



Validity expires on 10.06.2022

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

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

**Sub: SEIAA- Environmental Clearance for the proposed Granite Building Stone quarry project in Sy. Nos. 197/2 (p), 198/2 (p), 198/8 (p), 198/9 (p), 198/10 (p) & 205/2 (p) at Koppam Village, Pattambi Taluk, Palakkad District, Kerala by M/s Marath Enterprises and Crushers Pvt. Ltd - EC granted – Orders issued.**

**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA**

**No.310/SEIAA/KL/1693/2014**

***Dated, Thiruvananthapuram, 11.06.2017***

- Ref:
1. Application dated 11.04.2014 from Sri. P.K. Subramanian, Managing Director of M/s Marath Enterprises and Crushers Pvt. Ltd
  2. Minutes of the 30<sup>th</sup> SEAC meeting held on 6<sup>th</sup> & 7<sup>th</sup> June 2014
  3. Minutes of the 54<sup>th</sup> SEAC meeting held on 06<sup>th</sup> & 07<sup>th</sup> April 2016
  4. Minutes of the 55<sup>th</sup> SEIAA meeting held on 16<sup>th</sup> July 2016
  5. Minutes of the 62<sup>nd</sup> SEAC meeting held on 6<sup>th</sup> & 7<sup>th</sup> September 2016.
  6. Minutes of the 60<sup>th</sup> meeting of SEIAA held on 27<sup>th</sup> October 2016.
  7. Minutes of the 68<sup>th</sup> meeting of SEAC, held on 20<sup>th</sup> & 21<sup>st</sup> February 2017
  8. Judgment dt.02.03.2017 in W.P(C) No.129 of 2017 of Hon'ble High Court filed by Sri.P.K.Subramanian
  9. Minutes of the 71<sup>st</sup> meeting of SEAC held on 20<sup>th</sup> & 21<sup>st</sup> April 2017
  10. Minutes of the 68<sup>th</sup> meeting of SEIAA held on 12<sup>th</sup> May 2017

**ENVIRONMENTAL CLEARANCE NO.44/2017**

Sri. P.K. Subramanian, Managing Director of M/s Marath Enterprises and Crushers Pvt. Ltd, Building No.4, Kuwait Building, Nagalassery Village, Kootanad, Palakkad, Kerala - 679533 vide application received on 11.4.2014 has sought Environmental Clearance under the EIA Notification, 2006 for granite building stone quarry project in Sy. Nos. 197/2, 198/2, 203/3 and 369/1(P) at Koppam Village, Ottapalam Taluk, Palakkad District, Kerala for an area of 5.9481 Ha. Later on 19.09.2015 he has submitted revised application reducing the extent of area to 1.5298 ha in Sy.Nos. 197/2(p), 198/2(p), 198/8(p), 198/9(p), 198/10 (p) & 205/2 (p) at Koppam Village, Pattambi Taluk, Palakkad District. No forest land is involved in the present project. 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.

