



सत्यमेव जयते

Validity expires on 9-8-2020

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

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

**Sub:** SEIAA- Environmental Clearance for the proposed quarry project in Sy. Nos. 111/3 pt, 110/8, 112/4, 111/4 pt., 111/5 pt., 113/2, 112/5, 112/1-1, 112/1-2, 112/8-1, 112/8-2, 112/8-3, 112/2 and 112/7 at Koodal Village, Kalanjoor Panchayat, Adoor Taluk, Pathanamthitta District, by M/s Aswathy Granites Pvt. Ltd.- Granted . Orders issued.

**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

**No. 147/SEIAA/EC4/2748/2013**

***dated, Thiruvananthapuram 10-8-2015***

- Read:-**
1. Application dated 7-10-2013 submitted by Sri. Sudheer Sukumaran, Director, M/s Aswathy Granites, Padmalayam, Murinjakkal P.O, Pathanamthitta dist.
  2. Minutes of the 21<sup>st</sup> meeting of SEAC held on 4-11-2013.
  3. Minutes of the 24<sup>th</sup> meeting of SEIAA held on 22-11-2013.
  4. Minutes of the 25<sup>th</sup> meeting of SEAC held on 14/15- 2- 2014.
  5. Minutes of the 26<sup>th</sup> meeting of SEIAA held on 24-1-2014.
  6. Minutes of the 27<sup>th</sup> meeting of SEIAA held on 20-2--2014.
  7. Minutes of the 30<sup>th</sup> meeting of SEAC held on 6/7-6-2014.
  8. Minutes of the 32<sup>nd</sup> meeting of SEIAA held on 22-8-2014.
  9. Minutes of the 33<sup>rd</sup> meeting of SEIAA held on 24-9-2014.
  10. Minutes of the 35<sup>th</sup> meeting of SEAC held on 17/18-10-2014.
  11. Minutes of the 35<sup>th</sup> meeting of SEIAA held on 9-4-2015.
  12. Minutes of the 39<sup>th</sup> meeting of SEAC held on 14/15-5-2015
  13. Minutes of the 39<sup>th</sup> meeting of SEIAA held on 18-6-2015.

**Environmental Clearance No. 54**

Sri. Sudheer Sukumaran, Director, M/s Aswathy Granites Pvt. Ltd., vide his application received on 07.10.2013, has sought Environmental Clearance under EIA Notification, 2006 for the proposed quarry project in Sy. Nos. 111/3 pt, 110/8, 112/4, 111/4 pt., 111/5 pt., 113/2, 112/5, 112/1-1, 112/1-2, 112/8-1, 112/8-2, 112/8-3, 112/2 and 112/7 at Koodal Village, Kalanjoor Panchayat, Adoor Taluk (then), Pathanamthitta District, Kerala for an area of 9.3969 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  $9^{\circ} 9' 10.23''$  N to  $9^{\circ} 9' 26.32''$  N and  $76^{\circ} 52' 2.91''$  E to  $76^{\circ} 52' 21.86''$  E. The land use classification as per revenue records is private land. Out of the total 21.8532 hectares of land owned by the proponent, the lease area consists of 9.3969 hectares which is private land and present land use is quarrying activities. The current proposal is for the existing quarry and hence no alternate site was examined as the project is mineral specific. Forest land is not involved in the project. The proposed project is for quarrying of 5, 64,000 MTA of building stone from an area of 9.3969 hectares of land. The expected life of mine will be 19 years. The proposed project activity involves about 92% of the pit area for exploring building stone. At the end of life of mine, excavated pit will be backfilled and reclaimed and rehabilitated by plantation. 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 195 m MSL to 135 m MSL in conceptual phase. The ultimate depth of the mine workings is estimated to be 135 m MSL. Part of the proposed land is already under mining and there is no top soil in those areas. The remaining land is having top soil and overburden with average thickness of 0.5 m – 1 m. Around 44,524 m<sup>3</sup> of top soil will be generated from the proposed pit, which will be properly stacked at pre-determined place and will be utilized for plantation over the reclaimed areas. Around 89,048 m<sup>3</sup> of overburden generated will be utilized in developing internal haul roads and at the end use the same will be used as soil base for reclamation/plantation. 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 suitably disposed. The sludge generated from the septic tank will be dried and used as manure in plantation. The daily water requirement of 5 KLD will be met from existing open 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. At the end of life of mine, reclamation of the area (100%) will be carried out. 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 8000 trees will be grown in total area. Achankovil River is located at a distance of 9 km N, Valiyathode Thodu at a distance of 3 km S and Teak forest at a distance of 3 km N of the project site. The quarry is interlinked with a proposed crusher unit and M sand unit to be installed 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. The total cost of the project is Rs. 4.34 Crores. Other details of the case are as under:

