



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 building stone quarry project in Survey Nos. 428 (P) of Edayur Village, Tirur Taluk, Malappuram District, Kerala by M/s U.K. Granites Pvt. Ltd.-Granted- Orders issued.

**STATE ENVIRONMENTAL IMPACT ASSESSMENT
AUTHORITY**

No. 727/SEIAA/EC1/6106/2014

dated, Thiruvananthapuram 15-01-2016

- Read:-**
1. Application dated 05-12-2014 submitted by Sri. U. Abdul Kareem, Managing Partner, M/s U.K. Granites, Edayur Post, Thirur Taluk, Malappuram District-676552.
 2. Minutes of the 44th meeting of SEAC held on 12/13-08-2015.
 3. Minutes of the 47th meeting of SEAC held on 13/14-10-2015.
 4. Minutes of the 45th meeting of SEIAA held on 04- 12- 2015.

Environmental Clearance No. 135/2015

Sri. U. Abdul Kareem, Managing Partner, M/s U.K. Granites, Edayur post, Thirur Taluk, Malappuram District vide his application and mining plan dated 05/12/2014 and 16/03/2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 428(P) at Edayoor Village, Tirur Taluk, Malappuram District for an area of 4.685 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 18th 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 10°55'50.40" N to 10°55'39.02." N Latitude and 76°05'43.32" E to 76 °05'35.19" E Longitude. The lease area consists of 4.685 hectares and as per revenue records which is private own land (patta land) consent obtained by Mr. U. Abdul Kareem. The massive chamoockite formation is clearly inferred with outcrops. Hence no alternate site was examined. The present land use is rubber plantation. The proposed project is for quarrying of 29,595 m³/annum of building stone from an area of 4.685 hectares of land. There is no mineral waste anticipated in the proposed quarry. The entire quarried out mineral will be utilized; hence the stripping ratio is 1:0. Domestic effluent will be discharged in septic tank and soak pit system. The quarry operation is proposed to carry out with conventional open cast semi mechanized mining with 5.0 meter vertical bench with a bench width of 5.0 meter. The ultimate depth of the mine workings is estimated to be 50m (45 m along the hill slope up to general ground level of 95 m MSL & 5m below the general ground

level i.e. up to 90 m MSL) for the expected life of Twenty years. The total water requirement is 7.0 KLD, which will be met from bore-well and open well from nearby area and also from pit water. There is no toxic effluent expected to generate in the form of solid or liquid and gases and the no requirement of treatment of waste.

3. Electricity for Mines office and Lights only at nights (working is restricted on day time only between 9 a.m. to 5 p.m.) will be obtained from state electricity board. DG sets will be provided for emergency use. Around 100 LPD of HSD Diesel will be used for quarrying machineries. Diesel will be brought from nearby diesel pumps. 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, quarry benches and internal roads. Explosive shall be procured by License holder and transported to the site at the time of blasting and used in accordance with Explosive Rules 2008, MSIHC Rules 1989 Mines Act 1952 and MMR 1961 and with necessary permission for blasting from DGMS. As per year wise afforestation programme, plantation is proposed to be done in 33% of the lease area.

4. There are no protected areas like ecological landscape, cultural area, tourist, pilgrim areas etc. identified within the 15 Km radius. There is no Eco-sensitive area (ESZ) within the radius of 15 km from the Proposed area. There is no protected sensitive species are identified within the 15km radius. Nearest river is Kunthi River which is situated at a distance of 5.50 Km SE of the project site. The nearest densely populated built-up area is located at 5.0 Km SW from the proposed quarry. There is no interlinked project associated with the quarry unit and the proponent stated that, there is no litigation pending against the lease area/applicant of the lease area in any court of law, CRZ recommendations are not applicable. The total cost of the project is Rs. 90, 00,000/-. It is proposed to spend Rs 450,000 Lakhs/annum for various local development activities. Other details of the case are as under:

5. BASIC INFORMATION OF THE PROJECT

Environmental parameters considered	
WATER	
Facilities for liquid waste treatment	Garland drains will be provided around the mining boundary to arrest silt wash off during rains. The storm water drain will be connected with a settling tank. Gully checks/check bunds and retention walls will be constructed at strategic locations to arrest silt wash off. The seasonal water courses will be protected by a khathali plantation to reduce the soil erosion. Water accumulated in mine pit and settling tank will be used for dust suppression and plantation and excess water, if any, will be discharged outside only after ensuring proper settling.
Water quality meeting requirements	Regular monitoring and analysis will be carried out to meet the stipulated standards.
Water Regime	The quarry operation will be restricted well above the water table (Summer in 45m and rainy seasons in 40m), hence the water table will not be affected in any manner. The seepage and rain water will be drained out from the pit by the 5HP motor pump and will be discharged through filter media to boundary barrier for afforestation and excess water will be sprayed on haul roads to prevent dust propagation in to the atmosphere.