<b>I. Project details</b>		
1.	File No.	310/SEIAA/EC1/1693/2014
2.	Name /Title of the project	M/s. Marath Enterprises & Crushers Pvt Ltd
3.	Name and address of project proponent.	Mr. P.K. Subramanian, Managing Director, M/s. Marath Enterprises & Crushers Pvt Ltd No – 4, Kuwait building, Guruvayoor Road, Kootanad P.O., Palakkad District, Kerala - 679533. Email - marathcrushers@gmail.com Mobile - 8086242242
4.	Owner of the land	197/2(P) - Owned by Shri.Subramanian and Smt.Sumathi 198/8(P), 198/9(P), 198/2(P), 198/10(P) – Owned by M/s Marath Enterprises 205/2(P) – Owned by Shri. Sajeendran NOC has been obtained from Shri.Subramanian, Smt.Sumathi and Shri. Sajeendran (Given as Enclosures- N1 and N2 in Pg.No.229 in the EC report)
5.	Survey No. District/Taluk/ and Village etc.	197/2(P), 198/8(P), 198/9(P), 198/2(P), 198/10(P) & 205/2(P), Koppam village, Ottapalam (New Taluk – Pattambi) Taluk, Palakkad District, Kerala.
6.	Nature of the proposal – lease or permit with evidence.	The proponent has applied for lease over an extent of 1.5298 Ha. For the 1.5298 Ha proposed quarry lease area, Letter of Intent obtained vide certificate no. DOP/1874/2015/A1 dated 12.08.2015 from Department of Mining & Geology, Palakkad (Given as Enclosure 7 in Pg.No.107 of EC report)
7.	Date of submission of Application	September 2015
8.	Brief description of the project.	Enclosed as Annexure - 1
9.	Details of Authorized Signatory and address for correspondence	Mr. P.K. Subramanian, Managing Director, M/s. Marath Enterprises & Crushers Pvt Ltd No – 4, Kuwait building, Guruvayoor Road, Kootanad P.O., Palakkad District, Kerala - 679533. Email - marathcrushers@gmail.com Mobile – 8086242242
<b>II. Land Details</b>		
10.	a) Extent of area in hectares	1.5298 Ha
11.	b) Is the property forest land/Govt. land/own land/patta land	The entire area is Private Patta Land
12.	c) Quantity of top soil/over burden produced and	There is some soil capping in the proposed lease area. It comprises of top soil as well as overburden.

	managed	The total waste to be generated from the mine area is expected to be 24735.9 m <sup>3</sup> comprising 1978.9m <sup>3</sup> of top soil and 22757m <sup>3</sup> of overburden. The top soil will be used for reclamation and afforestation purpose. The waste material will be used for road formation and filling low lying areas. Remaining material if any can be dumped in the nearby land owned by the proponent.
13.	d) Latitude and Longitude	N 10°50'45.181'' to 10°50'38.313'' E 76°12'24.342'' to 76°12'18.763''
14.	e) Topography of land and elevation	The general elevation of the proposed ML area is from +89m AMSL to +119m AMSL sloping from northwest to south.
15.	f) Slope analysis	The proposed mine lease area slopes from Northwest to South.
16.	g) Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	This being an opencast mine there will not be any subsidence. The bench slopes will be maintained as per DGMS rules and requirement and hence there cannot be any instable slopes. There will be land disturbance due to mining activity.
17.	h) Access road to the site width and condition	The project site is approachable from Nedumarakadu Junction, which is connecting to Puthiya road junction in west and Vallapuzha in East directions. Width of access road to the quarry site is 7 – 8 m.
18.	i) Will there be any adverse impact on the aesthetics of the proposal site	There will not be any adverse impact on the aesthetics of the proposal site. During the mine closure stage, water body will be formed up to +89m AMSL and the remaining area will be reclaimed with vegetation.
<b>III. Mining details</b>		
19.	a) Minimum and Maximum height of excavation.	Up to +80m AMSL. (Minimum & Maximum depth is 9m & 39m respectively)
20.	b) Life of mine proposed.	7 years
21.	c) Underground mining if any proposed	Nil
22.	d) Method of Mining	Semi-mechanized opencast quarrying method
23.	e) Distance from the adjacent quarry	More than 50m
24.	f) Cluster condition if any	No
25.	g) Has "No cluster certificate" submitted?	Details of quarries situated within 500m radius from the Department of Mining and Geology, Palakkad is given as Enclosure – 16 in Pg.No.253 of EC report.
26.	h) Distance from nearby habitation	Nearest habitation is 265 m away
27.	i) Distance from nearby forest, if applicable	Not Applicable
28.	j) Distance from protected area, Wildlife Sanctuary, National	Not Applicable

