सत्यमेव जयते

Validity expires on 09.10.2022

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 quarry project in Sy. No. 39/1 & 39/2 of Venganellur Village, Thalappilly Taluk, Thrissur District, Kerala by Mr. V. Govindan Kutty, Managing Partner, M/s. Divya Metal Industries - Granted – Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No. 1062/SEIAA/EC1/1639/16 ***Dated,Thiruvananthapuram, 10.10.2017***

Ref:1. Application dated 07.01.2016 from Mr. V. GovindanKutty, Managing Partner, M/s. Divya Metal Industries,Nattianchira, Chelakodu P.O, Thrissur, Kerala-680587

2. Minutes of the 68th meeting of SEAC held on 20th& 21st February, 2017.
3. Minutes of the 71st Meeting of SEAC held on 20th& 21st April, 2017.
4. Minutes of the 69th Meeting of SEIAA held on 01st June, 2017.
5. Affidavit received dated. 26.09.2017 from Mr. V. GovindanKutty, M/s. Divya Metal Industries.

ENVIRONMENTAL CLEARANCE NO.71 /2017

Sri. V. Govindan Kutty, Managing Partner, M/s. Divya Metal Industries, Nattianchira, Chelakodu P.O, Thrissur District, Kerala-680587, vide his application dated 07.01.2016, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No's. 39/1 & 39/2 of Venganellur Village, Thalappilly Taluk, Thrissur District, Kerala for an area of 1.3079 hectares. The project comes under Category B2, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 5 hectares) 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.

Details of the project as furnished by the applicant are as follows:-

BASIC INFORMATION OF QUARRY

Project details		
1.	File No.	1062/SEIAA/EC1/1639/16
2.	Name /Title of the	"Granite Building Stone Quarrying Project"

	project	of M/s. Divya Metal Industries.
3.	Name and address of project proponent.	M/s. Divya Metal Industries, V. GovindanKutty- Managing Partner Nattianchira, Chelakodu P.O, Thrissur District, Kerala State.
4.	Owner of the land	Private lands
5.	Survey No. District/Taluk/ and Village etc.	Sy. No's. 39/1 & 39/2 of Venganellur Village, ThalappillyTaluk, Thrissur District, Kerala.
6.	Details of period of lease or permit with number including the beginning and expiry date of lease/permit period)	Applied for Fresh lease
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?	Applied for Fresh lease
8.	Date of submission of Application	07.01.16
9.	Brief description of the project.	The Project Proposal of Granite Building Stone Quarry applied by M/s. Divya Metal Industries., deals with production of 1,13,602 tons per annum out of ROM 1,15,920 tons/annum of Granite Building Stone to be handled as per the approved Quarrying Plan is prepared as required under "Kerala Minor Mineral Concession Rules-2015 . The Method of working shall be Semi-Mechanized open cast quarrying.
10.	Details of Authorized Signatory and address for correspondence	M/s. Divya Metal Industries, V. GovindanKutty- Managing Partner Nattianchira, Chelakodu P.O, Thrissur District, Kerala State. Partnership Deed attested by Notary is submitted.
	I. Land Details	
11.	**1.** Extent of area in hectares	1.3079 Ha.

12.	**2.** Is the property forest land/Govt. land/own land/patta land	Private lands
13.	**3.** Quantity of top soil/over burden produced and managed	Intercalated waste of the Building Stone handled during Quarrying operations is less as the entire area is almost a rocky terrain. An estimated quantity of around 8,190 tons of Overburden is required to be handled during the proposed 5 year plan period. To temporarily accommodate this waste material, non-mineralized area and same shall be utilized for haulage road maintenance, filling of pot holes & formation of safety bunds all along the 7.5m safety zone.
14.	**4.** Latitude and Longitude	Latitude - 10°43'54.2" to 10°43'58.9" N Longitude - 76°22'34.5" to 76°22'38.6"E
15.	**5.** Topography of land and elevation	The field studies it is observed that the Quarry lease area is falling in uncultivable lands, non-forest i.e. in Private lands. The area in essence consists of Stone/Rocky ridges and slope/gradient in all directions. The highest elevation is 155 m and lowest elevation is 118m above the MSL. The subject area falls within this region confining to a part of Venganellur Village.
16.	**6.** Slope analysis	Slope study analysis not carried out (Fresh Area)
17.	**7.** Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	• Based on the appraisal of the existing environmental scenario and the information gathered, there will not be significant environmental impact due to the quarrying of Granite Building Stone activities. • Sufficient check dams would be constructed in the drainage nallahs so as to arrest the surface run-off. • Retaining walls shall be constructed. Check dam shall be constructed along the seasonal nallahs as shown on the Environmental Plan to arrest the silt flowing along with water at downstream sides of the quarry.
18.	**8.** Access road to the site width and condition	The access road width will be maintained with7.0 m for movement.
19.	**9.** Will there be any adverse impact on the aesthetics of the proposal site	Mineral deposits are exploited for the sustained development of the country. But this economic activity is likely to cause some adverse impact on the environment and ecosystem of the area. Therefore, it is obligatory on the part of the leasee to implement suitable control measures to mitigate the adverse impact of the various quarrying operations.
	II. Mining details	
20.	a) Minimum and Maximum height of excavation.	Applied for Fresh quarry lease
21.	b) Life of mine	About 07 Years

