

# 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 building stone quarry project in Survey Nos. 51/3 (p), 53/1 (p), 53/2 (p), 54/3 (p), 54/4 and 54/5 at Urangattiri Village, Ernad Taluk, Malappuram District, Kerala by M/s Malabar Bricks and Metals-Granted- Orders issued.

#### STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

#### No. 437/SEIAA/EC1/2997/2014

dated, Thiruvananthapuram 18-11-2015

- Read:-
- 1. Application dated 30-05-2014 submitted by Sri. Azad M.M., Managing Partner, M/s Malabar Bricks and Metals, Musaliyarakath House, Koodaranhi P.O., Kozhikode District.
- 2. Minutes of the 33<sup>rd</sup> meeting of SEAC held on 02/03-09-2014.
- 3. Minutes of the 39<sup>th</sup> meeting of SEIAA held on 14/15-05-2015.
- 4. Minutes of the 43<sup>rd</sup> meeting of SEAC held on 15-07-2015.
- 5. Minutes of the 44<sup>th</sup> meeting of SEAC held on 12/13-08-2015.
- 6. Minutes of the 42<sup>nd</sup> meeting of SEIAA held on 01-10-2015.

### Environmental Clearance No. 102/15

Mr. Azad M.M., Managing Partner of M/s Malabar Bricks and Metals, vide his application received on 24.06.2014, has sought Environmental Clearance under EIA Notification, 2006 for the building stone quarry project in Survey Nos. 51/3 (p), 53/1 (p), 53/2 (p), 54/3 (p), 54/4 and 54/5 at Urangattiri Village, Ernad Taluk, Malappuram District, Kerala for an area of 7.6353 hectares. 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) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

- 2. The proposed project site falls within 11<sup>0</sup>15'00.94" N to 11<sup>0</sup> 15' 11.75" N and 76<sup>0</sup> 04' 58.22" E to 76<sup>0</sup> 05' 11.76" E. The land use classification as per revenue records is private land with rocks. Out of the total 16.3389 hectares of land owned by the proponent, the lease area consists of 7.6353 hectares, which is private land and the present land use is rocky land with quarrying activities. The current proposal is for the existing quarry with mineral specific and hence no alternate site was examined. Forest land is not involved in the project.
- 3. The proposed project is for quarrying of 3, 00,000 MTA of building stone from an area of 7.6353 hectares of land. The expected life of mine will be 19 years. The proposed project activity involves about 98 % of the pit area for exploring building stone. At the end of

life of mine, the excavated pit will be backfilled and reclaimed and rehabilitated by plantation leaving no void. The proposed project does not involve any underground mining activities. The mining will be done by open cast semi mechanized method. The bench height and width proposed is 5 m. The exploitation of mineral is being done from 170 m MSL to 80 m MSL in conceptual phase. The ultimate depth of the mine workings is estimated to be 80 m MSL. Around 22,906 m<sup>3</sup> of top soil will be generated from the proposed pit, which will be properly stacked and will be utilized for plantation over the reclaimed areas. Around 61,082 m<sup>3</sup> of overburden is generated which will be utilized in developing internal roads and at the end use the same will be used as soil base for reclamation. The sewage of 0.8 KLD generated from the mine office will be diverted to the septic tank followed by soak pit. The municipal solid waste generated from the labour quarter will be disposed along with reclamation or back filling. The sludge generated from the septic tank will be dried and used as manure in plantation. The daily water demand of 16 KLD will be met from well/storm water collection pond. The total power requirement of 75 kW will be drawn from diesel engine. There will be fugitive emissions generated during material handling, transportation, loading, unloading, etc. that are proposed to be managed by regular water sprinkling on haul road, green belt development, avoiding overloading of vehicles, maintaining the speed of vehicles within prescribed limits and covering the load with tarpaulin sheets. Plantation with shrubs, herbs and trees will be done as part of eco-restoration work. Anticipating 50 % growth rate, at the end of life of mine, about 7500 trees will be grown in total area of 7.6053 hectares. As per the biodiversity assessment report, no endemic species of plants are identified in the project site. An area equivalent to 10 percent of the area proposed for quarrying is reserved in the area owned by the project proponent outside the proposed quarry for compensatory mass plantation. In the instant case, it is proposed to have compensatory mass plantation in an area of 0.77 hectares. The area selected is such that there is enough depth of top soil and the quarrying in this area is not proposed in future. Electrical HT line and LT line is located within 500 m radius. Cherupuzha at 4 km W and Chaliyar River at a distance of about 3 km S of the project site. The nearest house is located at 339 m SW from the proposed quarry. The quarry is interlinked with a crusher unit existing within the complex. As stated by the proponent, there is no litigation pending against the lease area / applicant of the lease area in any court of law, CRZ recommendations are not applicable and distance from adjacent quarry, (M/s Abundant Quarry) is 1 km., E. The total cost of the project is Rs. 1.85 Crores. Other details of the case are as under:

