

# Proceedings of the State Environment Impact Assessment Authority Kerala

Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini. Member. Sri. P. Marapandiyan .I.A.S Member Secretary.

Sub: SEIAA- Environmental Clearance for the Building Stone quarry project in Sy. Nos. 41/1A(pt), 109(pt), 110/1(pt), 110/2(pt), 111(pt) and 115/1A(pt) at Kakkad Village, Karassery Panchayath, Kozhikode Taluk, Kozhikode District by M/s Alpha Bricks and Metals.- Granted. Orders issued.

# STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

#### No. 338/SEIAA/EC4/2170/2014

### dated, Thiruvananthapuram 10-8-2015

- Read:- 1. Application dated 12-5-2014 submitted by Sri. V.P. Mehaboob, Managing Partner, M/s Alpha Bricks & Metals, Karassery, Mukkam. Kozhikode district- 673602.
  - 2. Minutes of the 30th meeting of SEAC held on 6/7-6-2014.
  - 3. Minutes of the 32<sup>nd</sup> meeting of SEAC held on 12/13-8-2014.
  - 4. Minutes of the 35th meeting of SEAC held on 17/18-10-2014.
  - 5. Minutes of the 35th meeting of SEIAA held on 9-4-2015.
  - 6. Minutes of the 39th meeting of SEAC held on 14/15-5-2015
  - 7. Minutes of the 39th meeting of SEIAA held on 18-6-2015.

# Environmental Clearance No. 62

Sri. V.P. Mehaboob, Managing Partner of M/s Alpha Bricks and Metals, vide his application received on 14.05.2014, sought Environmental Clearance under EIA Notification, 2006 for the Building Stone quarry project in Sy. Nos. 41/1A(pt), 109(pt), 110/1(pt), 110/2(pt), 111(pt) and 115/1A(pt) at Kakkad Village, Karassery Panchayath, Kozhikode Taluk, Kozhikode District, Kerala for an area of 9.7165 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 0.M. No. L-11011/47/2011-IA.II(M) dated 18<sup>th</sup> May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

2. The proposed project site falls within  $11^{9}18^{\circ}5.26^{\circ}$  N to  $11^{0}18^{\circ}22.73^{\circ}$  N and  $75^{0}59^{\circ}49.34^{\circ}$  E to  $75^{0}59^{\circ}54.60^{\circ}$  E. The land use classification as per revenue records is private land. Forest land is not involved in the project. The proposed project is for quarrying of 3,96,000 tons (max) of building stone from an area of 9.7165 hectares of

land. This is an existing mine over about 1.9461 hectare of pit area. The project activity involves about 73 % of the lease area for exploring building stone. At the end of life of mine, the excavated pit will be 7.0525 hectare in which 6.0809 hectare will be reclaimed and rehabilitated by plantation and the remaining part of 0.9716 hectare will be used as a water pond. The expected life of mine will be 11 years. The mining will be done by open cast mechanized system. The bench height and width proposed will be 5 m (2.50 m x 2 sub benches) and 5 m. The ultimate depth of the working mine is 40 m above MSL. Part of the proposed land is already under mining and there is no top soil in those areas. The remaining land is moderately vegetated and having top soil with average thickness of 1 m. It is estimated that around 71,300 tonnes of topsoil will be generated, which will be properly stacked and will be utilized for plantation. 1, 32,000 tonnes of mine waste will be removed during the mining operations. Top soil excavated from the quarry will be stacked at predetermined place and subsequently will be utilized for plantation. Overburden material will be backfilled. Sewage to the tune of 1.19 KLD generated from the mine office will be treated through septic tank and soak pit. The sludge generated from the septic tank will be dried and will be used as manure in plantation. The water to a tune of 1.4 KLD will be drawn from existing open well for domestic purpose, about 1.4 KLD water is required for domestic consumption and about 3 KLD for watering the plantation and about 15 KLD for dust suppression. Fugitive dust generated during excavation, transportation and loading operations will be taken care of by water sprinkling at regular intervals on the haul roads, quarry benches and internal roads. Hazardous materials like spent oil, old batteries are disposed of as per the existing rules and guidelines of Hazardous waste (Management Handling & Transboundary Movement) Rules, 2008 and for disposal through authorized agents. The total project cost is Rs. 6 Crores. As stated by the proponent, there is no litigation pending against the project and/or land in which the project is proposed to be set up. Iruvazhinji Puzha is at a distance of 1.5 km from the project site. Other details of the case are as under:

# 3. BASIC INFORMATION OF THE PROJECT

Name of project		M/s. Alpha Bricks and Metals	
Brief description of the project		Open cast mining	
Category/Subcategory & Schedule		"B" Category, I(a)	
Location Sy no/ district, Taluk/ village		Sy. No-41/1 A(Pt), 109(pt), 110/1(pt), 110/2(pt),	
etc.		111(pt) and $115/1A(pt)$	
	•	Kakkad Village, Karassery Panchayath	
		Kozhikode Taluk, Kozhikode District of	
	_	Kerala State	
GPS co-ordinates		Longitude: 75° 59' 49.34" E to 75° 59'	
		54.60"E	
		Latitude: 11°18′ 5.26″ N tQ 11° 18′	
· .		22.73"N	
50	Extent of area (in hectares)	9.7165Ha	

Access road to the sit	e–Width &	7m -SE
Proximity to forest la		No forest within 15 km
		LAND
recycled water	· 	
Does it have provisio	ns for use of	No
		except biological parameters.
requirements	<del>-</del>	results found within the permissible limits,
Water quality meeting	g	Monitoring and analysis carried out and
watercourses or aqui		
changes to the hydrol		·
culverting, realignme		
Impoundment, damm	ing,	Nil
treatment		treated in septic tank and soak pit
Facilities for liquid w	vaste	Liquid wastes from toilet and office will be
	**	converted as RWH during mine closure plan
RWH units proposed		10% of the lease area (0.9716 Ha) will be
	,	Source - Storm water pond and open well
		plantation:3KLD
		Watering the
		Dust suppression:15 KLD
Water requirement &	sources	Domestic consumption –1.4 KLD,
	W	ATER
_		m 1 m wheres Consucreu
•		I Parameters Considered
	ABOUTT	THE PROJECT
		Machinery Cost - 4 Crores
		Crores Machinery Cost
		Land Cost - 2
		· ·
2 mass of project cos		Total Project Cost- 6crores
Details of project cos	·+	Total Project C
Capacity of production	on .	3,96,000tonnes per year
Distance from the adj	iacent quarry	1Km-East
Ultimate depth of mir	ning (in MSL)	40 m above MSL
Life of mine proposed	1	11 years
excavation (MSL)		Maxim um

Storage of explosives /hazardous	7 7
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 mgmt	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.
Topographic features/slope	Entire lease area is exposed by massive Charnockite with a top soil thickness of less than 1m. Length of the ore body: Ranging from 550- 295m (Average 422.5m)
•	Width of the ore body: Ranging from 276- 48m (Average 162m) Depth of the ore body: 40 m MSL
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 – 71,352 tonnes Overburden – 1,32,000 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
<i></i>	NERGY
Energy requirement	Power supply is required for office, canteen Which is from KSEB
:	Quarry operations are mainly by HEMM which are operated by HSD.
Energy sources	No energy is required for quarry operation, since quarry operation is carried out by HEMM which are operated by HSD.  About 97 litres/Hour of HSD is required in a day
	Proneness of the area for landslides  Significant land disturbance resulting in erosion, subsidence & instability  Top soil, overburden etc.  Likely emissions affecting environment  Energy requirement

Extent of usage of alternative	DG. Set-2 Nos with a capacity of 500 KvA &
energy resources	200 KvA is installed for power backup.
 BIO	DIVERSITY
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	None
Any introduction of alien / invasive species	None
 SOCI	AL ASPECTS
 Proximity to nearest habitation	130.89m towards South East
 · G.	ENERAL
Litigation/court cases, if any, against the project (Provide details)	There are no litigations against the project

# OTHER DETAILS OF THE PROJECT PROPOSAL

1,	Right & nature of ownership of land	Own land and by consent
2.	Is the property forest land/govt. land/own land	Private land – Own land
3.	Details of Authorised Signatory	Mr. V.P. Mehaboob
	•	Managing Partner
		M/s Alpha Bricks and Metals
		Vaduvappurath House
į		Karanthoor P.O.,
		Kunnamangalam
į		Kozhikode - 673571.
		Mob. No. 09745999666;
		08589026400
		Email:
		alphabricksmetals@gmail.com
4.	Details of NABET approved EIA	M/s Metamorphosis
	consultant organisation	#143, 2 <sup>nd</sup> Floor, 39 <sup>th</sup> Main, 4 <sup>th</sup>
		Cross Behind Silk Board
		BTM Layout 2 <sup>nd</sup> Stage
		Bengaluru - 560068;
L		TeleFax: +9180 2678 3 006/07