	proposed.	
22.	c) Underground mining if any proposed	Not applicable
23.	d) Method of Mining	Semi Mechanized Method of Open Cast Mining
24.	e) Distance from the adjacent quarry	There are no adjacent quarry leases
25.	f) Cluster condition if any	Not applicable
26.	g) Has "No cluster certificate" submitted?	-
27.	h) Distance from nearby habitation	Human settlement exists around the Quarrying area, but at considerable distance. In all, there are 05 villages situated within the buffer zone of 05 kms radius.
28.	i) Distance from nearby forest, if applicable	MedakuReserve Forest is 50 mtrs towards S-SE
29.	j) Distance from protected area, Wildlife Sanctuary, National Park etc.	There are no wild life sanctuaries within & nearby the Quarry lease area.
30.	k) Distance from nearby streams/rivers/ National Highway and Roads	There are no surface waterbodies within the lease area and the nearest water body is BharathappuzhaRiver is 2.40km towards NW
31.	l) Is ESA applicable? If so distance from ESA limit	NA
32.	m) Has approved mining plan, prepared by RQP submitted?	Approval of Mining Plan from Mining & Geology Department, Thrissur and copy of the same is submitted.
33.	n) Capacity of production in TPA	The envisaged maximum proposed ROM Production 1,15,920 tons/annum of Granite Building Stone.
34.	o) Details of mining process	Attached
III. Details of Project cost		

35.	Land cost	Lease Land	
36.	Plant and Machinery	27 Lakhs	
37.	Total Cost	The estimated total cost of the project is Rs. 27 Lakhs.	
38.	Financial Statement including funding sourceand details of insurance etc.	Own Resources & Financial Institutions	
39.	Management Plan	Air Pollution	Suitable mitigative measures such as dust proof drilling and small scale blasting, regular maintenance & sprinkling of water for dust suppression etc.,and also create green belt along lease boundary to act as a dust barrier.
		Water Pollution	• Construction of Garland drains along the approach roads within & outside the proposed workings to divert the rainwater. • Stabilization of worked out slopes by planting appropriate shrub/grass species on the slopes to prevent material wash off. • Check dams to be constructed outside the lease area in consultation with the appropriate local authorities. • Building of safety bunds about 120m all along the 7.5m safety zone.
		Noise	• Proper and regular maintenance of vehicles and other equipment with proper lubrication, fitting of effective silencers etc., to reduce the noise. Sound Proof Cabins for operators. • The workers employed will be provided with protection equipment and earmuffs etc.

			• Periodic noise level monitoring at various sources like equipment, plant transport, loading and dumping.	
		Solid Waste Management	• The bund to be formed all along the 7.5 meter safety zone of the lease area shall be stabilized and to improve aesthetics, the slopes of the bunds would be progressively vegetated with local hemata grass species and legumes and by afforestation. Also, CPT (Cattle Proof Trench shall be dug along the boundary adjacent to the fencing to avoid & prevent cattle entering the quarry area).	
		Eco-restoration	The afforestation proposed in the Quarry lease area will help in preventing dust emissions to spread outside the quarry lease area.	
40.	Whether Environment Management Plan or Eco restoration Plan satisfactory?	Yes		
41.	Does it suggest mitigation measures for each activity	Quarry operations will be carriedout with strictsafety norms as the Mines ActandDGMS safety provisions.It is proposed to take up mitigative measures in the form of sprinkling water in the sensitive areas and also create green belt along lease boundary to act as a dust barrier. As stated earlier the gaseous pollutants in and around the quarry are well within the permissible limits There is no likelihood of the concentrations exceeding the standards as the dust emanating from the drilling shall be controlled by adopting wet drilling. There is no other factory or beneficiation unit within the lease area. However, air quality parameters will be monitored as per the requirement.		
42.	If Pre-Feasibility Report (PFR) satisfactory	Yes		
43.	Does it need public hearing	No (category B2 <5 Ha.)		
44.	Details of litigation and Court verdict if any	There are no litigation pending against the Project.		

