

Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: SEIAA-. Environmental clearance for the proposed quarry project in Sy. Nos. 4/1pt, 4/3, 4/5 pt., 4/6 pt., 4/8, 4/9 pt., 4/11 pt., 4/12 pt., 61/3 pt., 61/5 pt., 61/8 pt., 62/2 pt., 62/3 pt., 62/4 pt. & 62/5 pt. at Uzhamalaekal Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala of Sri. M. Nizarudeen, Managing Director, M/s Ponmudi Blue Metals Pvt. Ltd. - Granted - Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No. 873/SEIAA/EC1/3104/2015

<u> Dated,Thiruvananthapuram, 29.12.2017</u>

- 1. Application received on 05-08-2015 from Sri. M. Nizarudeen, Managing Director, Ref: M/s Ponmudi Blue Metals Pvt. Ltd., M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiruvananthapuram, Kerala-695551
 - 2. Minutes of the 62nd Meeting of SEAC held on 06th & 07th September, 2016.
 - 3. Minutes of the 66th meeting of SEAC held on 19th December, 2016.
 - 4. Minutes of the 69th meeting of SEAC held on 9th and 10th March 2017.
 - 5. Minutes of the 68th meeting of SEIAA held on 12.05.2017.
 - 6. Minutes of the 76th SEIAA meeting held on 16.11.2017.
 - 7. Affidavit on 19.12.2017 from Sri. M. Nizarudeen, Managing Director, M/s Ponmudi Blue Metals Pvt. Ltd

ENVIRONMENTAL CLEARANCE NO. 105/2017

Sri. M. Nizarudeen, Managing Director, M/s Ponmudi Blue Metals Pvt. Ltd., M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiruvananthapuram, Kerala-695551, vide his application received on 05-08-2015, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Survey Nos. 4/1pt, 4/3, 4/5 pt., 4/6 pt., 4/8, 4/9 pt., 4/11 pt., 4/12 pt., 61/3 pt., 61/5 pt., 61/8 pt., 62/2 pt., 62/3 pt., 62/4 pt. and 62/5 pt at Uzhamalackal Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2016 and as per O.M. No. L-11011/47/2011-IA.II(M) dated 18th May 2012 of Ministry of Environment and Forests. The project comes under Category B2 as per Notification No.S.O.141 (E) dt.15.01.2016 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

BASIC INFORMATION OF QUARRY PROJECT PART A

		1. Project details
1.	File No.	873 / SEIAA / EC1 / 3104 / 2015
2.	Name / Title of the project	The building Stone Quarry (Minor Mineral) of M/s Ponmudi Blue Metals Pvt. Ltd. is situated at Survey No. 4/1pt, 4/3, 4/5 pt., 4/6 pt., 4/8, 4/9 pt., 4/11 pt., 4/12 pt., 61/3 pt., 61/5 pt., 61/8 pt., 62/2 pt., 62/3 pt., 62/4 pt., 62/5 pt of Uzhamalackal Village Nedumangad Taluk, Thiruvananthapuram District, Kerala
3.	Name and address of project proponent.	M/s Ponmudi Blue Metals Pvt. Ltd., Mr. M. Nizarudeen, Managing Director M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiravananthapuram, Kerala-695551 Mobile No. 9447209998.
4.	Owner of the land	M/s Ponmudi Blue Metals Pyt. Ltd. (Private own land)
5.	Survey No. District/ Taluk/ and Village etc.	Survey No. 4/1pt, 4/3, 4/5 pt., 4/6 pt., 4/8, 4/9 pt., 4/11 pt., 4/12 pt., 61/3 pt., 61/5 pt., 61/8 pt., 62/2 pt., 62/3 pt., 62/4 pt., 62/5 pt of Uzhamalackal Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala
6.	Details of period of lease or permit with number including the and expiry of lease/permit (Copy to be nitached)	The quarry is working with two mining leases for cumulative area of 1.7653 ha and the details of mining leases are provided below: 1. For mining area 1.1553 ha vide Order No. 667/2011-12/6819/M3/2011 with validity up to November, 2021. 2. For mining area 0.610 ha vide Order No. 558/2011-12/6818/M3/2011 with validity up to November, 2021. The copies of mining leases are attached.
7.	Present Status of the project a Date & Year of starting the work of the quarry project. b. whether the quarry is working at present or not? c. If stopped working since when?	The quarry is in operation since November, 2011. The quarry is working with two mining leases for an area of 1.7653 ha and the details of mining leases are provided below: 1. For mining area 1.1553 ha vide Order No. 667/2011-12/6819/M3/2011 with validity up to November, 2021. 2. For mining area 0.610 ha vide Order No. 558/2011-12/6818/M3/2011 with validity up to November, 2021. Not Applicable.
8.	Date of submission of Application	05 / 08 / 2015
9.	Brief description of the project.	The land for the quarry project is private owned land and the land is possessed in the name of M/s Ponmudi Blue Metals Pvt. Ltd. The targeted production of proposed mine is 85,000 MTA. The estimated project cost is Rs. 5.39 Crores. The expected life of mine estimated will be about 20 years. The working will be carried out by opencast semi-mechanized method as per the approved Mining Plan.
10.	Details of Authorized	Mr. M. Nizarudeen, Managing Director