	Email: mail@metamorphosis-
 ·	india.com

- 4. The project was appraised in the 30<sup>th</sup> meeting of SEAC, which decided to conduct site visit. On receipt of the site visit it was again taken up in the 32<sup>nd</sup> meeting which called for additional clarifications on land related matters. The proponent provided the additional clarifications sought for and the case was placed in the 35<sup>th</sup> meeting of SEAC. The Committee verified the additional documents submitted by the proponent and examined the field visit report. The Committee recommended the proposal subject to certain specific conditions in addition to the general conditions stipulated for mining projects.
- 5. The proposal was placed in the 35<sup>th</sup> meeting of SEIAA. The Authority called for approved Mining Plan for appraisal by SEAC as per the Kerala Minor Mineral Concession Rules -2015. The proponent submitted approved Mining plan. The proposal was placed in 39<sup>th</sup> meeting of SEAC. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report and all other documents submitted along with the Form I application. The Committee decided to endorse the recommendation of the earlier meeting for issuance of Environmental Clearance with the following specific conditions in addition to the general conditions stipulated for mining projects.
  - Steeply cut faces on the lower/bottom region must be fenced and provided with 'Danger' signs.
  - Pockets of OB are seen in the elevated crest part. This need to be removed and stored in designated places and working of the quarry must follow a top to bottom approach. Care must be taken when the OB is removed from the steep slopes that pose instability. A lot of red earth is seen taken from the nearby area for formation of road and filling the land to the west.
  - Concrete lined channels are to be provided for conducting water outside after clarification.
  - The dust suppression system must be in place at the earliest.
  - Reclamation and eco-restoration should be done by planting indigenous tree species.
- 6. 39<sup>th</sup> meeting of SEIAA considered the recommendations. If conditions and provisions on no cluster situation and buffer distance (General condition) as applicable are not there in the Mining Plan, those and details of CSR may be insisted before issue of E.C. Or else, E.C may be issued with the specific conditions recommended by SEAC. These requirements have also been met with. The documents called for having been submitted and on being satisfied that there are no other quarry in operation within 500 meters of this quarry, and 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 Alpha Bricks and Metals, for the Building Stone quarry project in

Sy. Nos. 41/1A(pt), 109(pt), 110/12(pt), 110/2(pt), 111(pt) and 115/1A(pt) at Kakkad Village, Karassery Panchayath, Kozhikode Taluk, Kozhikode District with the following specific conditions, in addition to the general conditions stipulated for mining projects as appended hereto:

- Steeply cut faces on the lower/bottom region must be fenced and provided with danger signs.
- Pockets of OB are seen in the elevated crustal part. This need to be removed and stored in designated places and working of the quarry must follow a top to bottom approach. Care must be taken when the OB is removed from the steep slopes that pose instability. A lot of red earth is seen taken from the nearby area for formation of road and filling the land to the west.
- Concrete lined channels are to be provided for conducting water outside after clarification.
- The dust suppression system must be placed at the earliest.
- Reclamation and eco-restoration should be done by planting indigenous tree species. .
- 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 5 and 6 of the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and undertakings in Chapter 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 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.
- 8. Validity of the environmental clearance will be five years form 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 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, Kozhikode 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. V.P. Mehaboob, Managing Partner, M/s Alpha Bricks and Metais, Karassery P.O., Mukkam (V) Kozhikode-673602.

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

To

Sri. V.P. Mehaboob, Managing Partner, M/s Alpha Bricks and Metals, Karassery P.O., Mukkam (V) Kozhikode – 673602.

#### Copy to;

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E & F Wing, IIblock, Koramangala, Bangalore-560034.
- 2. Principal Secretary to Government, Environment Department
- 3. The District Collector, Kozhikode
- 4. The Director, Department of Environment & Climate Change
- 5. The Director, Mining and Geology Department, Government of Kerala
- 6. The Secretary, Karassery Grama Panchayat, Karassery P.O., Kozhikode-673602
- 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 / KFBR, 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.
- (y) 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) Ouarrying 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.

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.

(x1) 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

In:

Directorate of Environment