



Validity expires on 15/09/2022

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. 105 pt and 111 pt of Kannamangalam Village, Malappuram District by Mr.Abdul Khadar.K Kanneth House, Cherur.P.O., Vengara (Via), Malappuram District, for an area of 8.8082 hectares - EC granted – Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No.846/SEIAA/EC1/2858/2015

Dated, Thiruvananthapuram 16/9/2017

- Ref:
1. Application dated 22/7/2015 by Sri. Abdul Khadar.K, Kanneth House, Cherur.P.O, Vengara(Via), Malappuram District, Kerala – 676 304.
 2. Minutes of the 49th meeting of SEAC held on 7-8 Dec 2015 .
 3. Minutes of the 55th SEAC Meeting held on 10th11th& 20th May, 2016
 4. Minutes of the 62nd meeting of SEAC held on 06th& 07th September 2016.
 5. Minutes of the 67th meeting of SEAC held on 27th January, 2017.
 6. Minutes of the 69th meeting of SEAC held on 9th and 10th March 2017.
 7. Minutes of the 68th meeting of SEAC held on 12th May 2017
 8. Minutes of the 74th meeting of SEAC held on 14th & 15th June 2017
 9. Minutes of the 71st meeting of SEIAA held on 20/07/2017
 10. Affidavit received on 24/8/2017 from Shri.Abdul Khader.K

ENVIRONMENTAL CLEARANCE NO.69 /2017

Sri.Abdul Khadar K., Kanneth House, Cherur P. O., Vengara (via), Malappuram District-676 304, vide his application received on 22-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos 105 pt& 111pt at Kannamangalam Village, Kannamangalam Panchayath, Tirurangadi Taluk, Malappuram District, Kerala for an area of 8.8082 hectares.

The proposed project site fall in Latitude (N) 11°05' 22.98" to 11°05' 34.87" and Longitude (E) 76°00' 01.43" to 76°00' 11.89". The land classification as per revenue records is private own land and the current proposal is for the new quarry and mineral specific and hence no alternate site was examined. The highest elevation of the lease area is 370 m MSL and lowest is 200 m MSL.

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

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

I. Project details		
1.	File No.	846 / SEIAA / EC1 / 2858 / 2015
2.	Name /Title of the project	Quarry project of Mr. Abdul Khadar.k
3.	Name and address of project proponent.	Mr. Abdul Khadar k. Kanneth House, Cherur P.O., Vengara (via), Malappuram Districy, Kerala-676304
4.	Owner of the land	Private Own Land
5.	Survey No. District/Taluk/ and Village etc.	Survey No. 105 pt and 111 pt of Kannamangalam Village, Thirurangadi Taluk, Malappuram District, Kerala
6.	Details of period of lease of permit with number including the beginning and expiry date of lease/permit (Copy to be attached)	Project
7.	Present Status of the project a. Date & Year of starting the work of the quarry project. b. whether the quarry is working at present or not ? c. If stopped working since when?	A) Not Started B) Not working C) Not Applicable
8.	Date of submission of Application	24-07-2015
9.	Brief description of the project.	The applied area is having building stone throughout the area. As per detailed estimation the geological reserves is about 1,66,13,965 MT. After deducting the minerals locked in mines safety slope 1,06,92,539 MT, the mineable reserves arrived to

		be 59,21,426 MT. The annual production is estimated to be 2,50,000 MTA. At the end of life of mine, the ultimate floor (bottom) level will reach 195 MSL. Under reclamation it is anticipated to undertake plantation in the applied area. Anticipating 50 % growth rate, at the end of life of mine about 8,800 trees will be grown in the total area.
10.	Details of Authorized Signatory and address for correspondence	Mr. Abdul Khadar K. Kanneth House, Cherur P.O., Vengara (Via.), Malappuram District, Kerala-676304
I. Land Details		
11.	a) Extent of area in hectares	8.8082 hectares
12.	b) Is the property forest land/Govt. land/own land/patta land	Private Own Land
13.	c) Quantity of top soil/over burden produced and managed	Top soil : 22,020 cu. m. Overburden : 24,662 cu. m.
14.	d) Latitude and Longitude	Latitude: 11°05' 22.98" to 11°05' 34.87"N Longitude: 76°00' 01.43" to 76°00' 11.89"E
15.	e) Topography of land and elevation	The topography of the lease area is hilly. The highest elevation of the lease area is 370 m. MSL and lowest is 200 m. MSL. As the proposed area is hilly, the drainage of the lease area is towards
16.	f) Slope analysis	As the proposed area is hilly, the slope is towards North
17.	g) Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	Due care will be taken to provide channel all around the foot of the hill to collect run off and also to avoid soil erosion. There is no danger of flood or inundation as the proposed working is above the normal ground level. The area is not susceptible to floods.
18.	h) Access road to the site width and condition	6 m. wide, tarred road
19.	i) Will there be any adverse impact on the aesthetics of the proposal site	The land used will be fully reclaimed and rehabilitated by backfilling the pits and. Plantation and afforestation will add to the improvement in environment and aesthetic beauty of the area.

