



Validity expires on 22/02/2023

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

*Present: Sri.Mir Mohammed Ali I.A.S., Chairman; Sri.S. Chandrasekar I.A.S., Member
Secretary & Sub Collector Thalassery; Sri.Suneel Pamidi.I.F.S., Member and
Sri. O Jayarajan I.F.S (Rtd) Member*

Sub: DEIAA- Environmental clearance for the Proposed Granite (Building Stone) Quarry project for an area of **0.7082 Ha** at **Sy. No. 156, Puthur Village, Thalassery Taluk, Kannur District** of **C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala**

DISTRICT ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KANNUR

No. 218/KNR/2017/DEIAA

Dated 23/02/2018, Kannur

- Ref: 1. Online Application dated 18 Dec 2017 from C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala
2. Minutes of the 11th meeting of DEAC held on 28/12/2017.
3. Minutes of the 12th meeting of DEAC held on 25/01/2018.
4. Minutes of the 12th meeting of DEIAA held on 22/02/2018.

ENVIRONMENTAL CLEARANCE NO. 4/2018

Mr. C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala vide his application received on 18 Dec 2017, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project of an area of **0.7082 Ha** at **Sy. No. 156, Puthur Village, Thalassery Taluk, Kannur District**. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 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) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. As per gazette notification no SO 190(E) dtd 20/01/2016, Government of India and GO(Ms)no.05/2016/Envr Dtd 04/04/2016, Govt:of Kerala DEIAA and DEAC constituted for considering the applications for environmental clearance less than 5 hectares in individual cases and 25 hectares in cluster

The proposed project site falls within Latitude: 11°47'23.82"N to 11°47'29.49"N and Longitude: 75°36'47.13"E to 75°36'52.19"E. The land area consists of



0.7082 hectares, which is private land. The land use classification as per revenue records is private own land. The current proposal is for the existing quarry and mineral specific. Hence no alternate site was examined. The proposed project is for quarrying of 154614 TPA of building stone.

The proposal was considered in the 11th meeting of DEAC held on 28/12/2017. Further to the intimation of DEAC, the proponent along with the RQP attended the meeting and the RQP made a brief power-point presentation of the salient features of the project. The committee appraised the proposal based on Form I, pre-feasibility report, mining plan. The committee deferred the item for field visit. The subcommittee visited the quarry site on 09/01/2018.

The committee recommended to increase CSR budget proportional to the project cost for the proposal. The proponent submitted the same. After the field visit, the proposal was again placed in the 12th meeting of DEAC held on 25/01/2018. The DEAC committee considered the proposal in the meeting and recommended the proposal before DEIAA with following condition. .

1. A Mines manager shall be appointed to control, direct, manage and supervise the Quarrying operations as required under the Mines Act, 1952.
2. Health and welfare measures for the persons employed shall be implemented.
3. Controlled blasting should be practiced and blasting shall be done only during day time. The mitigation measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.
4. 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.
5. The drains should be regularly de silted and maintained properly. Check dam and gully checks shall be constructed wherever required to arrest siltation. De siltation shall also be done every year before the onset of monsoon.
6. Fencing must be maintained properly all around the lease area.
- 7 The CSR should cover the felt needs of the locality with special emphasize for implementing ground water recharging techniques in and at the vicinity of the proposed site

