

**Proceedings of the District Environment Impact Assessment Authority
Palakkad**

Present: D.Balamurali IAS, Chairman, Asif K Yusuf IAS, Member Secretary,
Narendranath.V IFS, Member

Sub: Environmental Clearance for the building stone quarry project in Survey No. 229 of Vandazhi-I Village of Alathur Taluk, Palakkad District by Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District - EC Granted- Orders issued.

District Environment Impact Assesment Authority, Palakkad

EC No. DIA/KL/PL/25/2018

Dated: 29/11/2018

- Ref: 1. No. SO 190(E) dt: 20/01/16 of MoEF Government of India.
2. Lr. No. LRG 5-2016/37766/9 dt: 17/06/2016, of District Collector, Palakkad.
3. Lr. No. 4195/EC2/2015 SEIAA dt: 10/06/2016, 19/07/2016 of SEIAA, Thiruvananthapuram.
4. Online application filed by Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.
5. Minutes of the 21st meeting of DEAC held on 12/07/2018.
6. Minutes of the 13th meeting of DEIAA held on 19/11/2018.

ENVIRONMENTAL CLEARANCE NO. DIA/KL/PL/25/2018

Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District vide his application received on 18/05/2018 has sought Environmental Clearance under EIA notification, 2006 for the quarry project in Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District for an area of 0.9712 Hectares. The project comes under category B Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50hectares) and as per O.M No. L-11011/47/2011-1A.11(MM) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-1A-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:

Location sy no/district, Taluk/village etc.		Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District.	
GPS co- ordinates		Latitude(N)	N 10° 32' 18.59" N to 10° 32' 22.99"
		Longitude(E)	E 76° 32' 11.45" E to 76° 32' 17.46"
For mining projects	Extent of area (in hectares)	0.9712 Hectares	
	Minimum and maximum height of excavation (MSL)	90m to 122m	

Life of mine proposed	3 years
Ultimate depth of mining (in MRL)	90m (3 Years)
Distance from the adjacent quarry	There is no working quarry within 500m.
Capacity of production	60000 TPA
Details of project cost	30,00,000

ABOUT THE PROJECT

Environmental Parameters Considered

WATER

Water requirement & sources	The total requirement of water is 5.0 KLD. About 1.0 KLD is required for domestic consumption, 4.0 KLD is required for dust suppression and for green belt development. Ample water collected by rain water harvesting is available in the old pits in the southern boundary.
RWH units proposed	A rain water harvesting structure shall be provided in the northern side outside the applied area.
Facilities for liquid waste treatment	There will not be any disposal of water from mine and hence no treatment of water is required.
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	The drains should be regularly de silted and maintained properly. Check dams and gully checks shall be constructed wherever required to arrest siltation.
Water quality meeting requirements	There is no natural water body in the permit area. Mining operation will terminate much before the water table and there will not any intersection on the ground water body.
Does it have provisions for use of recycled water	No

LAND

Proximity of forest lands	No forest land near proposed area.
Access road to the site- width & condition	7 M. Private road. Road must be maintained in good motorable condition.
Storage of explosives/ hazardous substances	The controlled blasting is proposed by adopting all the safety measures as per MMR-1961 and with the permission of DGMS. The explosive by authorised blasting party himself and the blasting should be carried out by registered blasting contractor as per present practices.
Facility for solid waste management	Top soil generated/recovered shall be utilized for afforestation purposes and OB shall be used for reclamation and haul roads formation. There is no other solid waste anticipated during the quarrying operation.
Topographic features/slope	Topography of the quarry permit area is slopping towards North East. The slope steadily diminishes to 104m contour level in the North East of the quarry from the 122m on the South West.

