



Validity expires on 29-11-2020

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. 1/1 (pt), 2/2 (pt), 3/3 (pt) and 32/2 (pt) at Mankada Village, Mankada Panchayath, Perinthalmanna Taluk, Malappuram District, Kerala by M/s Ernad Granite Private Ltd.-Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 609/SEIAA/EC1/4638/2014

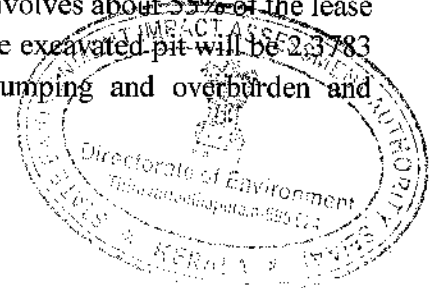
dated, Thiruvananthapuram 30-11-2015

- Read:-*
1. Application dated 22-09-2014 submitted by Sri. M.P. Shoukathali, Managing Director, M/s. Ernad Granite Private. Ltd., Mundampra house, Areecode P.O., Malappuram District.
 2. Minutes of the 41st meeting of SEAC held on 16/17-06-2015.
 3. Minutes of the 45th meeting of SEAC held on 11/12-09-2015.
 4. Minutes of the 43rd meeting of SEIAA held on 16- 10- 2015.

Environmental Clearance No./08/2015.

Sri. M.P. Shoukathali, Managing Director of M/s. Ernad Granite Pvt. Ltd., vide his application received on 26/09/2014 has sought Environmental Clearance under EIA Notification, 2006 for the building stone quarry project in Sy. No. 1/1 (pt), 2/2 (pt), 3/3 (pt) and 32/2 (pt) at Mankada Village, Mankada Panchayath, Perinthalmanna Taluk, Malappuram District, Kerala for an area of 4.2861 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) dtd. 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° 3'34.63"N to 11° 3'48.52"N Latitude and 76°9'19.01"E to 76°9'30.99"E Longitude. The land use classification as per revenue records is private own land. The current proposal is for quarrying of 3, 96,000 TPA of building stone from the lease area consists of 4.2861 hectares, which is private land and mineral specific. Hence no alternate site was examined. The expected life of mine will be 6 years. Forest land is not involved in the project. The project activity involves about 55% of the lease area for exploring building stone. At the end of life of mine, the excavated pit will be 2.3783 Ha, in which 2.1405 Ha will be reclaimed with stacked dumping and overburden and



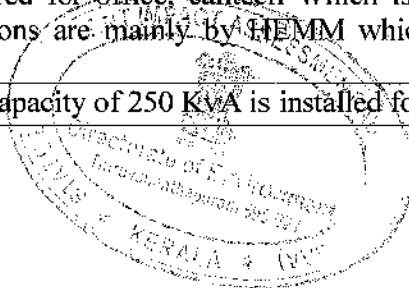
rehabilitated by plantation and the remaining part 0.2378 Ha will be used as a water pond. It is estimated that around 17,590 tonnes of topsoil will be generated and 73,000 tons of mine waste will be removed during the mining operations, which will be properly stacked and will be utilized for plantation. Mine waste material will be backfilled. The proposed project does not involve any underground mining activities. The mining will be done by open cast method. The bench height and width proposed will be 5.0m (2.50mX 2 sub benches) & 5m. To minimize the impacts of drilling and blasting, latest technology will be implemented. Excavated material shall be transported to the crushing unit for further processing. The ultimate depth of working mine estimated to be 100 m above MSL.