8. Appropriate sign boards should be displayed.
9. The blasting time must be displayed and strictly adhered to.
10. Dust suppression mechanism must be in place.
11. A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the biodiversity assessment etc.
12. The PPV values must be less than 10 mm/sec.
13. The green belt shall be provided around the periphery
14. Where the height of the bench formed during earlier workings exceeds the maximum reach of the excavator engaged for work, such bench height shall be reduced from top to bottom.
15. Loose or hanging rock or mineral boulder on the side wall shall be dressed down before engaging persons for work at the bottom of the bench
16. Permanent boundary pillars should be fixed by the proponent before commencing quarrying.
17. No Quarry blasting to be undertaken and sustained till warning time limit expires and/or when continuous 48 hours cumulative rainfall exceeds 8 cm and blasting shall not be resumed until 24 hrs of rain free situation arises in the quarry locality based on the evaluation by the revenue officials
18. All waste dumps and topsoil dumps shall be properly stabilized by using coir mats or bio-regeneration. Proper drainage system shall be provided so that water is properly diverted away from the dumps slopes with no disturbance to the stability of the slopes.
19. All dump slopes shall be sufficiently stabilized by using appropriate species mix of grass, creepers, shrubs & trees. This shall be done in consultation with the Forest Department and local research institutes and experts in stabilization of mine dumps.
20. Garland drains of at least 2m width shall be provided all along 7.5m buffer zone to divert the water from entering the Quarry slopes. These drains shall be cleaned every year before the monsoon season.
21. The water from the garland drainage shall be directed to the silt settling ponds. The clarified overflow from silt settling ponds, shall be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.
22. A retaining wall of stone rubble with wire mesh of sufficient width and strength (not less than 2m) shall be constructed at the bottom of the slope of the Quarry Lease area to arrest any likely roll of boulders during heavy rainfall.



23. Since it is a working quarry with quarrying lease the committee observed that the mining activity should not be done on the SW side of the quarry because the loose overburden may fall on the quarry site.

The proponent should maintain the following general condition of health also.

1. First Aid kit provided in the work site. It shall be periodically maintained properly. Some labourers shall be trained on First Aid.
2. Wholesome drinking water should be provided.
3. Premises should be maintained as wet to suppress the dust.
4. Sanitary type of latrines and urinals should be provided.
5. Resting place should be provided for workers.
6. 'No Smoking' board should be exhibited according to COTPA Act
7. Work should not be done in night.
8. Details of nearest hospital, Shortest route to hospital and contact no. etc. should be available.
9. Approach roads should be maintained properly

The proposal was placed in the 12th meeting of DEIAA held on 22/02/2018. **The authority decided to issue EC subject to the general condition and the above specific conditions .The proponent should submit an affidavit stating that the above conditions shall be strictly implemented**

The proponent submitted a notarised affidavit dtd. 23/02/2018 stating that he will strictly implement all conditions laid down by the authority . The Environmental clearance as per the EIA notification 2006 is hereby accorded for the Quarry project of Mr. C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala for an area of 0.7082 Ha at Sy. No. 156, Puthur Village, Thalassery Taluk, Kannur District, subject to the general condition and specific conditions as recommended by DEAC, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I(M), EMP, PFR and Mining plan submitted to DEIAA. 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, appended hereto will be applicable and have to be strictly adhered to.

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 2 (Mining), Chapter 2 (a) (Blasting), Chapter 3 (Mine Drainage), Chapter 4 (Stacking of Mineral Reject/Subgrade Material and disposal of waste) Chapter 8 (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 five years from the date of this clearance, subject to inspection by DEIAA 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.

Compliance of the conditions herein will be monitored by the DEIAA, 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, Kannur 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. C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala


S. Chandrasekar I.A.S
Member Secretary (DEIAA)

To,

C. G. George, Chitteth (H), Kuthuparamba P.O., Kannur Dist., Kerala

Copy to,

1. The member secretary, SEIAA, Kerala,
2. The D.F.O Kannur (DEIAA Member)
3. Sri.O.Jayarajan I.F.S Rtd (DEIAA Member)
4. District Geologist ,Kannur
5. District Collector, Kannur & Chairman, DEIAA
6. Secretary, Gramapanchayath/Municipality,
7. Tahsildar, Thalassery
8. Website.
9. S/f
10. O/c

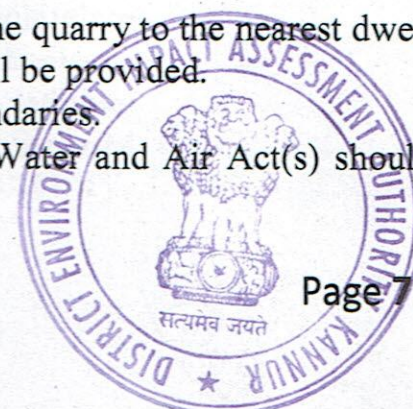


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DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KANNUR

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 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 on consent given by any other authority for the same project.
55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

Member Secretary, DEIAA, Kannur