#### 4. BASIC INFORMATION OF THE PROJECT

| Environmental parameters considered  |   |  |
|--|---|--|
| WATER  |   |  |
| Water requirement & sources  | The total water requirement is about 16 KLD (Domestic - 1.0 KLD, Dust suppression - 12 KLD & Plantation - 3 KLD).  The source of water is from storm water pond and open wells. |  |
| RWH units proposed   | Rain water collection pond  |  |
| Facilities for liquid waste treatment  | Not applicable  |  |
| Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers? | No impoundment, damming, culverting, realignment or other changes to the hydrology of surface water courses.  |  |

| Water quality meeting requirements                        | Water quality will meet requirements after treatment of water (filtration, disinfection & sedimentation).                 |  |
|---|---|--|
| Does it have provisions for use of recycled water         | No  |  |
| LAND  |   |  |
| Proximity to forest lands                                 | N. A  |  |
| Access road to the site – Width & Condition               | 7 m. tarred road, W   |  |
| Storage of explosives /hazardous substances               | Explosives will be stored as per Explosives Act/Rules.  |  |
| Facility for solid waste management                       | Vide Para 3.  |  |
| Top soil, overburden etc.                                 | Top soil – 22, 906 m <sup>3</sup> .<br>Overburden – 61, 082 m <sup>3</sup> .  |  |
| AIR   |   |  |
| Likely emissions affecting environment                    | Diesel engine, movement of vehicles like dumpers, trucks, tankers etc. will generate emissions.                           |  |
| ENERGY  |   |  |
| Energy requirement  | The total power requirement will be 75 kW for compressors, which will be drawn from diesel engine.                        |  |
| Energy sources  | From diesel engine.   |  |
| Extent of usage of alternative energy resources           | No  |  |
| resources   | BIODIVERSITY  |  |
| Presence of any endangered species or red listed category | No  |  |
| Loss of native species and genetic diversity              | Yes, For the quarrying activity all of native tree species, shrubs, herbs, climber etc. existing at site will be cleared. |  |
| Likely displacement of fauna                              | No  |  |
| Any introduction of alien / invasive species              | No  |  |
| ·   | SOCIAL ASPECTS  |  |
| Proximity to nearest habitation                           | 339 m., SW.   |  |
| CSR related to the project                                | In the following sectors:  1. Education 2. Health 3. Women Empowerment 4. Community Development and also see Para 5       |  |
| GENERAL   |   |  |
| Eco restoration programmes                                | Vide Para 3.  |  |

| O                                  | THER DETAILS OF THE PROJECT PROPOSAL      |
|------------------------------------|---|
| Details of Authorised<br>Signatory | Sri. Azad M.M.                            |
|                                    | Managing Partner                          |
|                                    | M/s Malabar Bricks and Metals             |
|                                    | Musaliyarakath House                      |
|                                    | Koodaranhi P.O.                           |
|                                    | Kozhikode District - 673604.              |
|                                    | Tel. No. 0483-3291445;                    |
|                                    | Mob. No. 09656878777;                     |
|                                    | Email: azadmm@ymail.com                   |
| Details of NABET                   | M/s Enkay Enviro Services Pvt.Ltd.        |
|                                    | 24-B, Dadu Marg                           |
|                                    | Gopal Bari, Ajmer Road                    |
| approved EIA consultant            | Jaipur, Rajasthan-302001.                 |
| organisation                       | Tel. No: 0141-4013996/ 4023996 / 4016996; |
|                                    | Fax; 0141-4026996;                        |
|                                    | Email: <u>info@enkayenviro.com</u>        |