ļ	Signatory and address for correspondence	M/s Ponmudi Blue Metals Pvt. Ltd., M.S. Building, Kalungu Jn., Vithura,
		Nedumangad, Thiruvananthapuram, Kerala-695551. Mobile No. 9447209998.
		2. Land Details
11.	a) Extent of area in hectares	3.0127 hectare
12.	b) Is the property forest land/Govt. land/own land/patta land	Private Own Land
13.	c) Quantity of top soil/over burden produced and managed	A total estimated quantity of 10,544 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage. About 12,050 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation.
14.	d) Latitude and Longitude	Latitude (N) 08 ⁰ 36'51.70" to 08 ⁰ 37'00.57" Longitude (E) 77 ⁰ 03'33.73" to 77 ⁰ 41'38.86"
15.	e) Topography of land and elevation	Part of the proposed land is exposed rock and the remaining land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. The highest elevation of the lease area is 200 m MSL and lowest is 160 m MSL. As the proposed area is a hillocks, the drainage of the lease area is towards South-West. No habitants are located in the lease area.
16.	f) Slope analysis	The slope of lease area is towards South-West.
17.	g) Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	Zone-III, Moderate damage risk zone as par BMTPC, Vulnerability atlas Seismic zone of India IS: 1893-2002.
18.	h) Access road to the site width and condition	7 m wide road
19.	i) Will there be any adverse impact on the aesthetics of the proposal site	No, the land used will be fully reclaimed and rehabilitated by backfilling the pits and plantation. Plantation and afforestation will add to the improvement in environment and aesthetic beauty of the area.

		_	3. Mining details
20	,	Minimum and Maximum height of excavation	The exploitation of mineral will be done from 200 m to 160m MSL in conceptual phase
1.	b)	Life of mine proposed.	About 20 years
2.	c)	Undergrou nd mining if any proposed	No, the working will be carried out by opencast semi-mechanized method as per the approved Mining Plan.
3.	d)	Method of Mining	The working will be carried out by opencast semi-mechanized method as per the approved Mining Plan.
4.	e)	Distance from the adjacent quarry	There is no quarry in operation within 500m radius of the proposed quarry project.
5.	f)	Cluster condition if any	Individual Application
6.	g)	Has "No cluster certificate " submitted?	Yes, cluster certificate is already submitted with EC Application at page No. 172.
7.	h)	Distance from nearby habitation	Nearest habitation is about 102m towards NW side.
8.		Distance from nearby forest, if applicable	Cholamali Reserve Forest, 200m, E Paruthyppally Reserve Forest, 5.5 km, E
9.	j)	Distance from protected area, Wildlife Sanctuary, National Park etc.	Peppara Wildlife Sanctuary, 8 km., E Neyyar Wildlife Sanctuary, 12 km, SE
10.	k)	Distance from nearby	Water Bodies: 1. Karmana River, 2.5 km., S 2. Peppara Dam Reservoir, 8 km., E