	Park etc.	
29.	k) Distance from nearby streams/rivers/National Highway and Roads	The nearest water bodies in the study area (aerial distances) are Bharatapuzha or Ponnani River – 5.5 km (S) & Thutha Puzha – 5.1 km (N). Pattambi – Perinthalmanna State Highway (SH-23) – 1.6 km (W) -Aerial
30.	l) Is ESA applicable? If so distance from ESA limit	Not Applicable
31.	m) Has approved mining plan, prepared by RQP submitted?	The mining plan for this lease area of 1.5298 Ha was approved by the Department of Mining & Geology, Palakkad District, vide letter no. DOP/1874/2015/A1 dated 12.08.2015 for the production capacity of 50,000 TPA (Approved mine plan given as Enclosure 30 in EC report. A hard copy of Approved mine plan is also submitted)
32.	n) Capacity of production in TPA	50,000 Tonnes per annum (TPA)
33.	o) Details of mining process	The mining operation comprises of drilling using jack hammer and compressors, blasting, removal of blasted material using shovel and transportation of material directly to the own crusher unit located adjacent to the lease area.
<b>IV. Details of Project cost</b>		
34.	a) Land cost	3.5 lakh
35.	b) Plant and Machinery	66.5 lakh
36.	c) Total Cost	Rs.70 lakhs
37.	V. Financial Statement including funding source and details of insurance etc.	Bank loan and internal funding
38.	Management Plan	<p><b>Air Pollution</b></p> <p><b>PROPOSED MANAGEMENT PLAN:</b></p> <p>a) <u>Drilling by jack hammer</u></p> <ul style="list-style-type: none"> <li>❖ Covering of drill holes with wet cloth</li> <li>❖ Usage of sharp drill bits for drilling of holes.</li> </ul> <p>b) <u>Blasting operation</u></p> <ul style="list-style-type: none"> <li>❖ Well-designed blasting parameter, effective stemming to achieve optimum breakage occurs without generating fines.</li> <li>❖ Use of appropriate explosives for blasting and avoiding overcharging of blast holes.</li> <li>❖ Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.</li> <li>❖ Use of blasting techniques with milli second delay detonators to keep the dust generation, noise as well as vibration level within the prescribed limits.</li> </ul> <p>c) <u>Excavation and Hauling</u></p> <ul style="list-style-type: none"> <li>❖ Proper maintenance of HEMM which avoids</li> </ul>

			<p>excessive noise and vibration</p> <ul style="list-style-type: none"> <li>❖ Acoustic enclosures for operator cabin.</li> <li>❖ Imparting sufficient training to operators on safety and environmental parameters</li> <li>❖ Proper maintenance of hauling equipment's</li> </ul> <p>d) <u>Transportation</u></p> <ul style="list-style-type: none"> <li>❖ Proper maintenance of machineries which avoids excessive noise and vibration</li> <li>❖ Acoustic enclosures for operator cabin.</li> <li>❖ Imparting sufficient training to operators on safety and environmental parameters</li> <li>❖ Proper maintenance of hauling equipment's.</li> <li>❖ Regular wetting of transport road using water tanker</li> <li>❖ Avoiding overloading of tippers</li> <li>❖ Covering of loaded tippers with tarpaulins during transportation.</li> <li>❖ Development of green belt / barriers wherever possible.</li> </ul>
		Water Pollution	<ul style="list-style-type: none"> <li>➤ Sewage generated will be properly discharged into septic tanks with soak pits.</li> <li>➤ The rain water falling in the quarry will be harvested up to general RL. This pit will act as a settling pond to prevent solids escaping along with discharge, before outlet etc.</li> <li>➤ Besides, it is also suggested to construct a settlement pond on the southern side so that the water can be diverted into this pond. Clear Supernatant water after settling can be let out of this pond after passing through settling traps. Most of the mine water will be used for green belt, dust suppression, etc.</li> </ul>
		Noise	<ul style="list-style-type: none"> <li>➤ Noise levels can be abated through good preventive maintenance of machineries, green belt creation, provision of ear muffs to workers, etc.,</li> <li>➤ Sound proof operator's cabin for equipment's like dumpers, shovel, tippers, etc.,</li> <li>➤ Ground vibration are controlled through optimum design for burden &amp; spacing, inclined drilling practice, using ordinary electric milli second delay detonators, in combination with detonating fuse etc.,</li> </ul>
		Solid Waste Management	<p>There is some soil capping in the area. It comprises of top soil as well as overburden. The total waste to be generated from the mine area is expected to be 24735.9 m<sup>3</sup> comprising 1978.9 m<sup>3</sup> of top soil and 22757 m<sup>3</sup> of overburden. The top soil will be used for reclamation and afforestation purpose. The waste</p>