II. Mining details		
20.	a) Minimum and Maximum height of excavation.	200 m MSL to 370 m MSL
21.	b) Life of mine proposed.	About 24 years
22.	c) Underground mining if any proposed	Not Applicable
23.	d) Method of Mining	The mining will be done by open cast semi-mechanized method of mining.
24.	e) Distance from the adjacent quarry	There is a quarry of Mr. T.P. Abdul Hameed in operation within 500m. for an area of 15 Ares.
25.	f) Cluster condition if any	Nil
26.	g) Has "No cluster certificate" submitted?	Yes. Submitted along with our application at Page No. 185.
27.	h) Distance from nearby habitation	No habitation within 500 m.
28.	i) Distance from nearby forest, if applicable	Nil
29.	j) Distance from protected area, Wildlife Sanctuary, National Park etc.	Nil
30.	k) Distance from nearby streams/rivers/National Highways and Roads	Kadabundi puzha, 4.70 km, S Boddu train, 500m, E
31.	l) Is ESA applicable? If so distance from ESA limit	Not falling in ESA
32.	m) Has approved mining plan, prepared by RQP submitted?	Yes
33.	n) Capacity of production in TPA	2,50,000 MTA
34.	o) Details of mining process	The mining will be done by open cast semi-mechanized method of mining. The bench height and width will be maintained 5 m. Excavated material is transported to the crusher unit existing near the complex for further processing. The ultimate depth of the mine workings is estimated to reach upto 195 m. MSL
III. Details of Project cost		
35.	a) Land cost	
36.	b) Plant and Machinery	Rs. 5.805 Crores
37.	c) Total Cost	Rs. 5.805 Crores

38.	V. Financial Statement including funding source and details of insurance etc.	Source :- Own source & bank loan	
39.	Management Plan	Air Pollution	<p>Mining activities will generate certain quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations.</p> <ul style="list-style-type: none"> • Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust. • To avoid the dust generation from the drilling operations, wet drilling method will be adopted. • Drill machines will be equipped with dust collectors. • Use of appropriate explosives for blasting and avoiding overcharging of blast holes. • Controlled blasting techniques will be adopted. • Watering of haul road and other road at regular intervals. • Provision of dust filters/ mask to workers working at highly dust prone and affected areas. • Provision of green belt all along the periphery of the lease area. • Periodical monitoring of ambient air quality in and around the lease area.
		Water	Provision of storm water collection pond with an



		Pollution	appropriate capacity. The water requirement for sprinkling on sources of dust emission, on roads, landscaping etc. Can be met from the stored rainwater in the pond.
		Noise	<p>The major noise generating source from the proposed activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels:-</p> <ul style="list-style-type: none"> • Proper maintenance of machinery, equipments and improvement on design of machines. • Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas. • Creation of wide green belt of dense foliage between mine areas and residential colonies. • Proper training to personnel to create awareness about adverse noise level effects. <p>Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions.</p>
		Solid Waste Management	<p>Topsoil Management</p> <p>A total estimated quantity of 22,020 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and</p>



		<p>infertility by planting fodder grass and leguminous plants during temporary storage</p> <p>Overburden Management</p> <p>About 24,662 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation.</p>
	Eco-restoration	The year wise programme of eco-restoration for the life of mine, about 8,800 trees will be planted in an area of 8.7417 ha
40.	VI. Whether Environment Management Plan or Eco restoration Plan satisfactory?	<p>The extracted mineral will be transported from the quarry to the end user by adopting following measures so as to minimize dust emissions.</p> <ul style="list-style-type: none"> • In case of long transportation the trucks after loading will be covered with tarpaulin sheets. • Speed of the vehicles will be maintained within prescribed limits. <p>Trucks will not be over loaded and will be maintained at the body level</p>
41.	Does it suggest mitigation measures for each activity	
42.	If Pre-Feasibility Report (PFR) satisfactory	Yes. Submitted along with our application.
43.	Does it need public hearing	No Public Hearing required because of the project comes under below 25 ha. (Category B2)
44.	Details of litigation and Court verdict if any	No.
45.	Details of public complaint, if any	Nil.
46.	Details of statutory sanction required	<p>a. Mine Lease</p> <p>b. NOC from Pollution Control Board</p> <p>c. Environment Clearance from SEIAA /</p>

