



***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: Environmental clearance for the quarry project in Sy. No. 4/3, 4/4, 4/11-1, 4/11, 4/13-1, 4/13-2, 4/13-3, 4/14, 6/1, 6/3, 6/4, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 6/5, 16/2 at Ezhumattoor Village, Mallapally Taluk, Pathanamthitta District, Kerala by Sri. V.R. Ajayakumar, Mallapally Taluk, Pathanamthitta District -Granted- Orders issued

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 816//SEIAA/EC4/2488/2015

Dated: 4-3-2016

- Ref: 1. Application dated 25-6-2015 from Sri. Ajaya Kumar, Proprietor, M/s Lakshmi Stone Industries, 479, Lakshmi Buildings, Ezhumattor P.O, Mallappally, Pathanamthitta District-689586.
2. Minutes of the 47th meeting of SEAC held on 13/14-10-2015.
3. Minutes of 49th meeting of SEAC held on 7/8-12-2015.
4. Minutes of the 48th meeting of SEIAA held on 23-1-2016.

ENVIRONMENTAL CLEARANCE NO. 25 / 2016

Sri. V.R. Ajayakumar, Proprietor, M/s Lakshmi Stone Industries, 479, Lakshmi Buildings, Ezhumattor P.O, Mallappally, Pathanamthitta-689586 vide his application received on 30-06-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 4/3, 4/4, 4/11-1, 4/11, 4/13-1, 4/13-2, 4/13-3, 4/14, 6/1, 6/3, 6/4, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 6/5, 16/2 at Ezhumattoor Village, Mallapally Taluk, Pathanamthitta District, Kerala for an area of 4.9011 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) dated 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 N 9° 26' 13.71" - N 9° 26' 00.08" E 76° 41' 56.17" - E 76° 41' 49.57". The current proposal is for existing quart and mineral specific hence no

alternate site was examined. The proposed quarry project is interlinked with crusher unit within the complex. The highest and lowest elevation of the lease area is 109 m and 89 m MSL. A total quantity of 39,209 m³ of top soil and 24,505 m³ of over burden will be removed during the mining operations. About 1.60 KLD sewage will be generated and it will be disposed to septic tank and soak pit. The total water requirement is 17 KLD and the total power requirement will be 75 kW which will be drawn from diesel engine. Other details of the project as under:

Brief description of the project	Quarry project with an area of 4.9011 ha. & production capacity of 2,00,000 MTA.		
Category/Subcategory & Schedule	Category B/B/2 & Schedule 1 (a)		
Location Sy no/ district, Taluk/ village etc.	Re-Survey Nos. 4/3, 4/4, 4/11-1, 4/11, 4/13-1, 4/13-2, 4/13-3, 4/14, 4/1, 6/3, 6/4, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 6/5, 16/2, Ezhumattoor Village & Panchayat, Mallappally Taluk, Pathanamthitta District, Kerala.		
GPS co-ordinates	Latitude (N)	9 ⁰ 26'13.71" to 9 ⁰ 26'00.08"	
	Longitude (E)	76 ⁰ 41'56.17" to 76 ⁰ 41'49.57"	
Extent of area (in hectares)	4.9011 ha.		
Minimum and maximum height of excavation (MSL)	109 m MSL and 84 m. MSL		
Life of mine proposed	6.5 Years		
Ultimate depth of mining (in MSL)	84 m. MSL		
Distance from the adjacent quarry	There is no quarry is operating within 500 m. radius.		
Capacity of production	2,00,000 MTA		
Details of Project Cost	Rs. 4.9011 Crores.		
Financial Statement including funding source and details of insurance	Insurance = Insurance to the quarry workers provided by the insurance company. Source of funding = Own source & loan from bank.		
ABOUT THE PROJECT			
Environmental Parameters Considered			
WATER			
Water requirement & sources	The total water requirement is about 17 KLD in which 2 KLD is for domestic which would be sourced from open well, 13 KLD for dust suppression system in mine as well as ancillary unit and 2 KLD for plantation purposes and will be sourced from storm water pond.		
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	No		