3. The sewage of 0.51 KLD generated from the mine office will be treated through septic tank followed by soak pit. The sludge generated from the labour quarter will be disposed along with reclamation or back filling. The sludge generated from the septic tank, on a periodic basis will be dried and will be used as manure in plantation. A total water requirement of 10 KLD. About 0.6 KLD is required for domestic consumption, 6.0 KLD is required for dust suppression and 3.0 KLD is required for green belt development. The required water will be met from bore well within the area and also from water pond. Electric power required for quarry operation is about 570 KW/day which is drawn from KSEB. DG. Set-1 No. with a capacity of 250KvA is installed for power backup. About 20 liters/Hr of HSD is required in a Day. Explosives will be procured, stored, transported, handled and used in accordance with Indian Explosive Act 1884, MSIHC Rules 1989, Mines Act, 1952 and regulations there under. Used oil from maintenance of from maintenance of DG sets, HEMM and tippers will be handled as per Hazardous Waste (Management Handling & Trans boundary Movement) Rules, 2008. Air pollutants are generated from transportation. There will be fugitive emissions generated during material handling, excavation, transportation, loading, unloading etc. Regular water sprinkling on haul road will suppress the dust particles and prevent them from getting air-borne. Fugitive dust will be generated while excavation, transportation & loading operations. This will be taken care of by water sprinkling at regular intervals on the haul roads, quarry benches, and internal roads. No odour is generated from handling the materials including construction materials, sewage and waste. Plantation with shrubs, herbs and trees will be done as part of eco-restoration work.

4. Around 2,000 saplings will be planted in an area of 2.1405 ha. 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. As per the biodiversity assessment report, no endemic species of plants are identified in the project site. Electrical HT line and LT line is located within 500 m radius, Kadalundi River at a distance of about 2.3 Km N of the project site. The nearest house is located at 41 m SW from the proposed quarry by keeping 100m buffer distance between the nearest house & the area proposed for mining. 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. The total cost of the project is Rs. 55 Lakhs. It is proposed to spend Rs 14.25 Lakhs/annum for various local development activities. Other details of the case are as under:

5. BASIC INFORMATION OF THE PROJECT

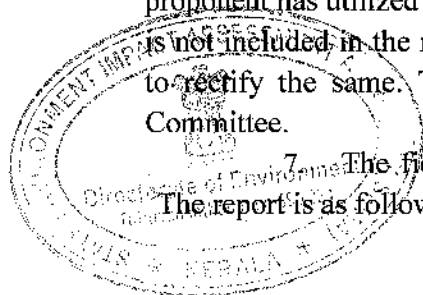
<i>Environmental parameters considered</i>	
WATER	
Water requirement & sources	Domestic consumption 0.6 KLD, Dust suppression:6 KLD Watering the plantation:3 KLD Source - Storm water pond and bore well
RWH units proposed	10% of the lease area (0.2378 Ha) will be converted as RWH during mine closure plan.
Facilities for liquid waste treatment	Liquid wastes from toilet and office will be treated in septic tank and soak pit
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	Monitoring and analysis carried out and results found within the permissible limits, except biological parameters.
Does it have provisions for use of recycled water	No
LAND	
Proximity to forest lands	No forest within 15 km
Access road to the site – Width & Condition	The public road leading to the quarry has a width of about 5.5m, where as all roads with in the quarry are having a minimum width of 7m.
Storage of explosives /hazardous substances	Explosives will be procured, stored, transported, handled and used in accordance with Indian Explosive Act 1884, MSIHC Rules 1989, Mines Act, 1952 and regulations there under
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.
Proneness of the area for landslides	The material exposed in the quarry is Charnockite, which is hard in nature and as per the seismic zone map, the project site falls under zone III (moderate).
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.	Topsoil – 17,590 tonnes Overburden –73,000 tonnes
AIR	
Likely emissions affecting environment	Due to quarry activity and operation of heavy earth moving machinery generation of dust, noise is likely. However, mitigative measures are proposed accordingly in the EMP.
ENERGY	
Energy requirement	Power supply is required for office, canteen Which is from KSEB. Quarry operations are mainly by HEMM which are operated by HSD.
Extent of usage of	DG. Set-1 Nos with a capacity of 250 KVA is installed for