		MoEF NOC from Explosive Dept.
47.	If CRZ recommendation applicable?	NA
PART B		
Environment Impact Assessment and Mitigation Measures		
Impact on water		
48.	Details of water requirement per day in KLD	The total water requirement is about 5 KLD in which 1 KLD is for domestic which would be sourced from open well, 2 KLD for dust suppression system in mine and 2 KLD for plantation purposes and will be sourced from storm water pond.
49.	Water source/sources.	Open Well & Storm water pond
50.	Expected water use per day in KLD.	5 KLD
51.	Details of water requirements met from water harvesting.	It is proposed to construct a storm water collection pond and de-siltation unit in the lowest contour of the plot. The water requirement for sprinkling on sources of dust emission, roads and for landscaping purposes can be met from the stored rain water pond and thereby conserve the fresh water.
52.	What are the impact of the proposal on the ground water?	The source of water for the project are :- Stored Rain water (Tanks), Wells. The use of ground water (standby arrangement) only based on the permissible yield from the large open wells. Thereby no impact to the ground water.
53.	How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	Not applicable as the project is quarry Project
54.	What is the incremental pollution load from waste water generated from the proposed activities?	Not applicable as the project is quarry Project
55.	How is the storm water from within the site managed?	It is proposed to construct a storm water collection pond and de-siltation unit in the lowest contour of the plot.

Impact on Biodiversity and Eco restoration Programmes		
56.	Will the project involve extensive clearing or modification of vegetation (Provide details)	The some area of proposed quarry has native trees, climbers, grass, shrubs, herbs etc.
57.	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 95 % which includes areas like along mine lease boundary (7.5 m width), all along the periphery and reclaimed area. Grass and bushes will be planted in areas prone to erosion especially at the foot of the hill. Other areas will be fertilized and planted with local species. The characteristics of this vegetation will resemble that of the natural environment except for the early growth, which may be a protective cover crop of non-seeding annuals.
58.	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)	
Impact on Air Environment		
59.	What are the mitigation measures on generation of dust, smoke and air quality	The prime objective of the baseline air monitoring was to evaluate the existing air quality of the area. This will also be useful for assessing the conformity to standards of the ambient air quality during the operation of the proposed mine.
60.	Details of internal traffic management of the site.	NA
61.	Details of noise from traffic, machines	Yes, noise level monitoring carried out from an

	and vibrator and mitigation measures	approved laboratory at site and report of the same is already submitted.
62.	Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	Drilling, blasting, compressors, plying of vehicles are the main sources of noise.
63.	Air quality monitoring in detail	Details already provided at EMP section at Sr. No. 39 above.
Energy Conservation		
64.	Details of power requirement and source of supply.	The total power requirement will be 75 kW for compressors which will be operated by Diesel Engine.
65.	Details of renewable energy (non – conventional) used.	The project proponent proposed to have a solar power plant to meet the energy requirements of the site office & labour quarters.
Risk Management		
66.	Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	<p>Water barricading and monitoring of the water level in the site area would be taken up to prevent accidents.</p> <p>Well equipped medical / hospital facilities should be available round the clock for attending emergency arising out of accidents.</p> <p>All working personnel would be medically examined at least once in every year and at the end of his term of employment.</p>
67.	Are proposals for fencing around the quarry satisfactory?	New Quarry project
	Storage of explosives/hazardous	Considering low consumption, a 550 kg magazine is for storing the explosive. The magazines are exists within the complex. Detailed Environment Management Plan is already submitted with E.C. Application at Page No.30

<p>substance in detail</p> <p>Facility for solid waste management</p>	<p>A total quantity of 22,020 cu. m. of topsoil and 24,662 cu. m of over burden will be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. OB will be utilized for laying internal haul road and will form base in reclamation / plantation.</p>
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Socio Economic Impacts

<p>68. Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?</p>	<p>No.</p>
<p>69. Will the proposal result in any changes to the demographic structure of local population. If so, provide details.</p>	<p>The proposed project will directly / indirectly develop the area by providing employment opportunities. With the proposed development in and around the area there will be many supporting facilities/ infrastructure eventually leading to the development of the area.</p>

