



***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 building stone quarry project in Sy. No. 402/1, 403/1, 403/2 at Chengalam East Village, Kottayam Taluk, Kottayam District, Kerala by Sri. Charles Mathew -E.C- Granted.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 835/EC4/2713/2015/SEIAA

Dated: 03-02-2016

- Read:-*
1. Application dated 3-7-2015 from Sri. Charles Mathew, Palathara House, Thuruthy P.O., Changanacherry, Kottayam-686001.
 2. Minutes of the 48th meeting of SEAC held on 6/7-11-2015.
 3. Minutes of the 47th meeting of SEIAA held on 7-1-2016.

ENVIRONMENTAL CLEARANCE NO. 07 / 2016

Sri. Charles Mathew, Palathara House, Thuruthy, Changanassery, Kottayam-686001 vide his application received on 14-7-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project Sy. No. 402/1, 403/1, 403/2 at Chengalam East Village, Kottayam Taluk, Kottayam District, Kerala for an area of 2.0766 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.

The proposed project site falls in Latitude 09°37'36.81'' to 09°37'43.32'' N and Longitude 76°42'40.75'' to 76°42'46.67'' E. The land use classification as per revenue records is private own land. The current proposal is for existing quarry and mineral specific hence no alternate site was

examined. The quarry was in operation with a short term quarrying permit issued by Mining & Geology Dept., Govt. of Kerala vide order no. 34/GBS/CRPS/2014-15/1696/DOY/2014 dated 19-9-2014. Forest land is not involved in the project site. The mining will be done by open cast semi mechanized method. At the end of life of mine, the total excavated area will be 1.8216 ha. And the same will be reclaimed by plantation. The top soil will be dumped at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. OB will be utilized for laying internal haul road and will form base in reclamation/ plantation. About 0.8 KLD sewage will be generated and it will be diverted to the septic tank followed by soak pit. Solar energy used for external lightings. The proposed site falls in the Zone-III, moderate damage risk zone as per BMTPC, vulnerability Atlas seismic zone of India IS:1893-2002. Meenachil river located at a distance about 15 km West. Other details of the project are as under:

Brief description of the project		Quarry project with an area of 2.0766 ha. & production capacity of 50,000 MTA	
Category/Subcategory & Schedule		Category B/B/2 & Schedule 1 (a)	
Location Sy no/ district, Taluk/ village etc.		Survey Nos. 402/1, 403/1, 403/2, Village Chengalam East, Akalakkunnam Panchayat, Kottayam Taluk & District, Kerala.	
GPS co-ordinates		Latitude (N)	09°37'36.81" to 09°37'43.32"
		Longitude (E)	76°42'40.75" to 76°42'46.67"
for Mining projects	Extent of area (in hectares)	2.0766 ha.	
	Minimum and maximum height of excavation (MSL)	101 m MSL and 76 m. MSL	
	Life of mine proposed	10 Years	
	Ultimate depth of mining (in MSL)	76 m. MSL	
	Distance from the adjacent quarry	There is no other quarry is operating within 500 m. radius.	
	Capacity of production	50,000 MTA	
	Details of project cost	Rs. 2.62 Crores.	
ABOUT THE PROJECT			
Environmental parameters considered			
WATER			
Water requirement & sources		The total water requirement is about 5 KLD in which 1 KLD is for domestic which would be sourced from open well, 2 KLD for dust suppression system in mine and 2 KLD for plantation purposes and will be sourced from storm water pond.	
RWH units proposed		Rain water collection pond.	
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 to meet requirements after treatment of water (filtration, disinfection & sedimentation).	

