefa can be considered for Environmental Clearance after placing all relevant documents including and not limiting to Form I, Prefeasibility report before SEAC for their appraisal and making a detailed appraisal in accordance with law".
- 7. The Authority in its 65th meeting held on 22nd March 2017 decided to ascertain whether the quarry is working without EC and place in the next meeting for a decision.

The proponent enclosed in the basic details that the proposed quarry is not working. Quarry worked only up to 03-12-2016 based on quarry permit provided by DMG.

- 8. The proposal was again considered in the 67th SEIAA meeting held on 28th April 2017. The Authority decided to issue Environmental Clearance for mining subject to the general conditions and to the specific condition that the depth of mining shall be limited to 70m. An affidavit to this effect should be submitted before the issuance of Environmental Clearance.
- 9. The proponent has submitted an affidavit vide reference 9th cited, satisfying all the above conditions. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed building stone quarry project in Sy. No. 267/1(pt), 267/2(pt), 269/1(pt), 270/1, 270/2(pt), 270/3(pt), 270/4(pt), 270/5(pt), 270/6(pt) & 276/1(pt) of Shri.Muhammed Haneefa at Nediyiruppu Village, Kondotty Taluk, Malappuram District, Kerala State for an area of 7.3685 Ha, subject to the specific conditions as recommended by SEIAA in para 8 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.
- 10. 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.
- 11. 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, 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.Muhammed Haneefa,S/o Muhammed Kutty Haji,Kari House, Chirayil (PO), Kondotty (via), Malappuram District, Kerala-673638

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

To,

Sri . Muhammed Haneefa S/o Muhammed Kutty Haji, Kari House , Chirayil (PO) Kondotty (via) Malappuram District, Kerala 673638

Copy to,

- 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, Malappuram
- 6. The District Geologist, Malappuram
- 7. The Tahasildar, Kondotty 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.
- 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 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.
- 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.
- 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.

Catch drains and siltation ponds of appropriate size shall be constructed around the mine 44. 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.

Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas 45. prone to air pollution and having high levels of PM10 and PM2.5 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.

Fugitive dust emissions from all the sources should be controlled regularly. Water spraying 46. arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

Measures should be taken for control of noise levels below 85 dBA in the work environment. 47.

A separate environmental management cell with suitable qualified personnel should be set-up 48. under the control of a Senior Executive, who will report directly to the Head of the Organization.

The funds earmarked for environmental protection measures and CSR activate should be kept in 49. 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.

The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the 50. 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 51. preferred, within a period of 30 days as prescribed under Section 16 of the National Green

Tribunal Act, 2010.

Concealing the factual data or submission of false/fabricated data and failure to comply with any 52. of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

The SEIAA may revoke or suspend the order, for non implementation of any of the specific or 53. 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.

The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or 54. simplified, contained in any other permit, license on consent given by any other authority for the

same project.

This order is valid for a period of 5 years or the expiry date of mine lease period issued by the 55. Government of Kerala, whichever is earlier.

The Environmental Clearance will be subject to the final order of the courts in any pending 56. litigation related to the land or project, in any court of law.

The mining operation shall be restricted to above ground water table and it should not intersect 57. ground water table.

All vehicles used for transportation and within the mines shall have 'PUC' certificate from 58. authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'

Project proponent should obtain necessary prior permission of the competent authorities for 59. drawal of requisite quantity of surface water and ground water for the project.

Regular monitoring of flow rates and water quality upstream and downstream of the springs and 60. perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.

Occupational health surveillance program of the workers should be under taken periodically to 61. observe any contractions due to exposure to dust and take corrective measures, if needed.

For Member Secretary, SEIAA Kerala

