



Validity expires on 13.02.2025

**PROCEEDINGS OF THE ADMINISTRATOR, STATE
ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,
THIRUVANANTHAPURAM
(Present. SHAHER BANU)**

Sub: SEIAA- Environmental Clearance for the proposed granite building stone quarry project in Survey Nos. 234/13, 234/5, 235/1, 235/4, 235/5 in Aruvikkara Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala by Mr.Kuriakose .M. Jacob - Granted – Orders issued.

State Environment Impact Assessment Authority, Kerala

No. 1365/EC1/2019/SEIAA

dated, Thiruvananthapuram 14.02.2020

- Ref: 1. Application received on 22.05.2019 from Mr.Kuriakose.M.Jacob, Managing Partner, GSAND Mylammodu, Aruvikkara, Thiruvananthapuram - 695564.
2. Minutes of the 99th SEAC meeting held on 26th & 27th JUNE, 2019.
3. Minutes of the 100th SEAC meeting held on 11th & 12th JULY, 2019.
4. Minutes of the 102nd SEAC meeting held on 26th & 27th AUGUST, 2019.
5. Minutes of the 105th SEAC meeting held on 28th & 29th October, 2019.
6. Minutes of the 106th SEAC meeting held on 28th, 29th & 30th November 2019.
7. Minutes of the 100th SEIAA meeting held on 23rd & 24th December, 2019.
8. Minutes of the 101st SEIAA meeting held on 17th & 18th January, 2020.
9. G.O(Rt.) No.29/2019/Env dt.12.04.2019.

ENVIRONMENTAL CLEARANCE NO. 19 /2020

Mr.Kuriakose.M.Jacob, Managing Partner, GSAND Mylammodu, Aruvikkara, Thiruvananthapuram- 695564 , vide the hardcopy of application received on 22.05.2019, for the proposed granite building stone quarry project in Survey Nos. 234/13, 234/5, 235/1, 235/4, 235/5 in Aruvikkara Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala

for an area of 0.8244 hectare. The project comes under Category B2, Activity 1(a), (i) as per the Schedule of EIA Notification 2006.

2. The proposed project site falls within Latitude $8^{\circ}34'58.75''$ to $8^{\circ}35'1.79''$ N to Longitude $77^{\circ}0'46.47''$ to $77^{\circ}0'50.66''$ E. The lease area consists of 0.8244 Ha and the average production capacity is 45,998 MT. The expected project cost is 1 crore.

3. The proposal was placed in the 99th SEAC meeting held on 26th & 27th JUNE, 2019. The Committee decided to invite the proponent for presentation and also directed to obtain the recent cluster/ non-cluster certificate.

4. The proposal was placed in the 100th SEAC meeting held on 11th & 12th JULY, 2019. The proponent was present and the RQP made presentation. The Committee decided to obtain the following documents from the proponent:

1. Produce a certificate from Competent Authority regarding safety of nearby dam.
2. CER plan of action to be prepared in consultation with the Working Group on Environment of the Local Self Government on a need based manner, as per O.M. of MoEF (F.No.22-65/2017-1A.III dated 01.05.2018) along with disclosure on the socio-economic expert engaged for preparing CER plan of action.

The proponent submitted the documents dated 14.08.2019 as per the 100th SEAC meeting.

Subsequently, the proponent requested vide letter dated 11.07.2019 for considering the application as Environmental Clearance, since the area applied is below one Hectare.

5. The proposal was placed in the 102nd SEAC meeting held on 26th & 27th AUGUST, 2019. The Committee entrusted Shri. K.KrishnaPanicker & Shri .G.Sankar for field inspection. The field inspection was conducted on 25-09-2019.

The proponent also submitted revised CER split up and revised drainage plan, which were suggested by the Subcommittee during field inspection.

6. The proposal was placed in the 105th SEAC meeting held on 28th & 29th October, 2019. The Committee decided to direct the proponent to submit the following document:

1. A map showing site - specific Garland Canal with contours.

The proponent submitted the document on 11.11.2019 as per the 105th SEAC meeting

7. The proposal was placed in the 106th SEAC meeting held on 28th, 29th & 30th November 2019. The Committee decided to recommend for EC subject to the following specific conditions:

1. Appropriate slit traps have to be provided in the garland canal
2. Water body in the old quarry needs to be protected
3. Gabion packing protection should be provided to protect the soil dump
4. Ensure free flow of water to the drainage system in the valley to avoid water stagnation at present

8. The proposal was placed in the 100th SEIAA meeting held on 23rd & 24th December, 2019. The Authority deferred the proposal.

9. The proposal was placed in the 101st SEIAA meeting held on 17th & 18th JANUARY, 2020. Authority decided to issue EC for a period of 5 years for the quantity mentioned in the approved Mining Plan subject to the following specific conditions in addition to the general conditions.