		Common CSR ACTIVITIES already carried out		
		no	Particulars	Amount in Rs. In lakhs
70.	Are the CSR proposals satisfactory. Give details	1	Financial contribution to patients suffering from Kidney deceases	1.5
		2	Financial support to the local clubs for their annual tournaments and cultural Programs	0.50
		3	Provided food items on Ramadan days for the economically backward families situated near by	1.20



			the project.	
		4	Financial contribution to the Masjid, Temple and Church located at near by the project.	1.50
71.	What are the projects benefits in terms of employment potential?	24 people are directly and indirectly working this quarry		
PART C				
72.	Details of NABET approved EIA Consultant engaged-Their name, address and accreditation details	M/s Environmental Engineers & Consultants Pvt. Ltd. (Sr. No. 58 as per MoEF&CC list of Accredited Consultant Organization) <i>Head Office :-</i> A1-198, Janak Puri, New Delhi. <i>Branch Office:-</i> C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.		
Summary and Conclusion				
73.	Overall justification for implementation of the project.	<p>It is predicted that socio-economic impact due to this project will positively increase the chance of more employment opportunities for local inhabitants. There are no Resettlement and Rehabilitation issues involved in this project. The project infrastructures will be of use to people of the area. The revenue of the State Govt. will be definitely increasing due to the proposed activity.</p> <p>The entire project area is devoid of any endangered flora and fauna. It is proposed to reclaim the land and develop green cover for eco-restoration with native species to a maximum possible extent. Additionally, an area is earmarked outside the proposed mining area for compensatory mass plantation. Also, a storm water pond is proposed outside the mining area for storage of rain water and for its subsequent use so as to conserve fresh water consumption. Thus the proposed project is not likely to affect the environment or adjacent ecosystem adversely</p>		

74.	Explanation of how adverse impact have been mitigated.	No, there will be no adverse impacts envisaged on the aesthetics of the project site. Detailed Pre-Feasibility Report (PFR) with Environment Management Plan (EMP) is already submitted with E.C.
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2. 49th meeting of SEAC held on 7-8 Dec 2015 has considered the matter as per the approved mining plan (KMMC Rules-2015) submitted. The total area proposed for EC is 8.8082ha. which is patta land. Ultimate depth of mining proposed is 195 m MSL. The annual production capacity is 2,50,000 MTA. The proposal is for a fresh quarry unit. To the enquiry of the committee, the proponent has informed there is no complaint against the quarry unit and the quarry is yet to be started. Since the proposed quarry is a fresh one, the committee decided to defer the item for field visit. *The sub-committee of SEAC consisting of Dr. Khaleel Chovva and Dr. P. S. Harikumar visited the quarry project on 27-03-2016 in Survey Nos. 105 & 111 at Kannamangalam Village, Tirurangadi Taluk, Malappuram Dt. of Sri. Abdul Khader K. The proponent was present at the site. The proposal is for a fresh quarry for an area of 8.8082 ha out of the total area of 13.7640 ha. Another quarry, with an area of 0.15ha of is operating within 500 m radius. Now it is a virgin rock area having different varieties of local plants and rubber plantation all around. Quarrying has not been started. The approach road was found to be not tarred and found to be a bad condition. There are over burden ranging from 0 to 3m thickness on the proposed quarrying area. Recommend for issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.*
1. *Fencing should be provided all around the project area.*
 2. *Storm water drainage from the quarry must be let out to the stream only after clarification.*
 3. *RWH structure should be provided in the site.*
 4. *Over burden must be stored in a designated place at a lower elevation.*
 5. *Approach roads to the quarry needs to be properly developed*
3. 55th SEAC Meeting held on 10th, 11th & 20th May, 2016 considered the inspection report of the Subcommittee. In view of some negative remarks in the inspection report the committee decided to include the Geology Expert Sri. John Mathai also to the subcommittee for inspecting the site. As decided in the 55th meeting of SEAC, additional site inspection in the proposed quarry project site of Sri. Abdul Khader was carried by Sri. John Mathai, (Member, SEAC) Kerala on 16.07.16 in the presence of the Proponent.
4. SEAC considered the proposal ^{and} as the report again in its 62nd meeting held on 06th & 07th September 2016. The Committee after examining the Minutes of 55th meeting of SEAC

held on 10th, 11th and 20th of May, 2016, and the two inspection reports observed that since differing views have emerged regarding the suitability of the site for mining it was decided to get the site inspection conducted by a team consisting of Dr. George Chackacherry, Dr. Khaleel Chowwa, Dr. P. S. Harikumar and Sri. John Mathai.

The site visit to the quarry was carried out twice on 27-03-2016 and 16.07.16. As per the decision of 64th SEAC meeting, a team consisting of following members again visited the site on 16-12-2016.