	streams	/		
	rivers /	'		
	Nationa	1		
	Highwa			
	and Roa	ds		
	l) Is ESA			
	applicab ? If so	ole		
11.	distance	Not falling in ESA		
	from ES	1		
	limit			
	m) Has			
	approved	d		
	mining	Ves the approved mining plan and the Dan to the second sec		
12.	plan,	Yes, the approved mining plan prepared by ROP is already submitted with EC Application		
	prepared by ROP			
ı	submitte	d?		
-	n) Capacity			
1.2	of			
13.	production	on 85,000 MTA		
ļ. <u> </u>	in TPA			
		The mining will be done by open cast semi-mechanized method of mining. The		
1	o) Details of	bench neight and width will be maintained 5 m. Excavated material is transported		
14.	mining	to the crusher unit existing within the complex for further processing. The		
	process	ultimate depth of the mine workings is estimated to reach upto 160 m MSL.		
· .		Details of Project cost		
15.	a) Land	Rs. 5.39 Crores (All inclusive)		
	cost			
16.	b) Plant and Machinery	Rs. 5.39 Crores (All inclusive)		
34	Wiacinitery			
17.	Total Cost	Rs. 5.39 Crores (All inclusive)		
**	V. Financial			
	Statemen			
	including	Rs. 5.39 Crores		
.18.	funding	Insurance = Insurance to the quarry workers would provide		
1.10.	source	through insurance company.		
	and details of	Funding = Own source & bank loan		
	insurance			
	etc.			
		Air Pollution Mining activities will generate certain quantities of dust		
		during drilling, blasting, loading and transportation		
19.	Management	operations. The following measures will be taken to mitigate		
	Plan	the fugitive dust from different operations.		
		• Laying of haul road as per the standards, black topping		
	<u> </u>	of permanent haul road and service road to avoid or		

	eliminate air – borne dust.
	To avoid the dust generation from the drilling
	operations, wet drilling method will be adopted.
· []	Drill machines will be equipped with dust collectors.
	Use of appropriate explosives for blasting and avoiding
	overcharging of blast holes.
	Controlled blasting techniques will be adopted.
	Watering of haul road and other road at regular
	intervals.
	Provision of dust filters/ mask to workers working at
1	highly dust prone and affected areas.
	Provision of green belt all along the periphery of the
	lease area.
	Periodical monitoring of ambient air quality in and
	around the lease area.
	The extracted mineral will be transported from the quarry to the end user by adopting following measures
	so as to minimize dust emissions.
	• In case of long transportation the trucks after loading
	will be covered with tarpaulin sheets
	• Speed of the vehicles will be maintained within the
	prescribed limits.
	Trucks will not be over loaded and will be maintained to
	the body level
Water	Provision of storm water collection pond with an appropriate
Pollution	capacity. The water requirement for sprinkling on sources of
	dust emission, on roads, landscaping etc. Can be met from
	the stored rainwater in the pond.
	The major noise generating source from the mining activity
Noise	is working machinery, drilling, blasting and plying of
	vehicles. The following control measures are to be
	undertaken to bring down the noise levels:-
	Proper maintenance of machinery, equipments and
	improvement on design of machines.
	• Use of personal protective devices i.e., earmuffs and
	earplugs by workers, who are working in high noise
	generating areas.
	• Creation of wide green belt of dense foliage between
	mine areas and residential colonies.
	• Proper training to personnel to create awareness about
1 1	adverse noise level effects.
	Planned noise monitoring at suitable locations in the plant
	and outside location for proper effective remedial actions.
	Tonsoil Management
Solid Waste	Topsoil Management The topsoil excavated from the quarry will be dumped /
Management	stacked separately at pre-determined place and subsequently
	will be utilized in spreading over reclaimed areas for
	plantation as part of eco-restoration. Precautions will be
	taken to limit the height of the topsoil dump / stacked to 5 to
	6 meters in order to preserve its fertility and shelf life. It will