45.	Details of public complaint, if any	NA
46.	Details of statutory sanction required	This is a applied quarry for fresh grant. Necessary permissions &other statutory requirements will be complied
47.	If CRZ recommendation applicable?	This project does not require approval/clearance under CRZ notification.
PART B Environment Impact Assessment and Mitigation Measures		
Impact on water		
48.	a) Details of water requirement per day in KLD	Water requirement for the proposed project is expected to be about 10 KLD.
49.	b) Water source/sources.	The drinking water requirement can be met from the well & the industrial water requirement like dust suppression and green belt will be met from the mines and rainwater harvesting cum settling pond located near the lease area.
50.	c) Expected water use per day in KLD.	10.0 KLD
51.	d) Details of water requirements met from water harvesting.	Fresh project: Applied for fresh grant
52.	e) What are the impact of the proposal on the ground water?	Since the ground water table is not at much depth and the rainfall is very high during monsoon, drainage of water shall be properly coursed with series of check dams & retaining walls so as not to disturb the natural drainage pattern of the area. There is no proposal to work below water table.
53.	f) How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	N A
54.	g) What is the incremental pollution load from waste water generated from the proposed activities?	N A
55.	h) How is the	Check dams will be constructed to contain the surface run-off of

	storm water from within the site managed?	the silt and sediments from the lease area during heavy rainy season. Garland drain around the quarry will be made to divert the water from working areas.
Impact on Biodiversity and Eco restoration Programmes		
56.	a) Will the project involve extensive clearing or modification of vegetation (Provide details)	The Entire area is Private Patta Land and proposed to be worked for Granite Building stone. This is an applied quarry lease, there is no extensive vegetation or buildings required to be cleared for the project.
57.	b) What ate the measures proposed to minimize the likely impact on vegetation (details of proposal for tree plantation/ landscaping)	About 300 saplings/annum is proposed to be taken up in the buffer zone and avenue plantation. The year wise afforestation program is furnished in EMP report.
58.	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)	N A
Impact on Air Environment		
59.	a) What are the mitigation measures on generation of dust, smoke and air quality	• Adopting wet drilling method will also help reduce the dust generation. • Afforestation for control of dust all along the service roads. • Water sprinkling at regular interval on the main haul road and other service roads by water sprinklers. • In addition to the use of dust collectors, dust extractors shall be provided to all drilling machine operations.
60.	b) Details of internal traffic management of the site.	• Speed of trucks entering or leaving the quarry to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks • Planting of trees along roads, around buildings to act as acoustic barriers in the buffer zone.

		• Construction of well designed haul roads with side drains and afforestation on both the sides to act as wind breakers.
61.	c) Details of noise from traffic, machines and vibrator and mitigation measures	• The noise in the quarry site shall be mainly due to drilling & excavation operations. However, the quarrying operations are limited to only 5-6 hours of drilling at intervals and as per requirement. • Proper and regular maintenance of vehicles and other equipment with proper lubrication, fitting of effective silencers etc., to reduce the noise. Sound Proof Cabins for operators. • Periodic noise level monitoring at various sources like equipment, plant transport, loading and dumping. • The workers employed will be provided with protection equipment and earmuffs etc.,
62.	d) Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	DG set if required shall be used
63.	e) Air quality monitoring in detail	The maximum value of PM_{10} in the core zone, 14.9-26.1$\mu g/m^3$ is found to be within the limits. Fall in the PM_{10} content in the atmosphere is due to the presence of humidity and also due to the fall in the wind speed. Details given in the EMP report.
	Energy Conservation	
64.	a) Details of power requirement and source of supply.	No electricity is needed or quarry operations as only diesel operated mining machinery including jackhammer are used for quarrying.The power requirement of the administrative buildings, shall be met from stategrid.
65.	b) Details of renewable energy (non – conventional) used.	N.A
	Risk Management	