- 5. The proposal was first considered by SEAC in its 33<sup>rd</sup> meeting held on 2<sup>nd</sup> & 3<sup>rd</sup> September 2014 as agenda Item No. 33.17, and the committee found that, the ultimate depth of mine should not be below 80 m, the approach road must be done by the proponent and as part of CSR the committed expenses of OP building of the primary Health Centre must be completely met by the proponent. The committee *deferred the item for site visit* but the inspection to the site could not be held due to expiry of SEAC/SEIAA, Kerala. On submission of approved Mining Plan the proposal was again considered in the 39<sup>th</sup> meeting of SEAC held on 14-15/09/2015. The committee *deferred* the item again for field visit by the SEAC sub-committee with a direction that the sub-committee shall specifically look at the faunal diversity of the locality.
- 6. Field visit was carried out on 03.06.2015 by a sub-committee of SEAC, Kerala. The report is as follows:-

"The project is an active quarry with a crusher unit located at Peringappara, about 6 km northeast of Areacode. Quarry area falling enitirely in own land is moderate to steeply sloping to south and southeast, exposing hard rock, mostly massive charnockite suite of rocks. Major faults or deep planes of discontinuity are not observed in the quarry area. Pockets of weathered rock with limited over burden (OB) are seen only in the upper most part of the area which is relatively flat and support coconut trees. The area does not have any well-defined drainage channels. The entire storm water from the quarry flows mostly as sheet flow into lower debris mantled lower slope. The lower slopes beyond the quarry lease area, is owned by the proponent and supports rubber plantation. A kutcha road on the northern side marks the upper boundary. The pit with water serve as settling tank.

Steep slopes of earlier workings to be left as danger zones with proper sign boards. Based on an overall evaluation of the site, following points may be considered:

1. Benches have been initiated in the excavated area. Main haulage lines are planned on the upper side which is partly formed. The steep slopes of the old workings are left outside the present lease area. However this area may be fenced all around with proper danger signs.

- 2. Over burden generated in the upper slope is presently stacked by the side of the working. The entire OB must be transported and stored in the designated place in the lower level. This stack must be provided with a protective wall and vegetative cover.
- 3. The drainage from the quarry is currently directed to a pit in the middle part for desiltation and clarification. However, additional pits may be provided at the lower most part with a silt trap or other suitable mechanism for clarification of water. Loose boulder checkdam can also be provided on the lower part upstream side of the culvert
- 4. Retaining wall has been provided at the lower slope to prevent down slope soil movement
- 5. The approach road to the quarry from the main road for about 1.5 km is maintained by the proponent. Considering its narrow width it may be necessary to restrict the entry of large sized vehicles.
- 6. Settlement is not seen in the immediate vicinity of the quarry. Nearest dwelling unit more than 300 m from the quarry. A buffer distance of 50 m is provided from the Kutcha road which is at a higher elevation.
- 7. The elevation of the flat land on the southern side with a ephemeral stream is about 80 m above MSL. Hence the ultimate depth of mine should be limited to above 80 m amsl.
- 8. The crusher unit is encased to reduce dust emission.
- 9. Vegetation is seen all around the quarry.
- 10. Outer fencing and sign boards must be provided Other items from general condition and CSR may be added".
- 7. Then the proposal was considered by SEAC in its 43<sup>rd</sup> meeting held on 15<sup>th</sup> July 2015 and the committee examined the field investigation report and found that the report does not contain analysis of the biodiversity of the locality. Hence the Committee *deferred* the matter for incorporating the observations of the subcommittee about the faunal diversity of the locality.
- 8. The proposal was again considered by SEAC in the 44<sup>th</sup> meeting held on 12-13/08/2015. The members of the subcommittee who conducted field inspection informed in the meeting that they did not notice any evidence of rich biodiversity and hence no special mention was made in the field inspection report. In the light of the said opinion of the sub Committee members, the Committee decided to *recommend* the item for issuance of EC with the following specific condition in addition to the general condition for mining.
  - 1. Over burden generated in the upper slope is presently stacked by the side of the working. The entire OB must be transported and stored in the designated place in the lower level. This stack must be provided with a protective wall and vegetative cover.
  - 2. Additional pits may be provided at the lower most part for directing drainage from the quarry with a silt trap or other suitable mechanism for clarification of water. Loose boulder check dam can also be provided on the lower part upstream side of the culvert.
  - 3. Considering the narrow width of the approach road it may be necessary to restrict the entry of large sized vehicles.

