



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

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

**Sub:** Environmental clearance for the building stone quarry project in Sy.No. 491/4, 491/4-1, 491/5(P) and 491/5-1 (P) at Pazhavangadi Village, Ranni Taluk, Pathanamthitta District by Sri. Joseph Mathew- E.C. Granted.

### **State Environment Impact Assessment Authority, Kerala**

**No. 808/EC4/2239/2015/SEIAA**

**Dated: 30-04-2016**

- Ref:**
1. Application dated nil from Sri. Joseph Mathew, Pullampallil House, Naranamoozhy P.O., Ranni Taluk, Pathanamthitta
  2. Minutes of the 47<sup>th</sup> meeting of SEAC held on 13/14-10-2015.
  3. Minutes of the 52<sup>nd</sup> meeting of SEAC held on 08/09-02-2016.
  5. Minutes of the 51<sup>st</sup> meeting of SEIAA held on 29-03-2016.

### **ENVIRONMENTAL CLEARANCE NO. 61 /2016**

Sri. Joseph Mathew, Pullampallil House, Naranamoozhy P.O., Ranni Taluk, Pathanamthitta District vide his application received on 16-06-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 491/4, 491/4-1, 491/5(P) and 491/5-1 (P) at Pazhavangadi Village, Ranni Taluk, Pathanamthitta District for lease area of 2.0705 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-IA.II(M) dated 18<sup>th</sup> 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:

<i>Category/Subcategory &amp; Schedule</i>	Schedule No. – 1(a) Category – B, Subcategory – B2
<i>Location Sy no/ district, Taluk/ village etc.</i>	Survey no's: 491/4, 491/4-1, 491/5(P) & 491/5-1(P) in Pazhavangadi Village, Ranni Taluk, Pathanamthitta District, Kerala
<i>GPS co-ordinates</i>	N - 9°23'5.23" to 9°23'13.2" E - 76°48'17.96" to 76°48'25.8"

<i>for Mining projects</i>	<i>Extent of area (in hectares)</i>	ML area 2.0705 Ha
	<i>Minimum and maximum height of excavation (MSL)</i>	+70m AMSL to +125m AMSL sloping from North East to south west
	<i>Life of mine proposed</i>	5 years
	<i>Ultimate depth of mining (in MSL)</i>	Up to +55m AMSL from the surface RL of +70m to +125m AMSL (Minimum depth – 15 m, Maximum depth – 70m)
	<i>Distance from the adjacent quarry</i>	More than 50 m
	<i>Capacity of production</i>	500 TPD
	<i>Details of project cost</i>	This being a working mine estimation of project cost at this juncture does not arise.
<b>ABOUT THE PROJECT</b>		
<b>Environmental parameters considered</b>		
<b>WATER</b>		
Water requirement & sources	<p>The water requirement for the quarry is as follows:</p> <p>For domestic &amp; sanitary needs - 1.0 KLD</p> <p>For dust suppression and Plantation etc., - 5.0 KLD</p> <p>Total - 6.0 KLD</p> <p>The source of water for domestic &amp; sanitary water requirement is being met from well water and for industrial operation is being met from mine sump pit/ well.</p>	
RWH units proposed	<ul style="list-style-type: none"> <li>➤ The rain water falling in the quarry will be harvested up to +70m AMSL. This pit will act as a settling pond to prevent solids escaping along with discharge, before outlet, etc.</li> <li>➤ Besides, it is also suggested to construct settling pond in southern corner of the lease area around +70m AMSL so that water can be diverted into this pond.</li> <li>➤ Supernatant clear water will be let out of the area after passing through silt traps. Most of the mine water will be used for green belt, dust suppression, etc.</li> </ul>	
Facilities for liquid waste treatment	The only effluent arising from project is domestic waste to the maximum of about 0.4 KLD. This is disposed into septic tanks with soak pits.	
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Not Applicable	
Water quality meeting requirements	<ul style="list-style-type: none"> <li>➤ Rainwater from the higher benches is made to drain into the sump and the mine pit bottom.</li> <li>➤ Suggested to construct settling pond in southern corner of the lease area around +70m AMSL so that water can be diverted into this pond so that water can be diverted into this pond. Supernatant clear water will be let out of</li> </ul>	