LAND	
Access road to the site -Width & Condition	The road from the quarry to main road is already in existence; the same road will be maintained and utilized for transportation.
Storage of explosives /hazardous substances	Explosive shall be procured by License holder and transported to the site at the time of blasting and used in accordance with Explosive Rules 2008, MSIHC Rules 1989, Mines Act 1952 and MMR 1961. Necessary permission will be obtained from concerned authorities.
Facility for solid waste management	Top soil to the tune of 22,200 m ³ will be generated during the life of the mine. The soil will be used for plantation and partial backfilling of the mined out void. The waste generated during quarrying activity is negligible rock mass during handling and re-handling. Hence, there is no waste in this quarrying operation. There is no other solid waste generation during the quarrying operation.
Significant land disturbance resulting in erosion, subsidence & instability	As per seismic zonation map of India, 2001, the proposed area comes under Zone-II. The proponent stated that the project area lies in the crystalline strata of peninsular India and there is no past record of any seismic activity or any natural disaster recorded in this area
Top soil, overburden etc.	The area is an elevated terrain so no overburden is anticipated during mining operation. About 22200 m ³ soil will be generated, which will be used in plantation and partial backfilling of the mined out void.
NOISE	
From operation of equipment e.g. engines, ventilation plant, crushers	Mining operation is being carried out by semi-mechanized method. Mitigation measures: Proper and regular maintenance of machinery. Ear muffs and earplugs will be provided to the persons exposed to noise levels. Periodical medical check-up will be conducted
Noise pollution control measures	The major noise generating source from the proposed activity is due to vehicular movement. Vehicle speed will be maintained at 20 KMPH within the proposed mining area. Proper training to personnel to create awareness about adverse noise level effects. Planned noise monitoring at suitable locations in the proposed area and outside locations for proper effective remedial actions. The greenbelt, which is being provided, will act as noise attenuator. Control Measures: Development of thick green belt around mining area Periodic maintenance of machinery and equipments. Provision of earplugs to workers exposed to high noise areas. Conducting periodical medical checkup of all workers for any noise related health problems. Proper training to personnel to create awareness about adverse noise level effects. Periodic noise monitoring at suitable locations in the mining area and nearby habitations to assess efficacy of adopted control measures.
Noise level monitoring	Noise level monitoring and other Mitigation measures will be carried out to reduce Noise and Vibration.
AIR	
Likely emissions affecting environment	Negligible emissions of SO ₂ & NO ₂ will be there due to use of diesel operated machinery and during blasting. Vehicular emissions will be kept under control by proper maintenance

By deposition of pollutants emitted to air into the land or into water	During operation phase there will be dust emissions mainly from excavation, loading, unloading, mineral handling, transportation and mobile sources. Control measures like water sprinkling, green belt development etc. will be adopted to minimize the same. Thus, dust settling on land is expected to be very low and will be nontoxic.
Air pollution control measures	Dust suppression by spraying of water on haulage roads at regular frequencies. Provision of dust mask to workers working at highly dust prone and affected areas. Provision of green belt development by vegetation for trapping dust. The vehicles employed shall be checked periodically for vehicular emissions. Greenbelt development along the haul roads, and along the boundaries of the lease area.
Air quality monitoring	Air quality will be monitored periodically as per Norms and Mitigation Measures will be carried out to prevent dust and Air propagation in to air. Mist Water spraying will be carried out to suppress dust.
ENERGY	
Energy requirement	The proposed Building stone quarrying does not require any power supply for the quarrying operation. It is proposed to operate in day time only from 9 Am to 5Pm with 1 Hour lunch interval between 1Pm to 2Pm. Electricity for use in office will be obtained from SEB. DG set will be provided for emergency use. Diesel (HSD) will be used for quarrying machineries around 100 LPD of HSD. Diesel will be brought from nearby diesel pumps.
BIODIVERSITY	
Presence of any endangered species or red listed category	There is no endangered, endemic or scheduled flora species existing at proposed mine lease area. There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN.
Loss of native species and genetic diversity	There will not be any loss of native species of genetic diversity as the quarry already exists and continuation of the same will not affect or loss of native species in general
SOCIAL ASPECTS	
Proximity to nearest densely populated or build-up area	5.0 Km towards South-West
CSR related to the project	In the following sectors: 1. Education 2. Health 3. Community Development and also as per Chapter 5
GENERAL	
Details of Authorised Signatory	Sri. U. Abdul Kareem, Managing Director, M/s. U. K. Granites, Edayur Post, Valanchery, Malappuram District, Kerala-676 552 e-mail : kareemuk53@gmail.com