BASIC INFORMATION OF THE PROJECT

<i>Distance from the adjacent quarry</i>	M/s City Stone, Karakkakuzhy, 2 km., S
<i>Details of project cost</i>	Rs. 4.34 Crores
<b>Environmental parameters considered</b>	
<b>WATER</b>	
Water requirement & sources	The total water requirement is about 5.0 KLD (Domestic – 1.0 KLD, Dust suppression – 2 KLD & Plantation – 2 KLD). The source of water is from storm water pond / wells.
RWH units proposed	Yes, 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 meeting requirements after the treatment of water (filtration, disinfection & sedimentation).
Does it have provisions for use of recycled water	No
<b>LAND</b>	
Proximity to forest lands	No
Access road to the site – Width & Condition	7 m. tarred road, NE side
Storage of explosives /hazardous substances	Yes, Explosives will be stored as per Explosives Act/Rules.
Facility for solid waste mgmt	The municipal solid waste from the labour quarter will be suitably disposed.
Proneness of the area for landslides	No
Significant land disturbance resulting in erosion, subsidence & instability	No

Top soil, overburden etc.	Top soil – 44,524 cu.m. Overburden – 89,048 cu.m.
<b>AIR</b>	
Likely emissions affecting environment	Diesel engine emissions & emissions from movement of vehicles like dumpers, trucks, tankers etc. will also generate.
<b>ENERGY</b>	
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
<b>BIODIVERSITY</b>	
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
<b>SOCIAL ASPECTS</b>	
Proximity to nearest habitation	101 m. , N
CSR related to the project / allocation / time frame (details mandatory)	As a part of Corporate Social Responsibility, it is proposed to spend minimum of Rs. 6 Lakhs per annum for different activities in consultation with local Grama panchayat. Bio-diversity fund- 1% of the profit of the company will be allotted for local bio-diversity management committee's developmental activity.
<b>GENERAL</b>	
Does it propose environment management plan	Yes
Does it have eco restoration programmes	Yes, The year wise programme of afforestation for the life of mine, about 8,000 trees will be planted.

	The main aim of the green belt development is to restore the ecosystem to its original form to a maximum possible extent by designing the green cover with the same native species.
Litigation/court cases, if any, against the project (Provide details)	No

**OTHER DETAILS OF THE PROJECT PROPOSAL**

Right & nature of ownership of land	Private land
Is the property forest land/govt. land/own land	Own land
Details of Authorised Signatory	Mr. Sudheer Sukumaran Director M/s Aswathy Granites Pvt. Ltd. Padmalayam, Murinjakal P.O. Pathanamthitta District Kerala - 689693. Phone No. 0468-2396536 Mob. No. 08547867140 Fax No. 0468-2269727 Email: asgranitespvtltd@gmail.com
Details of NABET approved EIA consultant organisation	M/s Enkay Enviro Services Pvt.Ltd. 24-B, Dadu Marg Gopal Bari, Ajmer Road Jaipur, Rajasthan-302001. Tel. No: 0141-4013996/ 4023996 / 4016996; Fax; 0141-4026996; Email: info@enkayenviro.com

3. The proposal was first considered by SEAC in its 21<sup>st</sup> meeting whereon the decision was to recommend with the following specific conditions:

- (i) A buffer distance of 100 m should be left from the side of the temple without conducting quarrying activities.
- (ii) Approach road should be widened and hard surfaced for facilitating transport of hard rock and machinery.
- (iii) Eco- restoration should be made in the already mined pit now in possession of the proponent.

4. SEIAA in its 24<sup>th</sup> meeting decided to call for documentary evidence as to the possession rights of the lands in question cadastral map and details of CSR activities proposed. On receipt those were examined in the 26<sup>th</sup> meeting and the case was returned to SEAC for verification and recommendations. 25<sup>th</sup> meeting of SEAC reported the documents as genuine and reiterated the earlier recommendations. 27<sup>th</sup> meeting of SEIAA directed the proponent to produce a map showing buffer zone of 100m left from the side of the temple and details of eco restoration plan for the already mined pit now in his possession. The case was returned to SEAC to examine all these in detail and to report. 30<sup>th</sup> SEAC recommended the project with the previous 32<sup>nd</sup> meeting of SEIAA again considered the case and deferred for detailed examination. 33<sup>rd</sup> meeting decided to have for site inspection report of SEAC for considering the application and hence returned the application to SEAC to retransmit with the report of inspection. 35<sup>th</sup> meeting of SEAC examined the project with reference to the enquiry report based on a direction from government. As per Govt. letter no. 1501/A3/12/Envvt dated 21.12.2012, an enquiry was conducted by Sri. John Mathai, Dr Oommen V. Oommen, Vice Chairman, Members of SEAC and Sri P. Sreekantan Nair, former Director, Department of Environment and Climate Change and Secretary, SEAC Kerala. The Committee had visited the site on 21.12.2012 and made the following observations:

- Though the quarry is in operation for some time, benches are not provided. Steep cuttings over 20 m are seen in the area which should be avoided for the safety. Hence future quarrying must be done by providing benches.
- The steep faces presently seen on the working face must be declared as danger zone. Protective fencing should be provided to this area. Quarrying activities should be relocated to other side. Fresh haulage lines should be provided from the eastern side.
- Storm water is being directed to the lower slope on the north without clarification. There is a need for channelizing this storm water through drains into the desiltation tanks. Desiltation and clarification tanks are not presently provided. Hence proper arrangement may be provided for desiltation and clarification of storm water before it is let out of the premises.
- The limited quantity of over burden and top soil is not stacked for eco restoration. Arrangements may be done for the preservation of available overburden and top soil. The loose material may be provided with protective grass cover to prevent erosion.
- A place of worship was noticed near the quarry which is reported to be recent addition when quarry was in operation.
- At the end of quarrying, eco restoration of the quarry with suitable species and conservation of water in the deeper pits must be enforced.