LAND	
Proximity to forest lands	None within the study area
Access road to the site – Width & Condition	7 m. wide road, SE
Storage of explosives /hazardous substances	Explosives will be stored as per Explosive Act / Rules.
Facility for solid waste management	The municipal solid waste 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 = 4,837 cu.m. Overburden = 6,270 cu.m.
AIR	
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 the site will be cleared.
Likely displacement of fauna	No
Any introduction of alien / invasive species	No
SOCIAL ASPECTS	
Proximity to nearest habitation	101 m. , N side
CSR related to the project/ allocation/ time frame (details mandatory)	As a part of Corporate Social Responsibility, it is proposed to spend Rs.7.7 lakhs for recurring and Rs.10 Lakhs for non-recurring purposes.
GENERAL	
Eco restoration programmes	The year wise programme of afforestation for the life of mine, about 2,000 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.
Litigation/court cases, if any, against the project (provide details)	Nil as declared
Details of Authorised Signatory	Sri. Charles Mathew, Palathara House, Thuruthy P.O.,

	Changanacherry, Kottayam-686001
Details of NABET approved EIA consultant organisation	Environmental Engineers & Consultants Pvt.Ltd., A1-198, Janak Puri, New Delhi-110058.

2. Since the tenure of the SEIAA, Kerala had expired, the proponent submitted an application to MoEF directly for getting EC. On constitution of the Authority, MoEF referred it to SEIAA as per letter No. Z-11013/24/2015-IA-II (M) dated 01-04-2015 without the corresponding physical files. The proponent submitted application including Form I, Pre-feasibility report, EMP and Approved Mining Plan. The proposal was placed in the 48th SEAC held on 6/7-11-2015. 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 with the following specific conditions, in addition to the general conditions stipulated for mining projects.

1. The set back from the nearby thodu should be maintained.
2. A set back of 100 m from the nearby house should be maintained

3. The proposal was placed in the 47th meeting of SEIAA held on 7th January 2016. Authority accepted the recommendation of 48th SEAC and to grant E.C subject to the specific conditions in para 2 and the General Conditions for mining projects. However if any genuine complaints about the quarry is received, E.C issued shall be reviewed.

4. Environmental clearance is therefore granted to the proposed quarry project by Sri. Charles Mathew in Sy. No. 402/1, 403/1, 403/2 at Chengalam East Village, Kottayam Taluk, Kottayam District, for an area of 2.0766 hectares subject to the specific conditions recommended by SEAC in para 2 and the mitigation measures undertaken in the EMP in the PFR and Mining plan submitted.

5. The clearance issued will be subject to full and effective implementation of all the undertakings given in the application, mitigation measures as assured in Chapter 4 of the PFR on Environment Management 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 the 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.

6. 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.

7. 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, Kottayam to take legal action under the Environment (Protection) Act, 1986.
- iii) The given address for correspondence with the authorized signatory of the project
Sri. Charles Mathew, Palathara House, Thuruthy P.O., Changanacherry, Kottayam-686001.

Sd/-
Member Secretary, SEIAA
&
Addl. Chief Secretary
Environment & Forests Department
Government of Kerala.

To,

Sri. Charles Mathew,
Palathara House,
Thuruthy P.O.,
Changanacherry,
Kottayam-686001

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. The District Collector, Kottayam
4. Director, Dept. of Environment and Climate Change, Govt. of Kerala, Tvm-24
5. Director, Mining & Geology, Thiruvananthapuram -4.
6. The Secretary, Akalakunnam Grama Panchayat, Poovathilappu, Manlumkal P.O., Kottayam-686503
7. Chairman, SEIAA, Kerala
8. Website
- ✓ 9. S/F
10. O/c



Forwarded/By Order

Administrator
SEIAA

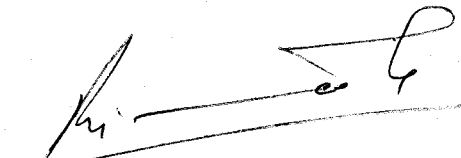
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

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 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

- (xxxii) competent authorities including that for blasting and storage of explosives.
- (xxxiii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- (xxxiv) 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.
- (xxxv) 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.
- (xxxvi) 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.
- (xxxvii) 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.
- (xxxviii) 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.
- (xxxix) 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
- (xl) 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.
- (xli) 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