			material will be used for road formation and filling low lying areas. Remaining material if any can be dumped in the nearby land owned by the proponent.
		Eco-restoration	<ul style="list-style-type: none"> <li>• In the mine closure stage, out of 1.0873 Ha of mined out area, 0.5289 Ha up to general RL of +89m AMSL will remain as water body whereas remaining 0.5584 Ha above this level will be reclaimed with bench vegetation/Plantation. The mined area will be properly fenced all around.</li> <li>• The rain water falling in the quarry will be harvested up to general RL. This pit will act as a settling pond to prevent solids escaping along with discharge, before outlet etc.</li> <li>• Besides, it is also suggested to construct a settlement pond on the southern side so that the water can be diverted into this pond. Clear supernatant water after settling can be let out of this pond after passing through settling traps. Most of the mine water will be used for green belt, dust suppression, etc.</li> <li>• Plantation will be planted in all possible vacant places within the lease area, periphery of the lease area, nearby land owned the lessee and in excavated mine benches. Local species in consultation with the state forest department can be chosen for this purpose. In the mine closure stage around 0.9984 Ha will be covered under bench vegetation/Plantation in the lease area.</li> </ul>
39.	VI. Whether Environment Management Plan or Eco restoration Plan satisfactory?		Yes. Proper mitigation measures are suggested to control all kinds of pollutions which may arise during mining.
40.	VII. Does it suggest mitigation measures for each activity		Yes. Mitigation measures are suggested for controlling air, water and noise pollution. Effective Solid waste management and Eco-restoration plan are proposed.
41.	VIII. If Pre-Feasibility Report (PFR) satisfactory		Yes.
42.	IX. Does it need public hearing		Not Applicable.
43.	X. Details of litigation and Court verdict if any		No litigation is pending against the project
44.	XI. Details of public complaint, if any		Nil
45.	XII. Details of statutory sanction required		The proponent has applied for Granite Building Stone Quarry lease over an extent of 1.5298 Ha. The Letter of Intent was granted vide certificate no. DOP/1874/2015/A1 dated 12.08.2015. The application for environmental clearance was submitted on

		September 2015.
46.	XIII. If CRZ recommendation applicable?	Not Applicable.
<b>PART B</b>		
<b>Environment Impact Assessment and Mitigation Measures</b>		
<b>Impact on water</b>		
47.	a) Details of water requirement per day in KLD	The water requirement for the quarry is as follows: For domestic sanitary needs -1.5 KLD For dust suppression & Green belt development etc. - 5.0 KLD Total - 6.5 KLD
48.	b) Water source/sources.	The entire water requirement for industrial activities such as Dust suppression and greenbelt development will be met from the bore well and procured from outside if necessary.
49.	c) Expected water use per day in KLD.	A total demand of 6.5KLD including 5KLD for dust suppression & Green belt development and 1.5KLD for domestic sanitary needs.
50.	d) Details of water requirements met from water harvesting.	The rain water falling in the quarry will be harvested up to general RL. This pit will act as a settling pond to prevent solids escaping along with discharge, before outlet etc. Besides, it is also suggested to construct a settlement pond on the southern side so that the water can be diverted into this pond. Clear supernatant water after settling can be let out of this pond after passing through settling traps. Most of the mine water will be used for green belt, dust suppression, etc.
51.	e) What are the impact of the proposal on the ground water?	The ultimate mining depth planned for this project is +80m AMSL. Hence no impact on ground water is anticipated.
52.	f) How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	No liquid waste treatment is proposed. However, most of the water from settling pond will be used for green belt, dust suppression, etc.
53.	g) What is the incremental pollution load from waste water generated from the proposed activities?	No major waste water or effluent is generated since this is a mining project. The only effluent to be generated from project is domestic waste to the tune of about 0.6 KLD. This will be disposed into septic tanks with soak pits.
54.	h) How is the storm water from within the site managed?	The storm water from the mine will be diverted to the settling pond and will be used for green belt, dust suppression, etc
<b>Impact on Biodiversity and Eco restoration Programmes</b>		
55.	a) Will the project involve extensive clearing or	There is no major clearing or modification of vegetation. Few trees / shrubs in the active mine areas

