



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

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

Sub: Environmental Clearance for the building stone quarry project in
Sy.No.21/1A1 at Kolayad Village and Panchayat, Thalassery Taluk, Kannur
District, Kerala by Sri. V.K. Benny -EC Granted-Orders issued

State Environment Impact Assessment Authority, Kerala

No. 628/SEIAA/EC4/4811/2014

Dated: 22-07-2016

- Ref: 1. Application dated 29-9-2014 from Sri. V.K. Benny, Co-Owner, Vakkachalil House, Kolayad, Puthalam P.O., Kannur-670650
2. Minutes of the 46th meeting of SEAC held on 29/9/2015
3. Minutes of the 52nd meeting of SEAC held on 8/9-2-2016
4. Minutes of the 55th meeting of SEAC held on 10/11/20-5-2016
5. Minutes of the 54th meeting of SEIAA held on 21-6-2016

ENVIRONMENTAL CLEARANCE NO. 93 /2016

Sri. V.K. Benny, Co-Owner, Vakkachalil House, Kolayad, Puthalam P.O., Kannur District vide his application received on 10-10-2014 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy.No 21/1A1 at Kolayad Village and Panchayat, Thalassery Taluk, Kannur District, Kerala for an area of 2.9302 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II(M) dated 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) dated 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the project are as under:

File No.	628/SEIAA/EC4/4811/2014
Name of project	Quarry project of Sri. V.K. BENNY
Brief description of the project	Quarry project with an area of 2.9302 ha. & production capacity of 1,20,000 MTA
Category/Subcategory & Schedule	Category B/B/2 & Schedule 1 (a)
Location Sy no/ district, Taluk/ village	Survey No. 21/1A1, Kolayad Village & Panchayat,

etc.		Thalassery Taluk, Kannur District, Kerala.	
GPS co-ordinates		Latitude (N)	11°52'11.75" to 11°52'04.16"
		Longitude (E)	75°42'55.08 to 75°42'41.60"
for Mining projects	Extent of area (in hectares)	2.9302 ha.	
	Minimum and maximum height of excavation (MSL)	140 m MSL and 65 m. MSL	
	Life of mine proposed	5 Years	
	Ultimate depth of mining (in MSL)	65 m. MSL	
	Distance from the adjacent quarry	There is no quarry in operating within 500 m. radius.	
	Capacity of production	1,20,000 MTA	
	Details of Project Cost	Rs. 1 Crore	
ABOUT THE PROJECT			
Environmental parameters considered			
WATER			
Water requirement & sources		The total water requirement is about 6 KLD in which 2 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.	
RWH units proposed		Rain water collection pond.	
Facilities for liquid waste treatment		Not applicable	
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		No impoundment, damming, culverting, realignment or other changes to the hydrology of surface water courses.	
Water quality meeting requirements		Water quality to meet requirements as per rules after the treatment of water (filtration, disinfection & sedimentation), to let out from the site.	
Does it have provisions for use of recycled water		No	
LAND			
Proximity to forest lands		Kannavam, 5 km.	
Is the land assigned for any other special purpose; Give details		No	
Access road to the site –Width & Condition		8 m. wide, tarred road, S & W	
Storage of explosives /hazardous substances		Yes, Explosives will be stored as per Explosive Act / Rules.	
Facility for solid waste management.		The Municipal Solid Waste will be disposed as per rules	
Topographic features/ slope		The topography of the lease area is hilly area covered with native tree, climbers, grass, shrubs, herbs etc. Slope = towards SW side.	
Proneness of the area for landslides		No	
Significant land disturbance resulting in erosion, subsidence & instability		No	
Top soil, overburden etc.		Top soil = 16,116 cu.m. Overburden = 13,186 cu.m.	
AIR			
Likely emissions affecting environment		Diesel engine emissions & emissions from movement of vehicles like dumpers, trucks, tankers etc. will also generate.	
ENERGY			
Energy requirement		The total power requirement will be 75 kW for compressions, which will be drawn from diesel engine.	

Energy Sources	From diesel engine.			
Extent of usage of alternative energy resources	No			
BIODIVERSITY				
Presence of any endangered species or red listed category	No			
Loss of native species and genetic diversity	For the quarrying activity all of native tree species all of native tree species, shrubs, herbs, climbers etc. existing at project site will be cleared.			
Likely displacement of fauna	No			
Any introduction of alien / invasive species	No			
SOCIAL ASPECTS				
Proximity to nearest habitation	125 m. , S			
CSR components suggested				
Sr. No	Description	Approx. Amount proposed	Remarks	
1.	Education	Recurring = Rs. 2.5 lakhs Non-recurring = Rs. 2.15 lakhs	A detailed study on social status of the project site surroundings & need base study on proposed CSR activities were carried out. The summary of the report is provided.	
2.	Health	Recurring = Rs. 4.26 lakhs Non-recurring = Rs. 7.75 lakhs		
3.	Women Empowerment	Recurring = Rs. 1.85 lakhs Non-recurring = Rs. 1.0 lakhs		
	Total	Recurring = Rs. 8.61 lakhs Non-recurring = Rs. 10.90 lakhs		
GENERAL				
Eco restoration programmes proposed	The year wise programme of afforestation for the life of mine, about 2,000 trees will be planted. The main aim of the green belt development is to restore the eco-system to its original form to a maximum extent by designing the green cover with the same native species.			
Litigation/court cases, if any, against the project (provide details)	Nil as informed by proponent			
Details of Authorized Signatory	Sri. V.K. Benny, Co-Owner, Vakkachalil House, Kolayad, Puthalam P.O., Kannur-670650 Ph.No.0490-2302360, 9447411260 Email:vkstonecrusher@gmail.com			
Details of NABET approved EIA consultant organization	M/s Environmental Engineers & Consultants Pvt. Ltd. (at Sr. No. 54 as per MoEF & CC list of Accredited Consultant Organization) <i>Head Office :-</i> A1-198, JanakPuri, New Delhi. <i>Branch Office:-</i> C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.			