66.	a) Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	• Personal protective devices like earmuffs, safetyboots ,helmets,goggles etc., will be provided to staff to minimize accident ,injuries etc. • Provision of proper firefighting equipment & training of staff • Ambulance Services. • First aid room, first aid kit and also the experts of first aiders will be maintained. • Nearest Primary Health Center/Hospital • Mitigative measures shall be taken up to prevent fires in adjacent lands by cleaning the area of 5 meters width during summer all along the boundary & appoint watchers during summer at the proponents cost.
67.	b) Are proposals for fencing around the quarry satisfactory? c) Storageof explosives/hazar dous substance in detail d) Facility for solid waste management	b) 450 meters of fencing proposed c) No storage within the quarry site d) Retaining walls will be constructed all along the waste dumps
	Socio Economic Impacts	
68.	1) Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	The local community will continue to have benefits like increased income levels, better lifestyles etc.Besides, the local panchayats, State and Central Governments will also benefit due to receipt of taxes,cess, royalty etc from the output from the project. The project proponent provides various services to local community and local area for improving local infrastructure and living conditions of local community.
69.	2) Will the proposal result in any changes to the demographic	The proposed quarrying activity is actually beneficial to the people of the surrounding villages as it creates employment potential which in turn helps in improving the economic status of

	structure of local population. If so, provide details.	the people and the society.

70.	3) Are the CSR proposals satisfactory. Give details	Under CSR initiatives the following socio-economic activities will be initiated: **CSRACTIVITIES (of five years):** **Sl. No. / Particulars / Amount (Rs. In Lakhs)** 01 – Extending educational aid in monetary form to poor and needy persons of surrounding nearby schools – 0.50 02 – Providing Computers, Rain water harvesting structures etc. to Venganellurschool – 1.00 03 – Providing Medical provision such as bench, shelf, table, chairs for patients of Government Primary Homoeo dispensary hospital, Venganellur village – 1.00 04 – Providing computers etc. to Venganellur school – 0.50 05 – Providing Kitchen cum store toVenganellur school – 1.00 06 – Providing Bedsheet,ChairsforOPpatients&ConstructionofToilet for patients ofP.H.Centre,school village – 1.00 **Total** – **5.00**
71.	4) What are the projects benefits in terms of employment potential?	Working of this quarry shall result in overall development of the region in its own way due to provision of direct & indirect employment, improvement in the general living standards and knowledge sharing, improved wage level and the living standard of the local people and continual improvements of the local amenities for the local society.
	PART C	
72.	Details of NABET approved EIA Consultant engaged- Their name, address and accreditation details	M/s. GLOBAL ENVIRO LABS 2-2-1075/14/A/1, Tilaknagar "X" Roads, BaghAmberpet, Hyderabad – 500 072. Ph.: 040-65582886; Telefax:040-27407969 E. Mail: globalelabs@rediffmail.com (QCI- NABET Provisional Accreditation No:49), & (Recognized by Govt. of India, MoEF, New Delhi Vide Gazette Notification No. S.O. 773 (E))

Summary and Conclusion

73.	a) Overall justification for implementation of the project.	• The project proponent has proposed good CSR activities to the local community around the project site.The CSR schemes are identified to meet the specific needs and requirement of the concerned group/person of any organization/Institutions. • The local community will continue to have benefits like increased income levels, better life styles etc. Besides, the local panchayats, State and Central Governments will also benefit due to receipt of taxes,cess, royalties,etc. from the output of the project.
74.	b) Explanation of how adverse impact have been mitigated.	• The dust generated from loading and transport operations will be controlled by water spraying for these purposes water tanker fitted with sprayer will be used at haul road, etc. Sprinkling water on the roads by tanker will be practiced. • The haulage vehicles shall be maintained with proper lubrication, fitting of effective silencers and maintenance to reduce the noise. • All around the proposed statutory buildings and along the road sides trees shall be planted in addition to the existing ones which will protect the workers from the noise and dust.

2. The proposal was considered in the 68th meeting of SEAC, Kerala, held on 20th & 21st February 2017.The Proponent and the RQP attended the meeting and RQP made a power point presentation about the salient features of the project. The Committee appraised the proposal based on the Mining Plan, Pre-feasibility Report and all other documents submitted along with Form1.

The proponent agreed to set apart Rs.5 lakh (non-recurring) and Rs.3 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat.

The Committee deferred the item for field inspection. During site inspection the proximity of reserve forest should be looked into. Accordingly, the Subcommittee Members of SEAC carried out site inspection and reported as follows:

Field visit to the Quarry project site of M/S Divya Metal Industries located in Survey Nos. 39/1 & 39/2 of Venganellur Village, Thalappilly Taluk, Thrissur District, Kerala by Mr. V. Govindan Kutty Managing Partner of M/s. Divya Metal Industries (File No. 1062/SEIAA/EC1/1639/16) was carried out on 04.03.2017 by the Sub-Committee of SEAC, Kerala, comprising Dr. Jayson E.A. and Dr. K.G. Padmakumar. The area requested is for 1.3079 hectares. The Proponent was present at the site.