	modification of vegetation (Provide details)	is to be cleared.
56.	b) What are the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantation/ landscaping)	Plantation will be planted in all possible vacant places within the lease area, periphery of the lease area, nearby land owned the lessee and in excavated mine benches. Local species in consultation with the state forest department can be chosen for this purpose. In the mine closure stage around 0.9984 Ha will be covered under bench vegetation/Plantation in the lease area.
57.	c) Is there any displacement of fauna – both terrestrial and aquatic. – If so what are the mitigation measures ? d) Presence of any endangered species or red listed category (in detail)	There is no displacement of fauna from the proposed mine lease area There are no endangered or endemic species of flora in the area. There are no schedule – 1 Fauna in the study area.
<b>Impact on Air Environment</b>		
58.	a) What are the mitigation measures on generation of dust, smoke and air quality	The mitigation measures are suggested in the detailed Environmental Management Plan given as Enclosure – 6 in Pg.No.93 of EC Report.
59.	b) Details of internal traffic management of the site.	Only few machinery will be involved in mining operations. Hence no major traffic is anticipated.
60.	c) Details of noise from traffic, machines and vibrator and mitigation measures	The mitigation measures are suggested in the detailed Environmental Management Plan given as Enclosure – 6 in Pg.No.93 of EC Report.
61.	d) Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	
62.	e) Air quality monitoring in detail	The result of Ambient Air Quality carried out at 3 locations for PM10, PM2.5, SO2, NO2 were found to be well within the prescribed NAAQ limits. The results of detailed analysis are given as Enclosure 25 in Pg.No.273 of EC report.
<b>Energy Conservation</b>		
63.	a) Details of power requirement and source of supply.	The power requirement for mining operation will be 150 HP and for crusher unit (own crusher located outside the lease area) is 2400 HP are sourced from KSEB.
64.	b) Details of renewable energy (non – conventional) used.	Nil
<b>Risk Management</b>		
65.	a) Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	A detailed Risk analysis has been done and the control measures are suggested (Given as Enclosure - 6 in Pg. no.104 of EC report).
66.	b) Are proposals for fencing around the quarry satisfactory?	The quarry will be fenced properly. Magazine is proposed outside the mine lease