2. Since the tenure of the SEIAA, Kerala had expired, the proponent submitted an application to MoEF directly for getting EC. Since SEIAA, Kerala has been constituted, MoEF returned the proposal to SEIAA as per the letter No. Z-11013/24/2015-IA-II (M) dated 01-04-2015. The proponent submitted Approved Mining Plan also. The proposal was placed before 46th meeting of SEAC held on 29-9-15. The Committee decided to defer the item for field visit and for submission of revised mining plan and letter of intent as per KMMC Rule 2015. According to the decision taken by 46th SEAC that field visits was conducted on 22-10-15 by the subcommittee members. The field inspection details are given below.

"It is an existing stone quarry. The proposal is for an area of 2.93 ha out of the total area of 5.05 ha. Open cast semi mechanized method is practiced. Benching is started .Fencing and warning boards are found. Vegetation is seen around the quarry with few endemic species which will be protected by the owner. No houses or settlements are noticed in the nearby area.

In addition to the general conditions, the following specific conditions should be applied.

The drainage water should be collected in pits after providing proper silt traps."

3. The proponent, however, has not submitted the revised Mining Plan and letter of intent. The proposal along with field visit report was again placed in the 52nd meeting of SEAC held on 8th & 9th February 2016. The Committee deferred the item once again for submission of Mining Plan and letter of intent. The proponent submitted the revised Mining Plan and letter of intent on 26-2-2016.

4. The proposal was placed in the 55th meeting of SEAC held on 10th, 11th and 20th of May 2016. The Committee appraised the proposal based on Form 1, Pre-feasibility Report and Mining Plan. The Committee recommended to issuance of EC subject to the general conditions and a specific condition to provide proper silt traps for drainage water.

5. The proposal was placed in the 54th meeting of SEIAA held on 21-6-2016. The Authority accepted the recommendation of SEAC and decided to issue E.C subject to the specific condition suggested by SEAC given in para 4 and the general conditions for mining projects. State Environment Impact Assessment Authority Kerala hereby grant environmental clearance to the proposed quarry project by Sri. V.K. Benny in Sy.No 21/1A1 at Kolayad Village and Panchayat, Thalassery Taluk, Kannur District, Kerala for an area of 2.9302 hectares subject to the specific condition given in para 4, general conditions in the appendix, mitigation measures undertaken in the EMP, in the PFR and in the Mining Plan submitted.

7. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures in the Environment Management Plan in Chapter 2 of the Pre-Feasibility Report 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 undertakings in Chapter 10 (Mining and Blasting) Chapter 12 (Mine Drainage), Chapter 18 (Environment Management Plan) and Chapter 19 (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 earlier review in the event of genuine complaint from anybody from the safety area or violation or non-compliance of any of the conditions stipulated herein.

9. Compliance of the conditions herein will be monitored by the Authority or its agencies 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, Kannur to take legal action under the Environment (Protection) Act, 1986.

iii) The given address for correspondence with the authorized signatory of the project Sri. V.K. Benny, Co-Owner, Vakkachalil House, Kolayad, Puthalam P.O., Kannur-670650.

Sd/-
V.S. SENTHIL.I.A.S,
Member Secretary (SEIAA)
&
Additional Chief Secretary
Environment & Forests Department.
Government of Kerala.

To,

Sri. V.K. Benny,
Co-Owner,
Vakkachalil House,
Kolayad, Puthalam P.O.,
Kannur-670650.

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. Director, Mining & Geology, Thiruvananthapuram -4.
4. District Collector, Kannur

5. Secretary, Kolayad Grama Panchayat, Thalassery Taluk, Kannur-670650
6. Chairman, SEIAA.
- ✓ 7. Website.
8. S/f
9. O/c



Forwarded/ By Order

Administrator, SEIAA

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

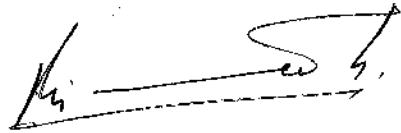
1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. Suitable avenue trees should be planted along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

30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
31. All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
32. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.
33. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
34. The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
35. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
36. A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
37. The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
39. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine

working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul Road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
49. The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or 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 up stream and down stream 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