recycled water	
LAND	
Proximity to forest lands	Mannamaruthy Reserve Forest, 13 km., SE
Is the land assigned for any other special purpose; Give details	No
Access road to the site –Width & Condition	7 m. wide, tarred road, W
Storage of explosives /hazardous substances	Yes, Explosives will be stored as per Explosive Act / Rules.
Facility for solid waste management.	The municipal solid waste will be suitable disposed.
Topographic features/ slope	The topography of the lease area is hilly area covered with native tree, climbers, grass, shrubs, herbs etc. Slope = towards north side.
Proneness of the area for landslides	No
Significant land disturbance resulting in erosion, subsidence & instability	No
Top soil, overburden etc.	Top soil = 39,209 cu.m. Overburden = 24,505 cu.m.
AIR	
Air quality meeting requirements	Ambient air quality standards will be adhered to
Noise level meeting requirements	Ambient noise standards will be maintained
Likely emissions affecting environment	Diesel engine emissions & emissions from movement of vehicles like dumpers, trucks, tankers etc. will also generate.
ENERGY	
Energy requirement	The total power requirement will be 75 kW for compressions, which will be drawn from diesel engine.
Energy Sources	From diesel engine.
Extent of usage of alternative energy resources	No
BIODIVERSITY	
Presence of any endangered species or red listed category	No
Loss of native species and genetic diversity	For the quarrying activity all of native tree species, shrubs, herbs, climbers etc. existing at project site will be cleared.
Likely displacement of fauna	No
Any introduction of alien / invasive species	No
SOCIAL ASPECTS	
Proximity to nearest habitation	Nearest house is about 55 m. from the site. Office Memorandum dt. 29-10-2014 issued by MoEF&CC, Govt. of India regarding minimum area distance required from building / road / inhabited site to the mining area is provided.

CSR components suggested			
Sr. No	Description	Approx. Amount proposed	Remarks
1.	Development of school	Recurring = about Rs. 9 lakhs Non-recurring = about Rs. 10 lakhs	A detailed study on social status of the project site surroundings & need base study on proposed CSR activities were carried out. The summary of the report is provided.
2.	Promotion of education		
3.	Help to vulnerable		
4.	Development of Basic infrastructure		
GENERAL			
Does it propose environment management plan		Yes	
Does it have eco restoration programmes		The year wise programme of afforestation for the life of mine, about 4,500 trees will be planted. The main aim of the green belt development is to restore the eco-system to its original form to a maximum extent by designing the green cover with the same native species.	
Biomedical waste management		Not applicable	
E-waste management		Not applicable	
Sufficiency of parking spaces/ traffic management		Yes	
Litigation/court cases, if any, against the project (provide details)		No	
Details of Authorised Signatory		Sri. V.R. Ajayakumar, Proprietor, M/s Lakshmi Stone Industries, 479, Lakshmi Buildings, Ezhumattoor P.O, Mallappally, Pathanamthitta-689586	
Details of NABET approved EIA consultant organization		M/s Environmental Engineers & Consultants Pvt. Ltd. (at Sr. No. 54 as per MoEF & CC list of Accredited Consultant Organization) Head Office :- A1-198, Janak Puri, New Delhi. Branch Office:- C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.	

3. The 47th SEAC held on 13th and 14th October 2015 appraised the proposal and decided to defer the item for field visit. Field visit was conducted by the subcommittee of SEAC on 31-10-2015. The major observations are as follows:

"The project is located near Kottenkudy at about 5 km east of Mallappally town. This quarry lease area of 4.9011 ha falling in own land occupy the west facing slopes of a hillock where few quarries were in operation. However only another quarry (J J Crusher) is currently in operation within 500 m and the combined area is less than 25 ha. The quarry lease area is

divided into two segments with a seasonal stream separating the two. The southern block has been considerably exploited with a deep pit in the centre and with steep cuttings. The northern minor block is a virgin land. The rock type is weakly foliated charnockite with prominent subvertical joints. Weathered rock with more than 1 m thick over burden (OB) and top soil is seen in the upper part that is yet to be developed. The entire storm water from the area flows to the pit in the central part from where it is pumped out. Rubber is the dominant land use. One dwelling units seen in the vicinity of northern block is reported to belong to the Proponent. The quarry has crusher and other associated facilities. The entrance of the unit is well maintained with flowering plants. Old pits have been partly reclaimed and used for growing paddy and grass. A dairy farm with varieties of cows is also functioning in the area.