- The presence of contiguous abandoned pits that have not fully exploited the available resources is an eye sore. There is a need to exploit the available rock reserves and finally restore the area with greenery. The abandoned area is reported to be Govt. land. Efforts may be directed for the proper utilization of this land.

The following additional conditions were recommended in the 35<sup>th</sup> meeting of SEAC.

- The steep faces presently seen on the working sides must be marked as danger zone. Protective fencing with sign boards should be provided to this danger zone.
- Quarrying activities should be relocated by providing haulage lines.

5. 35<sup>th</sup> meeting of SEIAA examined the above recommendations and decided to call for approved mining plan as per Rules 9 and 33 of the Kerala Minor Concession Rules -2015. The proponent submitted the approved mining plan. The proposal was placed in the 39<sup>th</sup> meeting of SEAC held on 14<sup>th</sup> and 15<sup>th</sup> May 2015 as agenda item no. 39.06. The proponent informed the Committee that quarry is not functioning since the lease period is over. The proponent proposes to quarry 3,50000 MTA/annum from 9.3969 ha of land for a period of 10 years. The crusher and m-sand unit are proposed and for that additional 15 KLD water will be required. The project proponent informed that the quarry is now in the newly formed Konni Taluk. He has produced certificate issued by Village officer regarding the same.

6. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, and all other documents submitted along with the Form I application and decided to endorse the decision of the 35<sup>th</sup> meeting of SEAC held on 17<sup>th</sup> & 18<sup>th</sup> October, 2014 and recommended the issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

- The steep faces presently seen on the working sides must be marked as danger zone. Protective fencing with sign boards should be provided to this danger zone.
- Quarrying activities should be relocated by providing haulage lines.
- Reclamation and eco-restoration should be done by planting indigenous tree species.

7. The Authority considered the proposals as appraised and decided to grant E.C subject to the specific conditions, recommended for by SEAC, on production of cluster condition certificate from District Geologist Pathanamthitta and an affidavit of the proponent that the mining area is having a minimum distance of 200 meters from notified P.As W.L.S and ESAs and on CSR. The documents called for having been submitted and on being satisfied that there are no other quarry in operation within 500 meters of this quarry, and there is no notified protected areas, wild Life sanctuaries, or Ecologically Sensitive Areas within 200 meters from the periphery of the mining area and there is proper undertaking that the committed CSR activities will be implemented the State Environmental Impact Assessment Authority, Kerala hereby accord environmental clearance under the EIA notification 2006, for the quarry project of M/S Aswathy Granites (Pvt ) Ltd, Murinjakkal P.O. Pathanamthitta

District- 689693 in 9.3969 ha of private land in Sy. Nos. 111/3 pt, 110/8, 112/4, 111/4 pt., 111/5 pt., 113/2, 112/5, 112/1-1, 112/1-2, 112/8-1, 112/8-2, 112/8-3, 112/2 and 112/7 at Koodal Village, Kalanjoor Panchayat, Konni Taluk, Pathanamthitta District with the following specific conditions , in addition to the general conditions stipulated for mining projects as appended hereto:

- (1) A buffer distance of 100 m should be left from the side of the temple without conducting quarrying activities.
- (2) Approach road should be widened and hard surfaced for facilitating transport of hard rock and machinery.
- (3) Eco- restoration should be made in the already mined pit now in possession of the proponent.
- (4) The steep faces presently seen on the working sides must be marked as danger zone. Protective fencing with sign boards should be provided to this danger zone.
- (5) Quarrying activities should be relocated by providing haulage lines.
- (6) Reclamation and eco-restoration should be done by planting indigenous tree species.

8. 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), Chapter7 (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.

9. 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.

10. 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, Pathanamthitta 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.Sudherer Sukumaran, M/S Aswathy Granites Pvt Ltd, Padmalayam, Murinjakal P.O, Pathanamthitta District, Kerala – 689693.

Sd/-

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

To,

Sri. Sudherer Sukumaran,  
Director,  
M/S Aswathy Granites Pvt Ltd,  
Padmalayam,  
Murinjakal P.O,  
Pathanamthitta Dist  
Kerala – 689693.

Copy to:

MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E& F Wing,  
Ibblock, Koramangala, Bangalore-560034.

Principal Secretary to Government, Environment Department

The District Collector, Pathanamthitta

The Director, Department of Environment & Climate Change.

The Director, Mining and Geology Department, Government of Kerala

The Secretary, Kalanjoor Grama Panchayat, Konni, Pathanamthitta district

Chairman, SEIAA

Website

Stock File

O/C.

Forwarded / By Order

Administrator, SEIAA



# STATE 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 dumping 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](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.
- (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