	· , - · -			
		be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.	•	
		Overburden Management		
		This waste will be utilized within the pit for lying of haul		
		roads. At the end use, OB can be reutilized as soil base for plantation.		
		Eco- restoration The year wise programme of eco-restoration for the life of mine, about 3,000 trees will be planted in area 3.0127 ha.		
20.	VI. Whether Environment Management Plan or Eco restoration	Detailed Environment Management Plan is already submitted with E.C. Application at Page No. 68-81.	n	
	Plan satisfactory?			
21.	VII. Does it suggest mitigation measures for each activity	Detailed Environment Management Plan is already submitted with E.C. Application at Page No. 68-81.		
22.	VIII. If Pre- Feasibility Report (PFR) Satisfactory	Detailed Pre-Feasibility Report (PFR) is already submitted with E.C. Application at Page No. 27-102.		
23.	IX. Does it need public hearing	No. Not required		
24.	X. Details of litigation and Court verdict if any	No litigation pending		
25.	XI. Details of public complaint, if any	No public complaint received		
26.	XII. Details of statutory	The following Govt. Orders / Policies are to be followed:- ➤ Kerala Minor Mineral Concession Rules, 2015. ➤ Mines Act, 1952		

		N. Dundagina Bulga, 2008
	sanction	 Explosive Rules, 2008 Kerala Panchayat Raj Act, 1994
	required	Environment Protection Act, 1986
		EIA Notification, 2006 / 2009
		➤ The Kerala Promotion of Tree Growth in Non-Forest Areas (Amendment) Act,
		2007.
	XIII. If	
	CRZ	
27.	recommend	Not Applicable
	ation	
	applicable?	PART B
		Environment Impact Assessment and Mitigation Measures
		Impact on water
	a) Details of	
ł	water	which would be sourced from open well, 13 KED for dust suppression system
28.	requireme	in mine as well as ancillary unit (Crusher / Misand Unit) and 2 KLD 101
	per day ir KLD	plantation purposes and will be sourced from storm water pond.
	KLD	The total water requirement is about 16 KLD in which 1 KLD is for domestic
	b) Water	which would be sourced from open well, 13 KLD for dust suppression system
29.	source/so	in mine as well as ancillary unit (Crusher / M sand Unit) and 2 KLD for
	s.	plantation purposes and will be sourced from storm water pond.
	c)Expected wa	iter 16 ZID
30.	use per day in KLD.	16 KLD
	c) Details of water	About 13 KLD for dust suppression system in mine with ancillary unit
31.	requirem	
] 31.	met from	
	harvestin	
	d) What are	
	impact o	f the
32.	proposal	
	the grou	nd
	water?	
44	e) How mu	
	the wate	KIN KIN
	requiren	
	can be n	
22	recyclin	
33.	treated v	
!	water?	
	(Facilitie	es for
	liquid w	
	treatmen	nt)
	f) What is	the
	increme	
34.	pollution	n load diverted to the septic tank followed by soak pit.
	from wa	iste
	water	

Γ		
	generated from the	
	proposed	
	activities?	
35.	g) How is the storm water from within the site managed?	The run-off from the lease area will be suitably collected through channels and will be stored in storm water pond for further utilization in Mine/ Crusher units. However, all measures will be taken for not to disturb the natural drainage system of the surrounding area.
	Im	pact on Biodiversity and Eco restoration Programmes
	a) Will the	
	project	Due to the mining activities, there will be loss of some native species and
	involve	vegetation. However, some of these species will be planted at the end use for
36.	extensive clearing or	eco-restoration.
50.	modification	
	of vegetation	
	(Provide details)	
<u> </u>	b) What are the	
	measures	
	proposed to	
	minimize the	
37.	likely impact on vegetation	The year wise programme of eco-restoration for the life of mine, about 3,000
, 5,,	(details of	trees will be planted in area 3.0127 ha.
, 8:1	proposal for	
W.	tree	
	plantation/ landscaping)	
9/3	c) Is there any	
.,,,	displacement	
	of fauna	
	both terrestrial and	
	aquatic If	
	so what are	
•		Not applicable
38.	measures ?	
	d) Presence of	
	any	No endangered species found at site.
	endangered	
	species or red listed	
	category (in	
-	detail)	
	<u> </u>	

