



सत्यमेव जयते

## ***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: SEIAA- Environmental clearance for the proposed quarry project in Sy. No. 6/1 of Vettilappara Village, Eranad Taluk, Malappuram District by Sri. Hisham, E. C. for M/s. Thomarappara Bricks & Metals-Granted- Orders issued.

### **STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

**No. 856/SEIAA/EC1/2980/2015**

***dated, Thiruvananthapuram 01-06-2016***

- Read:-
1. Application dated 22.07.2015 submitted by Sri. Hisham, E. C., S/o Muhammed Ali, EC Villa house, Chennamangallur (P.O.), Mukkam, Kozhikode District, Kerala – 673602
  2. Minutes of the 50<sup>th</sup> meeting of SEAC held on 30/31-12-2015.
  3. Minutes of the 53<sup>th</sup> meeting of SEAC held on 25/26-02-2016.
  4. Minutes of the 52<sup>nd</sup> meeting of SEIAA held on 29-04-2016.

#### **Environmental Clearance No. 77/2016.**

Sri. Hisham, E. C., S/o Muhammed Ali, EC Villa house, Chennamangallur (P.O.), Mukkam, Kozhikode District, Kerala State, vide his application received on 29-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Re. Survey. No. 6/1 of Vettilappara Village, Eranad Taluk, Malappuram District, Kerala over an area of 4.8542 Ha. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 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 proposal are as follows:

BASIC INFORMATION OF THE PROJECT	
Name of the Project	M/s Thomarappara Bricks & Metals
Survey Numbers	6/1(Pt)
Village	Vettilappara
Tehsil	Eranad
District	Malappuram
Extent of land in hectors	4.8542 Ha
Is the property forest land/Govt. land/ own land	Own Land
Latitude	11° 17' 27.68" N to 11° 17' 37.40" N
Longitude	76° 04' 27.68" E to 76° 05' 7.32" E
Distance of mining area from nearest human settlement	309 m
Proposed production capacity	2,70,000 tonnes per year
Expected life of mine	18 years
Expected cost of the project	4.5 crore
Interlinked project (if any)	No
Whether CRZ is applicable	Not Applicable
Status of litigation/complaint/cases	Nil (as stated by the proponent)
Permanent or temporary change on land use, land cover or topography	At the end of life of mine, the excavated pit will be 4.1742 Ha, in which 3.6742 Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation and the remaining part 0.5 Ha will be used as a water pond.
Topography of land and elevation	Entire lease area is exposed by massive Charnockite with a top soil thickness 1m. The topography of the lease area is hilly. The highest elevation of the lease area is 220m MSL and lowest 110m MSL.
Vegetation	Part of the proposed land is already under mining and the remaining land is sparsely vegetated having topsoil with average thickness of 1m.
Nearest water body	Cheru puzha – 0.7 Km
Change in water bodies due to mining activities	Nil as stated by the proponent
Proneness to natural hazards	No, quarry area is not susceptible to natural hazard as there is no history of such incidents.
Environmental parameters considered	
WATER	
Water (expected use and sources in KLD)	Domestic consumption –1 KLD, Dust suppression:4KLD Watering the plantation:2 KLD The required water will be met from water pond

Sources of generation and facilities for liquid waste treatment	Liquid wastes from toilet and office should be treated in septic tank and soak pit.
Water quality meeting requirements	Time to time monitoring and analysis should be carried out to meet the existing rules.
Water Regime	Open well and water pond
<b>LAND</b>	
Access road to the site –Width & Condition	8m.
Storage of explosives /hazardous substances	Explosives should be procured, stored, transported, handled and used in accordance with Indian Explosive Act 1884, MSIHC Rules 1989, Mines Act, 1952 and regulations there under
Hazardous waste management	Used oil from maintenance of DG sets, HEMM and tippers should be handled as per Hazardous Waste (Management Handling & Transboundary Movement ) Rules, 2008.
Facility for solid waste management	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.
Significant land disturbance resulting in erosion, subsidence & instability	No, quarry area is not susceptible to natural hazard as there is no history of such incidents.
Top soil, overburden etc.	<ul style="list-style-type: none"> <li>• About 14,250 tons of topsoil will be removed. This will be used for plantation.</li> <li>• About 129,000 tonnes of over burden waste will be generated and it will be dumped in the area earmarked for the purpose in a systematic and Scientific manner. During the post mining stage dumped material should be used for reclamation purpose.</li> </ul>
<b>NOISE</b>	
From operation of equipment e.g. engines, ventilation plant, crushers	The usage of excavator, hydraulic Jack Hammer and movement of trucks and tippers will create noise.
Noise pollution control measures	<ul style="list-style-type: none"> <li>• Effective maintenance of machineries and vehicles at regular and frequent intervals.</li> <li>• Plantation of green belt around the haul roads and lease periphery.</li> <li>• Noise enclosure will be provided at source PPE's will be provided.</li> </ul>
Noise level monitoring	Noise level survey was carried out in four corners of the project site both in day time as well as in night time. It should be maintained with in the standard permissible limits as per rules.