Based on an overall evaluation of the site, the quarry operations may be recommended with following conditions:

1. Approved mine plan following the 2015 rules may be made available.
2. Cadastral map to be submitted demarcating actual extent of area to be quarried.
3. Fencing should be provided all around the lease area.
4. A clear buffer width of not less than 7.5 m to be provided from the stream. The flow of water in the stream should not be tampered with.
5. The deep abandoned pit on the northern side of property to be maintained as RWH structure.
6. Ultimate depth of mine to be limited to the permissible level of deepening by benches.
7. OB burden and top soil must be used for ecorestoration of old abandoned pits and balance to be stored in a designated place.
8. The working must progress from top to bottom by providing benches. The existing steep cuttings should be negotiated in a planned and phased manner only.

Other items from general conditions like a) Appropriate sign boards should be displayed, b) The blasting time must be displayed and strictly adhered to, c) The PPV values must be less than 10 mm/sec, d) Steps to be taken to limit fly rock to within the lease area. Rock fragments should not fall anywhere outside the lease area, e) Dust suppression mechanism must be in place f) A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the biodiversity assessment etc”.

4. The proposal along with field visit report was again placed in the 49th meeting of SEAC held on 7th and 8th December 2015. The committee verified the cadastral map provided with the mining plan and found satisfactory. 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 recommend for issuance of Environmental Clearance for mining with following specific conditions, in addition to the general conditions stipulated for mining projects.

1. A clear buffer width of not less than 7.5 m shall be provided from the stream. The flow of water in the stream should not be tampered with.
2. The deep abandoned pit on the northern side of property shall be maintained as RWH structure

3. Ultimate depth of mine shall be limited to the permissible level of deepening by benches.
4. OB burden and top soil must be used for eco-restoration of old abandoned pits and balance shall be stored in a designated place.
5. While providing benches the existing steep cuttings should be negotiated in a planned and phased manner only.

5. The 48th meeting of SEIAA held on 23-1-2016 considered the recommendations of the SEAC and decided to grant environmental clearance to the quarry subject to the specific conditions recommended by SEAC, and the mitigation measures undertaken in the EMP in the PFR and Mining plan submitted.

6. Environmental clearance under the EIA notification 2006 is granted to the quarry project of Sri. V.R. Ajayakumar, Proprietor, M/s Lakshmi Stone Industries, 479, Lakshmi Buildings, Ezhumattoor P.O, Mallappally, Pathanamthitta-689586 vide his application received on 30-06-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 4/3, 4/4, 4/11-1, 4/11, 4/13-1, 4/13-2, 4/13-3, 4/14, 6/1, 6/3, 6/4, 9/1, 9/2, 9/3, 9/4, 9/5, 9/6, 9/7, 6/5, 16/2 at Ezhumattoor Village, Mallappally Taluk, Pathanamthitta District, Kerala for an area of 4.9011 hectares subject to the specific conditions as recommended by SEAC in para 4 above, the mitigation measures undertaken in the EMP in the PFR and Mining plan submitted and the general conditions for mining appended hereto.

7. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in Chapter 4.3.4 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 this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

8. 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.

9. Compliance of the conditions herein will be monitored by the SEIAA 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 authorized signatory of the project is Sri. V.R. Ajayakumar, Proprietor, M/s Lakshmi Stone Industries, 479, Lakshmi Buildings, Ezhumattoor P.O, Mallappally, Pathanamthitta-689586.

Sd/-
P.MARA PANDIYAN.I.A.S,
Member Secretary (SEIAA)
&
Additional Chief Secretary
Environment & Forests Department.
Government of Kerala.

To,

Sri. V.R. Ajayakumar,
Proprietor, M/s Lakshmi Stone Industries,
479, Lakshmi Buildings,
Ezhumattoor P.O,
Mallappally,
Pathanamthitta-689586.

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034
2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala
3. District Collector, Pathanamthitta
4. Director, Mining & Geology
5. Secretary, Ezhumattoor Grama Panchayat, Thelliyoor. P.O, Vennikkulam, Pathanamthitta District, 689544.
6. Chairman, SEIAA
7. Website
8. O/c
- ✓ 9. S/f



Forwarded/ By Order

Administrator,
SEIAA

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

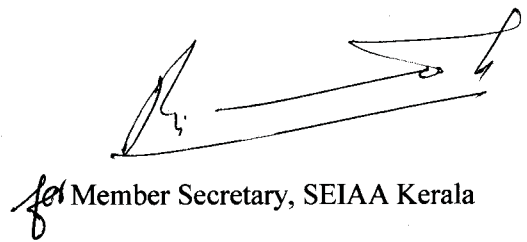
GENERAL CONDITIONS (for mining projects)

- (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) 100 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




for Member Secretary, SEIAA Kerala