Proneness of the area for landslides	There is no likelihood of any landslide at any stage.			
Significant land disturbance resulting in erosion, subsidence & instability	The final pit slope will not be kept at an angle steeper than 45° which is not likely to cause any problem in respect to the slope stability.			
Top soil, overburden etc.	Top soil and overburden thickness varies from about 0.5m to 1.5m. Top soil estimated to recover is 10000 tonnes.			
AIR				
Air quality meeting requirements	Quality of present ambient air is within permissible limit. There is no industrial activity in and around the proposed permit area. The mining has been proposed by semi-mechanised open cast method. Water spraying shall be done on service road, mining area, loading and unloading places etc. There shall not be any significant impact on ambient air quality.			
Noise level meeting requirements	Noise arising out of the quarrying and processing operations shall be abated or controlled by the lessee at the source so as to keep it within the permissible limit. By applying the air pollution control techniques, no significant noise impact is anticipated.			
Likely emissions affecting environment	No			
ENERGY				
Energy required	All quarry activities shall be carried out using deisel operated machineries and the quarry shall be worked only during day light hours.			
BIO DIVERSITY				
Presence of any endangered species or red listed category	No			
Loss of native species and genetic diversity	No			
Likely displacement of fauna	There is no wild life in core zone, buffer zone and permit area. The agricultural lands with rural activities all around the area do not provide favourable homeland to wild fauna.			
Any introduction of alien/ invasive species	No			
SOCIAL SPECIES				
Proximity to nearest habitation	There is no habitation within 100m radius of the proposed site.			
CSR related to the project/ allocation/ time frame	Sl No	Particulars	Approx. Amount	
			Recurring	Non- Recurring
	1	Health	Rs. 45,000/-	Nil
	2	Education	Rs. 30,000/-	Nil
	3	Social aspects	Rs. 25,000/-	Nil
	Total		Rs. 1,00,000/-	

3. A qualified person shall be appointed to control, direct, manage and supervise the quarrying operations.
4. The approach road to the quarry must be in good motorable condition.
5. Controlled blasting should be practiced and blasting shall be done only during day time.
6. Plantation shall be done which includes a green belt of adequate width around the Mining Lease area excluding the rocky area, along roads, overburden dumps and non mineralized area by planting suitable native species in consultation with the local DFO/ Agriculture Department.
7. A rain water harvesting structure shall be provided in the northern side outside the applied area.
8. The drains should be regularly de silted and maintained properly. Check dam and gully checks shall be constructed wherever required to arrest siltation.
9. Fencing must be maintained properly all around the lease area.
10. Appropriate sign boards should be displayed.
11. The blasting time must be displayed and strictly adhered to.
12. Dust suppression mechanism must be in place.
13. Health and welfare measures for the persons employed shall be implemented.
14. The overburden shall be properly stacked and suitably protected from soil erosion by planting fodder grass and leguminous plants during temporary storage.

The proponent Sri. Prakash.N. - Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District has remitted the processing charge of Rs. 48,560/- (Rupees Forty eight thousand five hundred and sixty Only) as per Chalan No. KI.001768943201819M dt: 19/05/2018, Sub Treasury, Palakkad as online processing fee for Environmental Clearance in the name of O/o. Member Secretary, DEIAA, Palakkad (Head of Account-1425-00-501-99). Also the total amount of CSR activities (of 3 years) is Rs. 3,00,000/- (Rupees Three Lakhs only) which needs to be redrafted. An affidavit has been filed to the effect that the quarry has not functioned since 06/12/2016.

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 11 of the Mining Plan and the mining features including progressive mine closure plan as submitted with the conditions and undertakings in mining, blasting, mine drainage, 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.


Validity of the Environmental Clearance will be three 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 the general and specific conditions has to be scrupulously followed.

Under the circumstances stated above, sanction is hereby accorded to Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District for the building stone quarry project having an extent of 0.9712 Hectares of land in Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District. EC will become operational only after fulfillment of all the pre-mining conditions.