	<p>c) Storage of explosives/hazardous substance in detail</p> <p>d) Facility for solid waste management</p>	<p>area. Explosive license was obtained from explosive department from Deputy Chief Controller of Explosives, Ernakulam vide License No: E/SC/KL/22/1666(E79896) Dated 06.05.2014, which was valid up to 31.03.2016. On expiry of this license, the proponent has applied for renewal.</p> <p>The waste material will be used for road formation and filling low lying areas. Remaining material if any can be dumped in the nearby land owned by the proponent.</p>																																																							
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67.	a) Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	Not Applicable.																																																							
68.	b) Will the proposal result in any changes to the demographic structure of local population. If so, provide details.																																																								
<table><tr><th colspan="5">CSR components suggested</th></tr><tr><th>S. No</th><th colspan="2">Description (next 5 years)</th><th>Capital Cost in Lakhs</th><th>Recurring Cost in Lakhs</th></tr><tr><td>1.</td><td colspan="4">EDUCATION FACILITIES:</td></tr><tr><td rowspan="4">a.</td><td rowspan="4">Nedumbrakkad ALP &amp; nearby Schools</td><td>Providing Note books, Bags, Uniforms &amp; other Stationery items for Students (Rs. 1000 * 60 Students * 5Yrs)</td><td>-</td><td>3.00</td></tr><tr><td>Infrastructure development:</td><td></td><td></td></tr><tr><td>Renovation works in schools</td><td>2.00</td><td>-</td></tr><tr><td>Providing Tables, Chairs, Library &amp; other facilities</td><td>1.00</td><td>-</td></tr><tr><td>2.</td><td colspan="4">MEDICAL FACILITIES:</td></tr><tr><td>a.</td><td colspan="2">Providing free medicines, Conducting free medical camps, Health awareness programmes to poor and needy people in nearby villages (Avg of Rs. 60000 * 5Yrs)</td><td>-</td><td>3.00</td></tr><tr><td>b.</td><td colspan="2">Donation to surgeries to poor people</td><td>-</td><td>2.00</td></tr><tr><td rowspan="3">c.</td><td rowspan="3"></td><td>Infrastructure development:</td><td></td><td></td></tr><tr><td>Providing Beds, Bedsheet &amp; Pillows</td><td>-</td><td>1.00</td></tr><tr><td>Providing Fan, Tubelight and other electrical devices</td><td>-</td><td>1.00</td></tr></table>			CSR components suggested					S. No	Description (next 5 years)		Capital Cost in Lakhs	Recurring Cost in Lakhs	1.	EDUCATION FACILITIES:				a.	Nedumbrakkad ALP & nearby Schools	Providing Note books, Bags, Uniforms & other Stationery items for Students (Rs. 1000 * 60 Students * 5Yrs)	-	3.00	Infrastructure development:			Renovation works in schools	2.00	-	Providing Tables, Chairs, Library & other facilities	1.00	-	2.	MEDICAL FACILITIES:				a.	Providing free medicines, Conducting free medical camps, Health awareness programmes to poor and needy people in nearby villages (Avg of Rs. 60000 * 5Yrs)		-	3.00	b.	Donation to surgeries to poor people		-	2.00	c.		Infrastructure development:			Providing Beds, Bedsheet & Pillows	-	1.00	Providing Fan, Tubelight and other electrical devices	-	1.00
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	3.	AREA DEVELOPMENT:	
	a.	Providing street lights at vulnerable locations in the region	2.00 -
	b.	Construction of bus shelter	2.00 -
	c.	Contribution to panchayats nearby for all socially beneficial projects planned by them	- 3.00
		Sub Total Cost	7.00 13.00
		Total Cost (Capital and Recurring)	20.00
69.	c)	What are the projects benefits in terms of employment potential?	The total manpower to be employed for quarry and nearby crusher as direct will be about 16 persons and indirect will be 100 persons for various allied services like logistics, loading, green belt creation, miscellaneous services etc.
PART C			
70.		Details of NABET approved EIA Consultant engaged- Their name, address and accreditation details	Creative Engineers & Consultants, 9/4b, Barathwajar Street, East Tambaram, Chennai – 600 059. Ph – 044 – 22395170 Mobile : 9444133619 Email : cecgiri@yahoo.com
Summary and Conclusion			
71.	a)	Overall justification for implementation of the project.	This quarry paves way in providing material for the construction industry which forms a core infrastructural growth component. Regionally, it also provides good employment opportunities directly and indirectly. Besides, the CSR activities of the project proponent has brought about improvement in infrastructure, living conditions of local community, etc., Monetary gains also accrue to state and central Governments through receipt of royalties, Taxes, etc., It may be worthy of mention here about importance of products for construction and building industry in Kerala, which provides good development growth in the region as well as good employment opportunities for life local and nearby population of the area.
72.	b)	Explanation of how adverse impact have been mitigated.	The mitigation measures are suggested in the detailed Environmental Management Plan given as Enclosure – 6 in Pg.No.93 of EC Report.

2. The project proposal was first placed in the 30<sup>th</sup> SEAC meeting held on 6<sup>th</sup> & 7<sup>th</sup> June 2014. The Committee found that the applicant has not provided the signed declaration in the prescribed format of Form 1. Also, it was found that the basic information and the additional

copies of proposals sought by the Secretariat of SEAC/SEIAA have also not been produced. Hence the item was deferred.