	Impact on Air Environment
39.	Mining activities will generate certain quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations. • Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust. • To avoid the dust generation from the drilling operations, wet drilling method will be adopted. • Drill machines will be equipped with dust collectors. • Use of appropriate explosives for blasting and avoiding overcharging of blast holes. • Controlled blasting techniques will be adopted. • Watering of haul road and other road at regular intervals. • Provision of dust filters/ mask to workers working at highly dust prone and affected areas. • Provision of green belt all along the periphery of the lease area. • Periodical monitoring of ambient air quality in and around the lease area.
40.	b) Details of internal traffic management of the site. The extracted mineral will be transported from the quarry to the end user by adopting following measures so as to minimize dust emissions. In case of long transportation the trucks after loading will be covered with tarpaulin sheets. Speed of the vehicles will be maintained within the prescribed limits. Trucks will not be over loaded and will be maintained to the body level
41.	c) Details of noise from traffic, machines and vibrator and mitigation measures The major noise generating source from the proposed activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels: Proper maintenance of machinery, equipments and improvement on design of machines. Lise of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas. Creation of wide green belt of dense foliage between mine areas and residential colonies. Proper training to personnel to create awareness about adverse noise level effects. Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions.
42.	d) Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures

Γ	10	A 1:4	
43.		Air quality	The ambient air quality monitoring of the project site was carried out and the
43.		monitoring in detail	copy of report is already submitted with E.C. Application.
	<u> </u>		
			Energy Conservation
	(a) I	Details of	
	1	ower	
44.		equirement	The total power requirement will be 75 kW, which will be drawn from diesel
	1	and source of	engine. Fuel Quantity – 16 to 20 lt/hr.
		supply.	
	1 1	Details of	
ļ]	enewable	The total power requirement will be 75 kW, which will be drawn from diesel
45.	l e	energy (non	engine. Fuel Quantity – 16 to 20 lt/ hr.
		onventional	
	1	used,	
			Risk Management
	1 1	Are there	
		ufficient	
	I	neasures roposed for	
	_	isk hazards	Detailed Environment March 191
46.		1 case of	Detailed Environment Management Plan is already submitted with E.C. Application at Page No. 68-81
		mergency	
	,	ich as	
	i	ecident at	
<u> </u>		ne site?	
	b) A		
		roposals for noing	
i		ound the	
A S	1::12:23:4::30:00:3	N 1990	Barbed wire fencing will be done all around the quarry site.
	sa	tisfactory?	win of done an around the quality site.
ls)-	\ ~.		The state diverse mine will regult in increase in factors of 11 diverse.
			The stone quarry mine will result in increase in frequency of blasting for mining the mineral. However, controlled blasting with optimum charge of holes will be carried
47.		plosives azardous	out to loosen the rock. Explosion hazards are envisaged due to mishandling of
т/,		bstance in	explosives. Explosives will be handled with utmost care in compliance of conditions
	1	tail	imposed by Chief Controller of Explosive & Metalliferous Mines Regulation, 1961.
			·
			Top soil and over burden generated from the site will be stored separately on
		cuity for	earmarked place and will be used for eco-restoration and internal road development.
		lid waste	
	1116	anagement	
		i	
,,			Socio Economic Impacts
	a) Wi	ill the	The quarry project will directly / indirectly develop the area by providing
48.			employment opportunities. With the proposed development in and around the
		-	area there will be supporting facilities/ infrastructure eventually leading to the
	-		Touching to the

	effects on local communities disturbance to sacred sites or other cultural values. What	development of the area.			
	are the safe guards proposed?		- Saine		
49.	b) Will the proposal result in any changes to the demographic structure of local population. If so, provide details.	The project site is private of land use as mining area in the is 200 m. MSL and lowest drainage is towards Southwill be confined within the land.	ie core zone. T is 160 m MSI West side. Ho	he highest elevation L. As the proposed	area is hilly, the
		Sl. Areas of Intervention O1 Promotion of education	No. of Interventio n	Recurring Expenses (in Rs.) 4,20,000	Non Recurring Expenses (in Rs.)
	c) Are the CSR proposals	02 Development of Infrastructure 03 Care for	03	4,00,000 1,80,000	2,50,000
50.	satisfactory. Give details	marginalized 04 Environmental sustainability	02	1,00,000	1,25,000
		05 Reduction in carbon footprint and CO, emission	1	Nil	3,50,000
		Total	11	11,00,000	14,09,000
51.	d) What are the projects benefits in terms of employment potential?	Due to the mining activity a workers attracted to the proj project.	nd due to the a ject area. It is p	attached ancillary un proposed to employ	it, there will be 25 persons in the
		PART	С		
52.	Details of NABET M/s Environmental Engineers & Consultants Pvt. Ltd. approved (NABET Accredited Consultant Organization)				