- 4. The elevation of the flat land on the southern side with an ephemeral stream is about 80 m above MSL. Hence the ultimate depth of mine should be limited to above 80 m AMSL.
- 5. Outer fencing and sign boards must be provided.
- 6. Reclamation and eco-restoration should be done by planting native species.
- 9. The proposal was considered by SEIAA in its 42<sup>nd</sup> meeting held on 01.10.2015 The Authority decided to grant E.C to the quarry subject to the above conditions and the mitigation measures undertaken in the EMP in the PFR. Environmental Clearance is therefore granted to the quarry project of M/s Malabar Bricks and Metals, in Survey Nos. 51/3 (p), 53/1 (p), 53/2 (p), 54/3 (p), 54/4 and 54/5 at Urangattiri Village, Ernad Taluk, Malappuram subject to the specific conditions in para 8 above and the general conditions annexed hereto.
- 10. 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 Chapter 4 of 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(Mining), Chapter 5 (Blasting), Chapter 6 (Mine Drainage), Chapter 7 (stacking of mineral rejects and disposal of wastes) 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.
- 11. Validity of the environmental clearance will be five years form the date of this clearance, subject to earlier review in the event of violation or non- compliance of any of the conditions stipulated herein.
- 12. Compliance of the conditions herein will be monitored by the Directorate of Environment and Climate Change 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.
- iii) The given address for correspondence with the authorised signatory of the project is Sri. Azad M.M., Managing Partner, M/s Malabar Bricks and Metals, Musaliyarakath House, Koodaranhi P.O., Kozhikode District 673604.

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

Principal Secretary to Government Environment & Forest Department Government of Kerala.

To,

Sri. Azad M.M.
Managing Partner
M/s Malabar Bricks and Metals
Musaliyarakath House
Koodaranhi P.O.
Kozhikode District - 673604.

#### Copy to:

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E& F Wing, IIblock, Koramangala, Bangalore-560034.
- 2. Principal Secretary to Government, Environment Department.
- 3. The District Collector, Malappuram
- 4. The Director, Department of Environment & Climate Change.

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- 5. The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
- 6. The Secretary, Urangattiri Grama Panchayat, Ernad, Malappuram- 673639
- 7. Chairman, SEIAA
- 8. Website

9. Stock File

11. O/C.

Administrator SEIAA

## L TATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA GENERAL CONDITIONS (for mining projects)

- (i) Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) 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.
- (iv) Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- (v) Sprinklers shall be installed and used in the project site to contain dust emissions.
- (vi) Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- (vii) 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 dumpings and overburden and planted with indigenous plant species that are eco-friendly.
- (viii) Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
  - (ix) The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine.
  - (x) Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
  - (xi) Control measures on noise and vibration prescribed by KSPCB should be implemented.
- (xii) Quarrying activities should be limited to day time as per KSPCB guidelines.
- (xiii) Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- (xiv) A licensed person should supervise/ control the blasting operations.
- (xv) Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- (xvi) Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored.
- (xvii) Height of benches should not exceed 5 m and width should not be less than 5 m.
- (xviii) Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- (xix) Maximum depth of mining from general ground level at site shall not exceed 10m
- (xx) No mining operations should be carried out at places having a slope greater than 45°.
- (xxi) 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.
- (xxii) The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- (xxiii) Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- (xxiv) The transportation of minerals should be done in covered trucks to contain dust emissions.
- (xxv) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- (xxvi) Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- (xxvii) Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- (xxviii) 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

- (xxix) 200 m buffer distance should be maintained from forest boundaries.
- (xxx) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.
- (xxxi) 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.
- (xxxii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- (xxxiii) 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.
- (xxxiv) 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.
- (xxxv) 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 Department of Environment and Climate Change, Govt. of Kerala 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.
- (xxxvi) 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.
- (xxxvii) 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 Directorate of Environment and Climate Change, Govt. of Kerala.
- (xxxviii) 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.
- (xxxix) 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.
  - (xl) 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

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