3. On receipt of the signed declaration in Form 1, mining plan, processing fee, basic information and the additional copies of proposals sought by the Secretariat of SEAC/SEIAA for circulation to SEAC members, the proposal was again considered by SEAC in its 54<sup>th</sup> meeting held on 6/7-04-2016. The proponent and the RQP attended the meeting. The Committee appraised the proposal based on Form I, Pre-feasibility Report & Mining Plan and recommended the proposal for issuance of EC subject to general conditions on production of more realistic CSR before SEIAA. As decided by 54<sup>th</sup> SEAC, the proponent submitted a more realistic CSR to SEIAA.

4. Thereon the proposal was considered by SEIAA in its 55<sup>th</sup> meeting held on 16<sup>th</sup> July 2016 and Authority found that the recommendation has been made without site inspection. In so far as the application was given two years back and pending for submission of revised Mining Plan and other defects in the application, and the situation in the intervening period is not clear, Authority decided that site inspection by SEAC is necessary to verify the statements in the application and documents submitted by the proponent, and to satisfy the sufficiency of the undertakings given therein. SEAC was requested to make available the report within one month.

*“Authority as a general rule decided that site inspection is required for all quarries, in so far as small quarries are also posing serious environmental concerns. In their appraisal DEIAAs also must follow this guide line. Appraisal by SEAC/ DEAC shall also include a site inspection report”*

5. Hence the proposal was considered in the 62<sup>nd</sup> SEAC meeting held on 6<sup>th</sup> & 7<sup>th</sup> September 2016. The Committee after examining the minutes of 55<sup>th</sup> & 56<sup>th</sup> meetings of SEIAA observed that the question of site inspection has been debated in detail in the past and finally SEIAA has taken a decision in the matter in its 48<sup>th</sup> meeting held on 23.01.2016 under agenda item 48.33 and SEAC decided to recommend to SEIAA to review its earlier decision in the matter

6. The proposal was placed in the 60<sup>th</sup> meeting of SEIAA held on 27.10.2016. Committee opined that considerable effort should be taken by the committee for the appraisal of quarry if it should become fruitful and justified. Hence the proposal was again returned to SEAC for site inspection report.

7. The proposal was again considered in the 68<sup>th</sup> meeting of SEAC, Kerala, held on 20<sup>th</sup> & 21<sup>st</sup> February 2017. The Committee examined the suggestions made by SEIAA and decided to defer the item for site inspection.

8. In the meanwhile the proponent filed a W.P(C) No.129 of 2017 against SEIAA and the Hon'ble High Court vide judgment dt.02<sup>nd</sup> March 2017 directed to *dispose the writ petition with a direction to the 1<sup>st</sup> respondent (Chairman, SEIAA) to ensure that a final*

*decision is taken on the application submitted by the petitioner for environmental clearance, within an outer time limit of two months from the date of receipt of a copy of the judgement after the site inspection and after hearing the petitioner.*

*In compliance of directions of the Hon'ble High Court , a team consisting of Dr. Jayson E.A., and Dr K.G.Padmakumar visited the site on 1st April and reported as follows:*

- 1. No forest land is present within 1 km.*
- 2. There is another operating quarry with in a distance of 265 m .*
- 3. The proponent has not started operation and there is no violation in this respect*
- 4. CSR commitment has been enhanced as suggested, and the same has been submitted*
- 5. The proponent has enough water source to operate the quarry and crusher unit.*
- 6. The proponent has installed an advanced dust free crusher unit, environment friendly, which require very low water requirement.*
- 7. The road entrance to the project site is wide and safely walled to avoid disturbance to the local residents nearby.*

*However, in addition to general guidelines to be insisted, the proponent shall ensure installation of display boards/ sign boards, etc. Workers rest places and essential facilities should be created before operation. Outflow of sediment water should not be allowed and for this a sedimentation tank of proper size shall be put to operation. Subject to these suggestions, the committee suggest early action to recommend for environment clearance to this project.*

9. The proposal was placed in the 71<sup>st</sup> SEAC Meeting held on 20<sup>th</sup> & 21<sup>st</sup> April 2017. The Committee appraised the proposal based on Form I, Pre-feasibility Report, Mining Plan, field inspection report of the Sub Committee and all other documents submitted with the proposal. The Committee decided to Recommend for issuance of EC subject to general conditions in addition to the following specific condition for mining.