1. Dr KhaleelChovva
2. Dr E A Jayson
3. Dr George Chackacherry
4. Dr P S Harikumar

The proponent was present during the site visit. The topography slope, drainage, land use, human habitations, probability of land slide, accessibility to the site etc were examined during the site visit

Observations:

The area is proposed to have an open cast mining

The accessibility of the site is through a private road which is narrow at some places and proponent had developed certain stretches of the road by laying concrete slabs.

The quarry is situated in a hill ridge (Urot mala)

No quarrying was started during the site visit.

The highest elevation of the mine area is 370m MSL and lowest is 200 m MSL

During the site visit, the proponent had arranged a survey team from M/S Survey and Engineering Solutions, Calicut. They had measured the slope in their presence and showed the measurements as follows:

The slope of the site varies 24^o to 30^o

The drainage of the site is towards South East to North West

No habitations were seen near the site

At certain locations some overburden was observed

In the upper part, coconut is seen planted in places with good soil cover. In the lower part of the slope and adjoining valley rubber is dominant. In other places, local vegetation was seen around the site.

5. The proposal was considered in the 67th meeting of SEAC held on 27th January, 2017. The Committee observed that the latest site visit report indicate only a slope bearing between 24^o to 30^o and does not point out any appreciable depth of overburden at the site. A letter from the Geologist Malappuram indicating, the locality has not history of landslides is also produced. After deliberations though the committee including the Sub Committee members Dr.K.M.Khaleel and Dr.George Chackacherry did not find any material to deny EC to the proponent.
6. The proposal was considered in the 69th meeting of SEAC held on 9th and 10th March 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. *The accessibility to the site should be improved*
2. *The drainage should be properly developed so that the water coming from the top should be properly collected and harvested. The water should be clarified before discharge*
3. *The overburden should be properly deposited at a specific site.*
4. *The boundary of the mining area should be clearly demarcated with fencing and identification signs*
5. *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.*

The proponent agreed to set apart Rs.11.65 lakh (non-recurring) and Rs.15.66 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat.

The proponent noted through the basic details that the quarry is not working and it is a fresh quarry.

7. The proposal was placed in the 68th meeting of SEIAA held on 12th May 2017. However, the Authority decided to return the proposal to SEAC for reconsideration of their recommendations. SEAC may also look into the status of the litigation pending against the quarry.
8. The proposal was considered in the 74th meeting of SEAC held on 14th & 15th June 2017. The Committee examined the suggestions made by SEIAA. The Committee once again considered all points of view which came up during the course of appraisal. The Physical features of the area is not anything unusual from many other areas for which we have already issued EC. Further, the district geologist has reported that the area has no history of landslides. Considering all the facts, the Committee came to the conclusion that there is no reason to change its earlier recommendation.
9. The proposal was considered in the 71st meeting of SEIAA held on 20/07/2017. Authority accepted the recommendation of SEAC and decided to issue EC subject to general conditions in addition to the following specific conditions.

1. *The accessibility to the site should be improved*
2. *The drainage should be properly developed so that the water coming from the top should be properly collected and harvested. The water should be clarified before discharge*
3. *The overburden should be properly deposited at a specific site.*
4. *The boundary of the mining area should be clearly demarcated with fencing and identification signs*

5. *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.*

The proponent should set apart an amount of Rs.11.65 lakh (non-recurring) and Rs.15.66 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat. EC will be issued only after fulfilling all the pre-mining conditions in the project site and a notarised affidavit should be submitted to this effect and agreeing to all the general and specific conditions. The proponent has submitted an affidavit vide reference 10th cited, satisfying all the above conditions.

10. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed building stone quarry project of Shri.Abdul Khadar.K,Kanneth House, Cherur.P.O, Vengara(via), Malappuram District- 676 304, Kerala State for an area of 8.8082 Ha,in Sy No. 105 pt& 111pt of Kannamangalam Village, Thirurangadi Taluk Malappuram District subject to the specific conditions as recommended by SEAC 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.
11. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and the undertakings in Chapter 4 (Mining), Chapter 5 (Blasting), 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.
12. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.
13. 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 Mr. Abdul Khadar.K, Kanneth House, Cherur.P.O., Vengara (Via), Malappuram District, Kerala – 676 304.

Sd/-

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

To,

Mr.Abdul Khadar.K
Kanneth House,
Cherur.P.O.,
Vengara (Via)
Malappuram District – 676 304.

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, Malappuram
6. The District Geologist, Malappuram
7. The Tahsildhar, Thirurangadi 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 of 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 condition.
17. Height of benches should not exceed 5m, and width should not be less than 5 m, if there is no mention in 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 or 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