<u> </u>	Consultant	How J.O.C A1 100 J	
	engaged- Their name, address and accreditati on details	Head Office:- A1-198, Janak Puri, New Delhi. Branch Office:- C-306, Kanchanjunga Apartments, Palarivattom P.O., Kochi, Kerala.	
		Summary and Conclusion	
53.	a) Overall justification for implement on of the project.	tati tati tati t	
54.	b) Explanation of how adverse impact have been mitigated.	Detailed Pre-Feasibility Report (PFR) is already submitted with E.C.	

2. The proposal was placed in the 62nd meeting of SEAC, Kerala, held on 06th & 07th September, 2016. 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 deferred the item for field visit. Since the Peppara wildlife sanctuary is within 10kms, proof of having applied for the wildlife clearance from MoEF &CC has to be produced. The Committee also suggested revision of CSR activities.

Accordingly, the Subcommittee of SEAC conducted the field visit and field visit report is given below.

Field visit to the Quarry project site of M/s Ponmudi Blue Metals Pvt. Ltd Uzhamalakkal village, Thiruvananthapuram district, was carried out on 30.11.2016 by the sub-committee of SEAC, Kerala, comprising Dr. Harikrishnan and Sri. John Mathai. The Proponent Sri Nizarudin was present at the site at the time of site visit.

The project is located at about 3 km north of Uzhamalakkal with the approach from Kuryathi on the Kulappada-Mannoorkonam road. This quarry area falling in own land occupy the crest and southern upper slopes of a hill ridge exposing hard rock. An abandoned quarry is seen to the NE of this lease area. Boundary pillars of the plot are erected temporarily at the respective cordinates and numbered as given in the surface plan. The rock type is a mixture of Khondalite and Charnockite. Formation of benches has been initiated. Storm water is channelized into a pit on the upper part that functions as a temporary RWH structure, clarified let out down the slope. Fencing is to be provided along the outer boundary. OB is now partly stored in the upper slopes. The quarry has a crusher unit. Floral and faunal biodiversity is not observed as the area is mostly rocky and disturbed. Water is sprinkled for dust suppression. Vegetation in the form of rubber plantation is seen all around. Based on an overall evaluation of the site, issuance of EC can be recommended after compliance of the following:

- All the boundary pillars are to be fixed permanently on the ground and their respective coordinates to be marked on them
- Fencing to be completed around the lease area.
- OB now stored on the steep slopes to be relocated to the lower slopes in own land.

 Being a sloping area, protective support walls to be provided.
- Catch water drain to be provided on the lower part from the crusher to the SW boundary.
- A pond like structure to be made on the lower hollow like part on the south side (between BP 3 and BP 4) to serve as another RWH. The over flow from catch water drain to be directed into it.
- Commitment of CSR to be verified.
- 3. The proposal was considered in the 66th meeting of SEAC held on 19th December, 2016. 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 **deferred** the item for submission of clarifications/details sought in the field visit report.

- 1. Copy of application for Forest clearance from NBWL
- 2. All the boundary pillars are to be fixed permanently on the ground and their respective coordinates to be marked on them
- 3. Fencing to be completed around the lease area.
- 4. OB now stored on the steep slopes to be relocated to the lower slopes in own land. Being a sloping area, protective support walls to be provided.
- 5. Catch water drain to be provided on the lower part from the crusher to the SW boundary.

6. A pond like structure to be made on the lower hollow like part on the south side (between BP 3 and BP 4) to serve as another RWH. The over flow from catch water drain to be directed into it.

The proponent agreed to set apart Rs.11.5 lakhs (non-recurring) and 11lakhs per annum (recurring) CSR activities for the welfare of the local community. The proponent also agreed to spend this amount in consultation with the local Panchayath.