1. Appropriate slit traps have to be provided in the garland canal.
2. Water body in the old quarry needs to be protected.
3. Gabion packing protection should be provided to protect the soil dump.
4. Ensure free flow of water to the drainage system in the valley to avoid water stagnation.
5. Activities relating to Corporate Environmental Responsibilities for an amount of Rs.0.02 crores shall be carried out leading to protection and promotion of environment including waste management in the project district as per OM F.No.22-65/2017-IA-III dt.01.05.2018 of MoEF& CC as directed by Director, Directorate of Environment & Climate Change and supervised by District Collector.

6. *The proponent shall carry out quarrying as per the approved Mining Plan and the proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.*
7. *In the wake of occurrence of large scale landslides in the state, as per the information provided by the Department of Mining & Geology, it is directed to use only NONEL (Non Electrical) technology for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wildlife.*
8. *As per the directions contained in the latest OM F.No.22-34/2018-IA.III dated 16th January 2020 issued by MoEF &CC, in obedience to the directions of the Honourable Supreme Court, the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the half yearly compliance report which will be monitored by SEAC/Regional Office, MoEF&CC, Gol, Bangalore at regular intervals."*
10. Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the granite building stone quarry project of Mr.Kuriakose.M.Jacob, Managing Partner, GSAND Mylanmodu, Aruvikkara, Thiruvananthapuram- 695564, in Survey Nos. 234/13, 234/5, 235/1, 235/4, 235/5 in Aruvikkara Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala for an area of 0.8244 hectare for the quantity mentioned in the Mining plan, for a period of five years subject to the specific conditions in para 9 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 48), 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 6 (Mines Drainage), Chapter 7 (Stacking of Mineral rejects and Disposal of waste) Chapter 11 (Environment Management Plan) & Chapter 12 (Progressive Mine Closure Plan) of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

11. Validity of the Environmental Clearance will be five years from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.

12. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.

- i. Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
- ii. Instances of violation if any shall be reported to the District Collector, Thiruvananthapuram
- iii. The Half Yearly Compliance Report (HYCRs) with its contents of a covering letter, compliance report and environmental monitoring data has to be in PDF format merged into a single document. The email should clearly mention the name of the project, EC No and date, period of submission and to be sent to the Regional Office of MoEFF & CC by email only at email ID rosz.bng-mefcc@gov.in . Hardcopy of HYCRs shall not be acceptable.

- iv. The given address for correspondence with the authorised signatory of the project is Mr.Kuriakose.M.Jacob, Managing Partner, GSAND Mylammodu, Aruvikkara, Thiruvananthapuram- 695564


SHAHER BANU

Administrator, SEIAA

To,

Mr.Kuriakose.M.Jacob
Managing Partner
GSAND Mylammodu
Aruvikkara
Thiruvananthapuram- 695564

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.(through e-mail: rosz.bng-mefcc@gov.in)
- 2.The Principal Secretary to Government, Environment Department, Government of Kerala
3. The Director, Directorate of Environment & Climate Change, 4th Floor KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala 695001.
- 4.District Collector, Thiruvananthapuram
5. Director, Mining & Geology, Thiruvananthapuram -4.
6. The Member Secretary, Kerala State Pollution Control Board
7. District Geologist, Thiruvananthapuram
8. Tahsildhar, Nedumangad Taluk, Thiruvananthapuram District
9. Village Officer, Aruvikkara Village, Thiruvananthapuram District
10. Chairman, SEIAA.
11. Website.
12. S/f
13. O/c

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA
GENERAL CONDITIONS (for mining projects)

1. A separate environmental management and monitoring cell with qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
2. 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.
3. Sprinklers shall be installed and used in the project site to contain dust emissions.
4. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
5. In view of the deep pits left after the excavation, stacking at maximum top level should be carried out.
6. Corporate Environment Responsibility agreed upon by the proponent should be implemented.
7. The project proponent shall comply the conditions stipulated by the statutory authorities concerned.
8. Tarring /multiple options on the access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.
9. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
10. 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.
11. Ground level should be fixed in individual cases separately.
12. No mining operations should be carried out at places having a slope greater than 45°.
13. 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. This condition is applicable only in such cases if a crusher is adjacent to the quarry.
14. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
15. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
16. The transportation of minerals should be done in covered trucks to contain dust emissions.
The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project. SEAC should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in planting.
17. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
18. 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.
19. 50 m buffer distance should be maintained from forest boundaries.
20. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
21. 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.
22. 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.
23. 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.
24. 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.

25. 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.
26. The Environmental Clearance shall be put on the website of the company by the proponent.
27. Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website.
28. 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
29. 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.
30. 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.
31. 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.
32. 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.
33. 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.
34. 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.
35. 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.
36. Measures should be taken for control of noise levels below 85 dBA in the work environment.
37. The funds earmarked for environmental protection measures and CER 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.
38. 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.
39. 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.
40. 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.
41. 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.

42. 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.
43. 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.
44. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
45. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution testing centre. Washing of all vehicles shall be inside the lease area.
46. 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.
47. 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.
48. Occupational health surveillance program of the workers should be undertaken periodically to observe any contraindications due to exposure to dust and take corrective measures, if needed.


Administrator, SEIAA