<b>AIR</b>	
Likely emissions affecting environment	Due to quarry activity and operation of heavy earth moving machinery generation of dust, noise is likely. Strictly adhere the mitigative measures proposed in the EMP.
By deposition of pollutants emitted to air into the land or into water	Dust will be generated, which will be suppressed by regular water sprinkling on haul roads, quarry benches and surrounding area.
Air pollution control measures	Dust released due to quarry activity (Heavy Earth Movers, Loaders, Rock breaker, etc) will be suppressed periodically by sprinkling of water.
Air quality monitoring	Air quality should be monitored periodically as per Norms and Mitigation Measures should be carried out to prevent dust and Air propagation in to air. Air quality should comply with the requirements as per rules.
Air pollution control measures: By deposition of pollutants emitted to air into the land or into water.	<p>During mining operation there will be dust emissions mainly from excavation, loading, unloading, mineral handling, transportation and mobile sources. The following measures will be taken:</p> <ul style="list-style-type: none"> <li>• Laying of haul road as per the standards, black topping of permanent haul road to avoid or eliminate air borne dust.</li> <li>• Wet drilling method should be adopted to avoid dust generation.</li> <li>• Drill machines should be equipped with dust collectors.</li> <li>• Use of appropriate explosives and avoiding overcharging of blast holes.</li> <li>• Controlled blasting.</li> <li>• Covered transportation.</li> <li>• Limiting the speed of vehicles.</li> <li>• Watering of haul road at regular intervals.</li> <li>• Provision of dust filters and mask to workers.</li> <li>• Provision of green belt along the periphery of the lease area.</li> <li>• Periodical monitoring of Ambient Air Quality.</li> <li>• Adopting latest green technology.</li> <li>• Use of bag filters at all traverses points.</li> </ul> <p>Closed conveyor system with water sprinkling arrangements.</p>
<b>ENERGY</b>	
Energy requirement	<p>Power supply is required for office, canteen Which is from KSEB</p> <p>Quarry operations are mainly by HEMM which are operated by HSD.</p>
Extent of usage of alternative energy resources	Alternate energy source such as solar panels etc. should be utilized)
<b>BIODIVERSITY</b>	
Presence of any endangered species or red listed category	Nil.
Loss of native species and genetic	There will not be any loss of native species of genetic

diversity	diversity as the quarry already exists and continuation of the same will not affect or loss of native species in general. The site should be eco-restorated scientifically.
Likely displacement of fauna	Nil as stated by the proponent. If any should be properly protected and rehabilitated.
Any introduction of alien / invasive species	Nil.
<b>SOCIAL ASPECTS</b>	
Proximity to nearest densely populated or build-up area	309m towards South West
<b>CSR related to the project</b>	
CSR related to the project	In the following sectors: 1. Education 2. Health 3. Women Empowerment and also as per Chapter 4.3.5.8 of PFR
<b>GENERAL</b>	
Details of Authorised Signatory & Address for correspondence)	Sri.Hisham, E. C., S/o Muhammed Ali, EC Villa house, Chennamangallur (P.O.), Mukkam, Kozhikode- 673602, Kerala
Details of NABET approved EIA consultant Organisation	Overseas Min-Tech Consultants OCI/NABET Accreditation serial no. NABET/EIA/1417/1A003
<p>3. The proposal was first considered by 50<sup>th</sup> meeting of SEAC held on 30-31/12/2015. The Committee deferred the item for the production of revised social responsibility proposal. On submission of the revised CSR, the proposal was again considered by SEAC in its 53<sup>rd</sup> meeting held on 26/27-02-2016. The Committee appraised the proposal in the light of the Mining Plan, prefeasibility report and revised CSR and recommend for E.C with general conditions. The proponent should strictly adhere as per modified CSR submitted by him.</p> <p>4. The proposal was considered by the SEIAA in its 52<sup>nd</sup> meeting held on 29-04-2016. The Authority decided that EC may be issued to the quarry as per the recommendations of SEAC subject to the general conditions of mining projects.</p> <p>5. The grant of E.C is also subject to production of no cluster certificate, affidavit and general conditions stipulated for mining projects and the mitigation measures undertaken in the EMP in the PFR. However if any genuine complaints about the quarry is received, E. C issued shall be reviewed.</p> <p>6. Validity will be five years 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. Environmental Clearance is therefore granted to the quarry project of Sri. Hisham, E. C., S/o Muhammed Ali, EC Villa House, Chennamangallur (P.O.), Mukkam, Kozhikode District, Kerala – 673602 subject to the general conditions annexed hereto.</p>	

7. 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 undertakings in chapter 4 of Mining plan (Mining), Chapter 5 of Mining plan (Blasting), Chapter 11 (EMP) of the Mining Plan and the entire Progressive Mine Closure Plan as submitted will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated 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, Malappuram to take legal action under the Environment (Protection) Act 1986.

9. The given address for correspondence with the authorised signatory of the project is Sri. Hisham, E. C., S/o Muhammed Ali, EC Villa House, Chennamangallur (P.O.), Mukkam, Kozhikode District, Kerala - 673602, Kerala.

Sd/

P. Mara Pandiyan., I.A.S  
Member Secretary (SEIAA)

&

Additional Chief Secretary to Government  
Environment & Forest Department  
Government of Kerala.

To,

Sri.Hisham, E. C.,  
S/o Muhammed Ali,  
E. C. Villa House,  
Chennamangallur (P.O.),  
Mukkam,  
Kozhikode- 673602,  
Kerala



Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E& F Wing, II block, Koramangala, Bangalore-560 034.
2. Principal Secretary to Government, Environment Department.
3. The District Collector, Malappuram.
4. The Director, Department of Environment & Climate Change.
5. The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
6. The Secretary, Urangattiri Grama Panchayath, Arecode P.O., Malappuram-673638
7. Chairman, SEIAA
8. E.C File
9. Stock File
10. O/C.



Forwarded/ By order

Administrator  
SEIAA

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 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.

  
For Member Secretary, SEIAA Kerala

**G. RAJEEV**  
Administrator  
State Environment Impact Assessment Authority  
Pallimukku, Pettah  
Thiruvananthapuram-695024  
Phone: 0471-2742264