alternative energy resources	power backup.
BIODIVERSITY	
Presence of any endangered species or red listed category	There are no endangered or rare species in the area.
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.
Likely displacement of fauna	No
Any introduction of alien / invasive species	No
SOCIAL ASPECTS	
Proximity to nearest habitation	41 m towards South East(100m buffer distance is kept between the nearest house and the area proposed for mining)
CSR related to the project	In the following sectors: 1. Education 2. Health 3. Women Empowerment 4. Community Development and also as per Chapter 5
GENERAL	
Eco restoration programmes	Vide Para 4.
OTHER DETAILS OF THE PROJECT PROPOSAL	
Details of Authorised Signatory	Sri. M.P. Shoukathali, Managing Director, M/s. Ernad Granite Pvt. Ltd., Mundampra House, Areecode P.O., Malappuram-673639 Ph:9387340440 ernadgranitepvtltd@gmail.com
Details of NABET approved EIA consultant organisation	M/s Metamorphosis, NABET/EIA/1215/141 #143, 39 th Main, 4 th Cross, Behind Silk Board, BTM Layout, II Stage, Bangalore-560068 mail@metamorphosis-india.com

6. The proposal was first considered in the 41th meeting of SEAC held on 16th to 17th June 2015. The committee found that in the application proposed area for mining is 4.2861 ha., but in the mining plan it is 2.9 ha since the Mining and Geology Department insisted to leave buffer from the lease boundary. Highest elevation is 195m above MSL and lowest is 115m above MSL. This is an existing quarry. Under SR initiative the project proponent has utilized Rs.1425000/-. The Committee observed that a proper mine closure plan is not included in the mining plan and therefore it is incomplete. The proponent was directed to rectify the same. The Committee decided to defer the item for site visit by the sub-committee.

7. The field visit was carried out on 30-7-2015 by a sub-committee of SEAC. The report is as follows:-



'The project is an active quarry with a crusher unit located about 2 km from the site. Since the quarry site is comprised of exposed rocks, only minimum topsoil was seen at the site. Topsoil is sparsely distributed in the area. They had initiated mining operations by open cast semi-mechanized method. And the present quarrying activities are being done by maintaining the height and width of the bench at 5m. The drains are found to regulate the monsoon flow from the top and it is being clarified and collected. The firm had constructed a pond approximately 500 m from the site which receives the drains from the quarry site and is being used by public. There is no major defect noticed in the area. Vegetation is seen around the site. They had planted teak, mahogany etc. near the crusher unit which is reducing the dust problem. The approach road to the quarry from the main road is maintained in satisfactory condition. No residential houses are seen near the quarry site'.

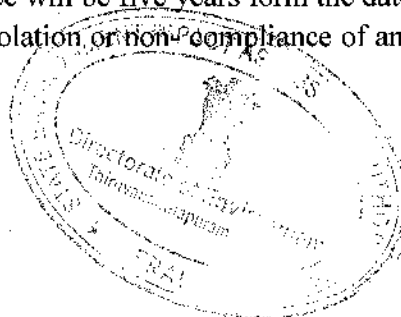
8. Then the proposal was considered in the 45th meeting of SEAC held on 11-12/09/2015 and the Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, field investigation report and all other documents submitted along with the Form I application and decided to Recommend for issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

1. To the extent possible local biodiversity management Committee shall be involved in the environmental management/restoration activities.
2. Reclamation and eco-restoration should be done by planting native species.

9. The proposal was considered by SEIAA in its 43rd meeting held on 16.10.2015. 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. The documents called for having been submitted and on being satisfied that 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. Ernad Granite Pvt. Ltd., in Survey Nos. 1/1 (pt), 2/2 (pt), 3/3 (pt) and 32/2 (pt) at Mankada Village, Mankada Panchayath, Perinthalmanna 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 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.



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. M.P. Shoukathali, Managing Director, M/s. Ernad Granite Pvt. Ltd., Mundampra House, Areecode P.O., Malappuram-673639

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

To,

Sri. M.P. Shoukathali,
Managing Director,
M/s. Ernad Granite Pvt. Ltd.,
Mundampra House,
Areecode P.O., Malappuram-673639
Ph:9387340440

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, Iblock, 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, Thiruvananthapuram-4
6. The Secretary, Mankada Grama Panchayat, Vellila P.O., Perinthalmanna, Malappuram – 679324.
7. Chairman, SEIAA
8. Website
9. Stock File
10. 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 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 or consent given by any other authority for the same project