Subsequently the proponent submitted the above mentioned documents sought by the $66^{\rm th}$ SEAC

- 4. The proposal was considered in the 69th meeting of SEAC held on 9th and 10th March 2017. The Committee verified the additional documents submitted by the proponent and found satisfactory. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, field visit report and all other documents submitted along with Form1. The Committee decided to Recommend for Issuance of EC subject to the following specific conditions in addition to the general conditions.
 - 1. If any plant species endemic to Western Chats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.

The proponent agreed to set apart Rs.11.5 lakh (non-recurring) and Rs.11 lakhper annum (recurring) for CSR activities. The proponent also agreed to spend this amount in consultation with the local Panchayat for the welfare of the local community.

The proponent vide e-mail dated 8th May 2017 has informed that the quarry is working with two trining leases for cumulative area of 1.7653 ha and the details of mining leases are provided below:

- 1. For mining area 1.1553 ha vide Order No. 667/2011-12/6819/M3/2011 with validity up to November, 2021.
- 2. For mining area 0.610 ha vide Order No. 558/2011-12/6818/M3/2011 with validity up to November, 2021.
- 5. The proposal was considered in the 68th meeting of SEIAA held on 12.05.2017. The Authority accepted the recommendation of 69th meeting SEAC and decided to issue Environmental Clearance subject to obtaining legal opinion as decided in the 66th SEIAA meeting whether quarrying on lease areas without Environmental Clearance also come under the scope of violation. The Authority also decided that the mining operations should be limited to an area at least 100 m from the dwelling unit and an affidavit stating that there is no dwelling unit within 100 m distance should be submitted by the proponent. The conditions mentioned in the field inspection report should also be strictly implemented.
- 6. In the light of the clarifications of the legal opinion of 76^{th} SEIAA meeting held on 16.11.2017, decided to issue EC to the proposal. The proponent has submitted an affidavit on 19.12.2017 vide reference 7^{th} cited, satisfying all the above conditions.

- Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed quarry project in Sy. Nos. 4/1pt, 4/3, 4/5 pt., 4/6 pt., 4/8, 4/9 pt., 4/11 pt., 4/12 pt., 61/3 pt., 61/5 pt., 61/8 pt., 62/2 pt., 62/3 pt., 62/4 pt. & 62/5 pt. at Uzhamalackal Village, Nedumangad Taluk, Thiruvananthapuram District, Kerala of Sri. M. Nizarudeen, Managing Director, M/s Ponmudi Blue Metals Pvt. Ltd, M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiruvananthapuram, Kerala-695551, for an area of 3.0127 hectares, subject to the specific conditions as recommended in para 4 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.
- 8. 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 Planas submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.
- 9. 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.
- 10. 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, Thiruvananthapuram to take legal action under the Environment (Protection) Act 1986.

iii. The given address for correspondence with the authorised signatory of the project is Sri. M. Nizarudeen, Managing Director, M/s Ponmudi Blue Metals Pvt. Ltd, M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiruvananthapuram, Kerala-695551

Sd/-

P.H.KURIAN.I.A.S, Member Secretary (SEIAA)

To

Mr. M. Nizarudeen, Managing Director M/s Ponmudi Blue Metals Pvt. Ltd., M.S. Building, Kalungu Jn., Vithura, Nedumangad, Thiruvananthapuram, Kerala-695551

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 Director, Mining & Geology, Thruvananthapuram -4.
- 4. The Member Secretary, Kerala State Pollution Control Board
- 5. The District Collector, Thiruvananthapuram
- 6. The District Geologist, Thiruvananthapuram
- 7. The Tahasildar, Nedumangad Taluk, Thiruvananthapuram District
- 8. Chairman, SEIAA.
- 9. Website.
- 10. S/f
- 11. 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.
- 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.
- 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.
- 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 proponentshall apply and get the approval of this Authority.
- 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.
- 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. 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.
- 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.
- 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.
- 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 PM₁₀ and PM_{2.5} 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.
- 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.
- 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.
- 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

			·	
·				
	·		·	
		·		