Details of NABET approved EIA consultant Organisation	M/s Anacon Laboratories Pvt. Ltd., NABET/EIA/RAO15/042 dated 30/07/2015, 60, Bajiprabhu Nagar, Nagpur-440 033, Maharashtra. Lab: FP-34, 35, Food Park, MIDC, Butibori, Nagpur-441122, Ph: 0712-2242077, 9373287475, Email: anaconngp@gmail.com , anaconlabngp@gmail.com Website: www.anaconlaboratories.com , www.anacongarway.com
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6. The proposal was appraised in the 44th meeting of SEAC held on 12th & 13th August 2015 and the Committee deferred the item for field visit. The sub-committee of SEAC visited the quarry project of Sri. U. Abdul Kareem, M/s U.K. Granites on 2 October 2015. The field visit report is as follows:

"This is an existing quarry. They are following the open cast semi mechanized method. Recently, only, started formation of benches. Very steep cutting. The drainage from the quarry is collected in a pond which is not maintained properly. Lots of vegetation is seen around the site. The quarry has thick overburden. The removed overburden is not collected and deposited properly. No house or settlement is seen nearby. The proponent has not provided any signboards or safety signals at the quarry site.

In addition to the general conditions, the following specific conditions should be added:

- 1. The mining should be continued only after the formation of benches*
- 2. The overburden should be deposited at a safer place and stored in the designated places for future restoration of the land and provided with protective support walls*
- 3. The trees and vegetation around the quarry site should be conserved*
- 4. Proper sign boards and fencing should be provided all around the quarry site*
- 5. The drainage water from the quarry should be collected properly, desilted and clarified before discharge.*

7. The proposal was again placed in 47th meeting of SEAC held on 13th and 14th October 2015 and 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 decided to recommend for issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

1. The mining should be continued only after the formation of benches
2. The overburden should be deposited at a safer designated place for future restoration of the land and provided with protective support walls
3. The trees and vegetation around the quarry site should be conserved
4. Proper sign boards and fencing should be provided all around the quarry site
5. The drainage water from the quarry should be collected properly, desilted and clarified before discharge.
6. To the extent possible local biodiversity management Committee shall be involved in the environmental management/restoration activities.
7. Reclamation and eco-restoration should be done by planting native species.

8. The proposal was considered by SELAA in its 45th meeting held on 04.12.2015. The Authority decided that Environmental Clearance be given to the quarry project

subject to the specific recommendations of SEAC and the above site specific conditions in addition to the general conditions stipulated for mining projects and the mitigation measures undertaken in the EMP in the PFR. Validity may 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 M/s U.K. Granites in Survey Nos. 428 (P) of Edayur Village, Tirur Taluk, Malappuram District, Kerala subject to the specific conditions in para 7 above and the general conditions annexed hereto.

9. 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 6 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 3 of EMP (Mining), Chapter 7 (Blasting), Chapter 6 (Mine Drainage), Chapter 7 (stacking of mineral rejects and disposal of wastes) Chapter 4 (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.

10. Validity of the environmental clearance will be five years from the date of this clearance, subject to earlier review in the event of violation or non-compliance of any of the conditions stipulated herein or genuine complaints from residents within the security area of the quarry.

11. 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.

12. The given address for correspondence with the authorised signatory of the project is Sri. U. Abdul Kareem, Managing Director, M/s. U. K. Granites, Edayur Post, Valanchery, Malappuram District, Kerala-676 552.



Sd/-
P. Mara Pandiyan., I.A.S
Member Secretary (SEIAA)
&
Additional Chief Secretary to Government
Environment & Forest Department
Government of Kerala.

To,

Sri. U. Abdul Kareem,
Managing Director, M/s. U. K. Granites,
Edayur Post, Valanchery,
Malappuram District,
Kerala-676552.

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
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, TVM-4
6. The Secretary, Edayur Grama Panchayat,
Kuttippuram Block, Edayur P.O., Malappuram- 676554.
7. Chairman, SEIAA
8. Website
9. Stock File
10. O/C.



Forwarded/ By order

Administrator
SEIAA

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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 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 5m and width should not be less than 5m.
- (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) 100m 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 '3ft X 3ft' 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 or consent given by any other authority for the same project.



[Signature]
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