	the area after passing through silt traps. Most of the mine pit water will be used for green belt, dust suppression, etc.
Does it have provisions for use of recycled water	Other than using of mine sump water no other recycling is envisaged.
<b>LAND</b>	
Proximity to forest lands	NIL
Access road to the site –Width & Condition	The project is approachable from the pukka road and it is about 4.5 m wide. The project site is approachable from Mukkalumon junction in Ozhuvanpara to Ammachikadu road which is connected to Ranni village and Ittivapara via College Road and it well connected to various part of the district.
Storage of explosives /hazardous substances	License to store and use of Explosive obtained from Deputy Chief Controller of Explosives, Ernakulam. Explosive License No: E/SC/KL/22/739 (E27645) Dated: 21.03.2014, which is Valid Upto: 31.03.2019.
Facility for solid waste management	The total waste to be generated from the mine area is expected to be 4738 m <sup>3</sup> comprising 948 m <sup>3</sup> of top soil and 3790 m <sup>3</sup> of overburden / waste. Topsoil shall be used for afforestation purpose. Remaining waste/overburden shall be used for road formation, filling of low lying areas and creation of bund around the mine periphery. The other waste if any can be dumped in proponents own land nearby or can be utilized for filling of low lying areas or other commercial purpose outside the lease as per norms. Liquid domestic effluents are minimal and let out into septic tank and soak pits.
Topographic features/ slope	The granite rocks occur as sloping terrain with the RL in the range of +70m AMSL to +125m AMSL sloping from North East to south west.
Proneness of the area for landslides	Granite occur here as a hard massive rock which can withstand steep slopes. Hence not prone to landslides.
Significant land disturbance resulting in erosion, subsidence & instability	This being an opencast mine there will not be any subsidence. The bench slopes will be maintained as per DGMS rules and requirement and hence there cannot be any instable slopes. There will be land disturbance due to mining activity.
Top soil, overburden etc.	Total Waste: 4738m <sup>3</sup> Topsoil: 948m <sup>3</sup> Overburden / waste: 3790 m <sup>3</sup>
<b>AIR</b>	
Air quality meeting requirements	To be well within the prescribed NAAQ limits.
Noise level meeting requirements	Noise level to be within the prescribed standards.
Likely emissions affecting environment	There will be some dust emission due to mining and allied activities which will be controlled by following measures like: <ul style="list-style-type: none"> <li>• Proper maintenance of HEMM</li> </ul>

	<ul style="list-style-type: none"> <li>• Frequent water sprinkling</li> <li>• Development of greenbelt</li> <li>• Covering of transport material with tarpaulin cover etc.,</li> </ul>
<b>ENERGY</b>	
Energy requirement	No electricity is needed for quarry operations as only diesel operated mining machinery including jack hammer are used for quarrying. Hence the negligible power requirement of the administrative buildings etc., are and will be met from state grid. The power connection for office use is available near to the site.
Energy sources	KSEB
Extent of usage of alternative energy resources	If not, should be installed solar energy panel.
<b>BIODIVERSITY</b>	
Presence of any endangered species or red listed category	If any, should be properly conserved
Loss of native species and genetic diversity	If any, should be properly revegetated
Likely displacement of fauna	If any, should be properly conserved
Any introduction of alien / invasive species	If any, should be properly conserved
<b>SOCIAL ASPECTS</b>	
Proximity to nearest habitation	103 m
Proposed CSR Budget	For Future CSR activities, need based assessment for the local community to the tune of Rs.25 lakhs is made and budgetary provision of Rs. 5lakhs per year is provided
Does it propose environment management plan	Yes. The Environmental Management Plan prepared and submitted.
Does it have eco restoration programmes	<ul style="list-style-type: none"> <li>➤ Trees will be planted in all possible vacant places within the lease area. Local species in consultation with the state forest department can be chosen for this purpose.</li> <li>➤ In the mine closure stage, Water body will be formed up to the RL of +70 m AMSL in the mined out void till the mine floor level of +55m AMSL. Out of 1.5261 Ha of mined out area, 0.3365Ha will be left as water body and the remaining 1.1896 Ha of area above general RL of +70m AMSL will be reclaimed back with bench plantation / plantation. The mined area will be properly fenced all around.</li> </ul>
Sufficiency of parking spaces/ traffic management	The entire quarried stone from this mine area is and will be sent to outside crusher unit for production of different sizes of stone aggregates. Thus the available space within the ML area is enough for parking of vehicles.
Litigation/ court cases, if any, against the project (Provide details)	Nil as declared
Details of Authorized Signatory	Sri. Joseph Mathew, Pullampallil House, Naranamoozhy P.O., Ranni Taluk, Pathanamthitta District, Kerala. Mobile No: 09447269585 E.mail: <a href="mailto:cibyjoseph@gmail.com">cibyjoseph@gmail.com</a>

Details of NABET approved EIA consultant organization	Creative Engineers & Consultants, 9/4b, Barathwajar Street, East Tambaram, Chennai – 600 059. PH – 044 – 22395170 Mobile : 9444133619 Email – <a href="mailto:cecgiri@yahoo.com">cecgiri@yahoo.com</a>
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2. The application was placed before the 47<sup>th</sup> meeting of SEAC held on 13/10/15. The Committee deferred the item for field visit by the subcommittee concerned and submission of a realistic social responsibility proposal separating recurring and non-recurring expenditure. Field inspection was conducted by the subcommittee members on 24/10/15. The site inspection details are given below:

*“The project is located at about 2 km east of Ranni town. This quarry lease area of 2.0705 ha falling in own land is an active quarry without crusher occupying the south facing slopes of an elevated ridge. Two quarries of less than a hectare are seen in the vicinity of 500 m, but the total area will be less than 25 ha. The elevation of the lease area ranges from 125m in the rock exposed hillock to 85 m in the lower southern part. The rock type is weakly foliated charnockite with prominent sub vertical joints. Pockets of weathered rock with about 1m thick over burden (OB) and top soil is seen interspersed with rock out crops in the upper part where benches have been formed. In the eastern lower part old workings with steep cuttings are seen. The OB excavated has been used for reclamation of old pits. The entire storm water from the area flows as sheet flow to the south and partly collected in the pits from where it is let out into a lined channel. Part of it is let out into the rubber plantations. RWH structure in the form of small sized tank is provided near to the entrance. Rubber is the dominant land use. Dwelling units are seen to the west but beyond 100 m. Rest shed provided to the workers. The approved mine plan shown to the subcommittee did not have any date and reference to the 2015 rules.*

*Based on an overall evaluation of the site, the quarry operations may be recommended with following conditions:*

- 1. The mine plan must have a date of approval with reference to the 2015 mineral concession rules.*
- 2. The proponent must submit the Cadastral map of the lease area with subdivisions clearly indicating the area proposed to be quarried*
- 3. Fencing should be provided all around the lease area.*
- 4. Ultimate depth of mine to be limited to the permissible level of deepening by benches.*
- 5. OB burden must be stored in a designated place at a lower elevation after the restoration of existing pits.*
- 6. The approach road to be maintained in motorable condition.*
- 7. The CSR need redrafting with inclusion of felt needs of the locality.*

*Other items from general conditions like a) Appropriate sign boards should be displayed, b) The blasting time must be displayed and strictly adhered to, c) The PPV values must be less than 10 mm/sec, d) Steps to be taken to limit fly rock to within the lease area. Rock fragments should not fall anywhere outside the lease area, e) Dust suppression mechanism must be in place f) A belt of trees (Vegetation belt) should be maintained all around the quarry but must be maintained till the entire life of quarry, g) A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the biodiversity assessment etc.”*

3. The proposal was again placed in the 52<sup>nd</sup> meeting of SEAC held on 7/8-02-2016. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, Field Inspection Report and all other documents submitted along with the Form I application and found that the proponent has complied with the request of the Committee and decided to recommend for issuance of Environmental Clearance, with the following specific conditions in addition to the general conditions stipulated for mining projects.

1. Fencing should be provided all around the lease area.
2. Ultimate depth of mine to be limited to the permissible level of deepening by benches.
3. OB must be stored in a designated place at a lower elevation after the restoration of existing pits.
4. The approach road to be maintained in motorable condition.
5. To the extent possible local Biodiversity Management Committee shall be involved in the environmental management/restoration activities.
6. Reclamation and eco-restoration should be done by planting native species.

4. The proposal was considered by the Authority in its 51<sup>st</sup> meeting held on 29-3-2016. The Authority accepted the recommendations of SEAC and decided to issue E.C subject to the specific conditions recommended by SEAC given in para 3 above and the general conditions on mining as appended. No cluster certificate also to be produced.

5. The documents called for having been submitted with a proper undertaking that the committed CSR activities will be implemented, the State Environmental Impact Assessment Authority Kerala hereby grant environmental clearance to the proposed quarry project by Sri. Joseph Mathew in Sy. Nos. 491/4, 491/4-1, 491/5(P) and 491/5-1 (P) at Pazhavangadi Village, Ranni Taluk, Pathanamthitta District for lease area of 2.0705 hectares subject to the specific conditions given in para 3, general conditions in the appendix, mitigation measures undertaken in the EMP, in the PFR and in the Mining Plan submitted.

6. 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 4 (Mining), Chapter 5 (Blasting) Chapter 6 (Mine Drainage), Chapter 7 (stacking of mineral rejects and disposal of wastes) 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.

7. 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.

8. 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, Pathanamthitta to take legal action under the Environment (Protection) Act, 1986.

iii) The given address for correspondence with the authorized signatory of the project Sri. Joseph Mathew, Pullampallil House, Naranamoozhy P.O., Ranni Taluk, Pathanamthitta.

Sd/-

P.MARA PANDIYAN.I.A.S,  
Member Secretary (SEIAA)  
&  
Additional Chief Secretary  
Environment & Forests Department.  
Government of Kerala.

To,

Sri. Joseph Mathew,  
Pullampallil house,  
Naranamoozhy P.O.,  
Ranni Taluk, Pathanamthitta

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> 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, Pathanamthitta
5. Secretary, Pazhavangadi Grama Panchayat, Ranni Block, Pathanamthitta
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](http://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 PM<sub>10</sub> and PM<sub>2.5</sub> 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

**G. RAJEEV**  
Administrator

Date Environment Impact Assessment Authority  
Pallin, Ettah  
Thiruvananthapuram-695024  
Phone: 0471-2742264

1. The first part of the paper is devoted to the study of the properties of the function  $f(x)$  defined by the equation  $f(x) = \int_0^x f(t) dt$ . It is shown that  $f(x)$  is a constant function, and its value is determined by the initial condition  $f(0)$ .