The proposed project site falls within North Latitude 10°43'54.2" to 10°43'58.9"N and East Longitude 76°22'34.5" to 76°22'38.6"E. The land use classification as per revenue records is private own land. The lease area consists of 1.3079 hectares, which is private land. The proposed project is for quarrying of maximum proposed ROM Production 1,15,920 tons/annum of Granite Building Stone. The total water requirement is about 10.0 KLD in which 3.0 KLD is for domestic which would be sourced from open well, 7.0 KLD for dust suppression system in mine as well as ancillary unit. The total project cost is 27 lakhs. The mining activity will have localized impact and create physical change in the existing environment due to the change in the land use. Among the Water bodies the Bharathapuzha River is at 2.4 km – NW and the Reserve Forest Medaku RF, is at 50 m in South and South East direction.

During field studies it is observed that the Quarry lease area is falling in uncultivable lands, non-forest i.e. in Private lands. The area in essence consists of Stone/Rocky ridges and slope/gradient in all directions. The highest elevation is 155 m and lowest elevation is 118m above the MSL. The subject area falls within this region confining to a part of Venganellur Village. The method of operation is reported as through controlled blasting. The working faces are presently modified by the formation of benches. Dwelling units are not seen in the immediate vicinity of 100 m. Garland drains will be needed to control the water flowing out of the quarry.

Based on an overall evaluation of the site, following points may be considered:

1. *No work has been initiated in the site.*
2. *Sign boards of warning and blasting time has to be fixed before initiating the work.*
3. *The whole lease area has to be fenced.*
4. *Resting place for workers and staff has to be constructed.*
5. *Over burden is to be stored in the designated places with protective support.*
6. *The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good motorable condition by the proponent. Buffer distance from the road near the quarry may not be required as it ends at the quarry.*
7. *Dust suppression mechanism must be in place.*
8. *Vegetation is seen all around the quarry but must be maintained till the entire life of quarry.*
9. *Nearest house is at 500 m.*
10. *Highest elevation- 30m*
11. *Slope North to South*
12. *One rocky portion*

3. The proposal was considered in the 71st meeting of SEAC held on 20th and 21st 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. *The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good motorable condition by the proponent.*
2. *Dust suppression mechanism must be in place.*
3. *100 m distance should be left from the Reserve Forest boundary.*
4. *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.*

The proponent agreed to set apart Rs 5 lakhs and Rs 3 lakhs, non-recurring and recurring amounts respectively, for taking up CSR activities in the locality in consultation with local panchayat.

4. The proposal was considered by the Authority in its 69th meeting held on 01.06.2017. The Authority accepted the recommendation of SEAC in its 71st meeting held on 20th and 21st April 2017 and decided to issue EC subject to general conditions in addition to the following specific condition for mining.

1. *The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good motorable condition by the proponent.*
2. *Dust suppression mechanism must be in place.*
3. *100 m distance should be left from the Reserve Forest boundary.*
4. *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.*

The conditions suggested by the inspection report should also be fulfilled. The premining conditions should be fulfilled before the mining is started. Rs.5 lakh (non-recurring) and Rs.3 lakh per annum (recurring) should be set apart for CSR activities for the welfare of the local community in consultation with the local Panchayath. An affidavit that all the above conditions shall be fulfilled, should be submitted before the issuance of EC. EC will be issued only after submitting an affidavit to the effect that 100 m distance should be left from the Reserve Forest boundary.

5. The proponent has submitted an affidavit vide reference 5th cited, satisfying all the above conditions. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed building stone quarry project in Sy. No. 39/1 & 39/2 of Venganellur Village, Thalappilly Taluk, Thrissur District, Kerala by Mr. V. GovindanKutty, Managing Partner, M/s. Divya Metal Industries Nattianchira, Chelakodu P.O, Thrissur District, Kerala-680587,for an area of 1.3079 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

~~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.

6. 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.

7. 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.

8. 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, Thrissur 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. Govindan Kutty, Managing Partner, M/s. Divya Metal Industries, Nattianchira, Chelakodu P.O, Thrissur District, Kerala-680587

Sd/-

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

To,

Sri. V. Govindan Kutty,
Managing Partner,
M/s. Divya Metal Industries,
Nattianchira, Chelakodu P.O,
Thrissur District, Kerala-680587

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, Thiruvananthapuram -4.
4. The Member Secretary, Kerala State Pollution Control Board
5. The District Collector, Thrissur
6. The District Geologist, Thrissur
7. The Tahasildar, Vengallur Village, Thrissur Taluk, ThrissurDistrict, Kerala
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.
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 proponentshall 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. 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^{0}. 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_{10} 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.

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.

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

For Member Secretary, SEIAA Kerala