Compliance of the conditions herein will be monitored by the Geologist, Palakkad. 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. Instances of violation if any shall be reported to the District Collector, Palakkad to take legal action under the Environment (Protection) Act, 1986 and Notification No. SO 637 (E) dated 28/02/2014 of the Ministry of Environment and Forest, Government of India.




Member Secretary (DEIAA) &
Sub Collector, Palakkad

To

Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.

- Copy to:
1. The Chairman, DEIAA & District Collector, Palakkad.
 2. The chairman, SEIAA
 3. The Chairman, DEAC & Irrigation Engineer, Palakkad.
 4. The Tahsildar, Alathur.
 5. Geologist, Palakkad.
 6. Village Officer, Vandazhi-I.
 7. Divisional Forest Officer, Palakkad (Member of DEIAA)
 8. Dr. A.V. Santhoshkumar, Professor, Kerala Agricultural University (Expert Member of DEIAA)
 9. Secretary, Vandazhi Grama Panchayath.
 10. Station House Officer, Mangalam Dam.

GENERAL

Does it have eco restoration programmes	During the mine closure stage, the mined out area of 0.6770 Ha shall be reclaimed by with plantation and 0.1 Ha shall retained as rain water harvesting pond.
Sufficiency of parking spaces/ traffic management	The existing transport facility will be utilised for the proposed project. The proposed project does not involve any closure or diversion of existing transport routes.
Litigation/ court cases; if any, against the project (provide details)	No
Right & nature of ownership of land	Private land
Is the property forest land/govt. Land/own land	Non forest private land
Details of Authorised signatory	Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.
Details of NABET approved EIA consultant organisation	Hareesh G Thampy 905 D-9th Street, Sankar Nagar Kaimanam P.O. Trivandrum. RQP/BNG/2296/2013/A

Field visit to the quarry project site of Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District was carried out on 10/07/2018 by the committee members of DEAC, Palakkad comprising Sri. Krishnan.M.N, Sri.K.C. Subramanyan and Sri. Rajesh.A. The proponent with his representatives was present at the site at the time of site visit.

The project is located in Survey No. 229 of Vandazhi-I Village of Alathur Taluk, Palakkad District. The applied area geographically falls in latitude N 10° 32' 18.59" N to 10° 32' 22.99" and longitude E 76° 32' 11.45" E to 76° 32' 17.46". The topography of the applied area is an elevated terrain with rocky land with sporadic wild shrubs and grass. An abandoned small quarry is situated in the south eastern part of the applied area. The quarry of TMT granites adjoins the southern boundary of the applied area. The highest elevation of the applied area is 122m above MSL and lowest elevation is 104m above MSL. The area is gently sloping towards northern direction. Managalam river flows at a distance of 110m from the northern boundary of the applied area. The top soil thickness varies from 0.5 to 1.5 mts. The top soil excavated as a part of quarrying activities shall be stacked separately at a predetermined place. The rock type found in the area is gneissic granitic charnockite. No dwelling units are seen in the immediate vicinity of the applied area.

Based on the overall evaluation of the site the quarry operations may be recommended with general conditions subject to the following specific conditions.

- 1. The natural flow of river seen in the northern side of the applied area should not be disturbed. Outflow of sediment water from the quarry should not be allowed to the river and for this a sedimentation tank of proper size should be put in to operation.*
- 2. Quarrying should be practiced by benching system as mentioned in the approved mining plan.*

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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. Atleast 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 over burden 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 4 ft 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 5m, and width should not be less than 5m, if there is no mention in the mining plan/ specific conditions.
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 should 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 atleast 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. 100m 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 conformation.
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 condition 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, Government 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 mettalic board of 3ft * 3ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extend 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 SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of 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 Notifications 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increase at places of loading and unloading points and transfer point to reduce fugitive emissions.
 43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the top soil shall be used for land reclamation and plantation. The overburden(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 erosions 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 vegetations 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 the 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 measured and CSR activity should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to 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 conditions 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 operations 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 mine 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 this springs and perinnial 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 programmes of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.