- 1. Outflow of sediment water should not be allowed and for this a sedimentation tank of proper size should be put to operation.*
- 2. If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.*

A commitment may be obtained from the proponent to set apart Rs.9 lakh (non-recurring) and Rs 9 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat.

10. The proposal was finally placed in the 68<sup>th</sup> meeting of SEIAA held on 12<sup>th</sup> May 2017. The Authority decided to issue EC subject to the strict implementation of all specific conditions in addition to the general conditions. An affidavit to this effect should be submitted within 10 days of the receipt of the EC. An undertaking stating that the commitment made by the project proponent in the basic details for CSR activities shall be implemented.

11. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed building stone quarry project in Sy. No. 197/2(p), 198/2 (p), 198/8(p), 198/9(p), 198/10(p) & 205/2(p) at Koppam Village, Pattambi Taluk, Palakkad District by Sri. P.K. Subramanian, Managing Director, M/s Marath Enterprises and Crushers Pvt. Ltd, Building No.4, Kuwait Building, Nagalassery Village, Kootanad, Palakkad, Kerala - 679533 for an area of 1.5298 hectares, subject to the specific conditions as recommended by SEAC in para 9 above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining (items 1 to 61), appended hereto will be applicable and have to be strictly adhered to.

12. 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 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 the undertakings in Chapter 4 (Mining), Chapter 5 (Blasting), Chapter 6 (Mine Drainage), Chapter 7 (Stacking of Mineral rejects and Disposal of waste) Chapter 11 (EMP) Chapter 12 (Progressive Mine Closure Plan) of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

13. Validity of the Environmental Clearance will be five years from the date of this clearance, 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.

14. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices 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, Palakkad 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. P.K. Subramanian, Managing Director of M/s Marath Enterprises and Crushers Pvt. Ltd, Building No.4, Kuwait Building, Nagalassery Village, Kootanad, Palakkad, Kerala - 679533.

Sd/-

**JAMES VARGHESE.I.A.S.,**  
**Member Secretary (SEIAA)**

To,

Sri. P.K. Subramanian,  
Managing Director, M/s Marath Enterprises & Crushers Pvt. Ltd,  
Building No.4, Kuwait Building,  
Nagalassery Village, Kootanad,  
Palakkad, Kerala – 679533

Copy to,

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala.
3. The Advocate General, Ernakulam (with CL)
4. The Director, Mining & Geology, Thiruvananthapuram -4.
5. The Member Secretary, Kerala State Pollution Control Board
6. The District Collector, Palakkad
7. The District Geologist, Palakkad
8. Tahsildhar, Pattambi Taluk, Palakkad
9. Chairman, SEIAA.
- ✓ 10. Website.
11. S/f
12. O/c

Forwarded/By Order



Administrator, SEIAA

# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

## GENERAL CONDITIONS (for mining projects)

1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. 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.
4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
5. Sprinklers shall be installed and used in the project site to contain dust emissions.
6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
7. 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, if no other specific condition on reclamation of pit is stipulated in the E.C.
8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
9. The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.
10. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14. A licensed person should supervise/ control the blasting operations.
15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
19. Maximum depth of mining from general ground level at site shall not exceed 10m
20. No mining operations should be carried out at places having a slope greater than 45°.
21. 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.
22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
24. The transportation of minerals should be done in covered trucks to contain dust emissions.
25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
26. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
28. 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.
29. 100 m buffer distance should be maintained from forest boundaries.

30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
31. 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.
32. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponents shall apply and get the approval of this Authority.
33. 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.
34. 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.
35. 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 State Environment Impact Assessment Authority (SEIAA) office 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.
36. 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.
37. 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 State Environment Impact Assessment Authority (SEIAA) office.
38. 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
39. 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.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.



44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul Road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
49. The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or thisimplementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
54. 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.
55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.



  
For Member Secretary, SEIAA Kerala

