



सत्यमेव जयते

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

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

Sub: SEIAA- Environmental clearance for the proposed quarry project in Sy. No. 215/1 A at Thazhekode Village, Perinthalmanna Taluk, Malappuram District, Kerala by Sri. Sri. Mohammed Haneefa Jailabdeen, M/s. VMR Granite Quarry –E.C. Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 758/SEIAA/KL/333/2015

dated, Thiruvananthapuram 08-08-2016

- Read:-**
1. Application dated 15-12-2014 submitted by Sri. Mohammed Haneefa Jailabdeen, Proprietor, M/s. VMR Granite Quarry, (V.M.R) Jamsenamanzil, Puthanangadi Post, Vailangara, Malappuram District -679321
 2. Minutes of the 46th meeting of SEAC held on 29/30-09-2015.
 3. Minutes of the 54th meeting of SEAC held on 06/07-04-2016.
 4. Minutes of the 53rd meeting of SEIAA held on 24-05-2016
 5. Minutes of the 55th meeting of SEIAA held on 16/07/2016.

Environmental Clearance No. 102/2016.

Sri. Mohammed Haneefa Jailabdeen, Proprietor, M/s. VMR Granite Quarry, (V.M.R) Jamsenamanzil, Puthanangadi Post, Vailangara, Malappuram District vide his application received on 02/02/2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 215/1 A at Thazhekode Village, Perinthalmanna Taluk, Malappuram District, for an area of 2.90 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the proposal are as follows:

Basic information about the project		
Name of project	M/s. VMR Granite Quarry of Sri. Muhammed Haneefa Jailabdeen	
Category/Subcategory & Schedule	Category: B, (sub-category - B2) Schedule: 1 (a) Mining of Minerals	
Location Sy no/ district, Taluk/ village etc.	Survey Nos.	215/1A
	District	Malappuram
	Taluk	Perintalmanna
	Village	Thazhekode
GPS co-ordinates	Latitude : 10°58'5.18"N to 10°57'57.90"N Longitude : 76°17'8.12"E to 76°16'59.99"E	
Extent of area (in hectares)	2.90 Hectares	
Minimum and maximum height of excavation (MSL)	Elevation of lease area: 120 m to 190 m MSL Height of excavation: 120 m to 185 m MSL	
Life of mine proposed	Ten (10) years	
Ultimate depth of mining (in MSL)	upto 120 m MSL	
Distance from the adjacent quarry	Abandoned stone quarries located adjacent and within 500 m from the mine lease area.	
Cluster condition (if any)	There is no quarry in operating within 500 m. radius.	
Capacity of production	12315 m ³ /annum building stone production.	
Details of Project Cost	Rs.50,00,000.00 (FiftyLakhs) (Fixed Assets for Land, Building &Machineries)	
Financial Statement including funding source and details of insurance	This is an existing building stone quarry. Existing mine machinery and site infrastructure will be utilised.	
Status of litigation/complaint/cases	Nil as stated by the proponent.	
Interlinked project (if any)	Nil	
Whether CRZ is applicable	Not applicable	
ABOUT THE PROJECT		
Environmental parameters considered	Description	
WATER		
Water requirement & sources	Detail of water requirements in KLD as given below:	
	Dust Suppression	2.0 KLD
	Drinking Purpose	0.5 KLD
	Green Belt	1.5 KLD
	Total	4.0 KLD
The required water will be met from bore well and open well from the nearby area and also from rain water harvested in mine pit during later phase of mining.		

RWH units proposed	Mine Pit will work as RWH unit.
Facilities for liquid waste treatment	<ul style="list-style-type: none"> No process effluent will be generated. Construction of garland drains to divert surface run-off from virgin area away from mining area. Construction of check dams / gully plugs at strategic places to arrest silt wash off from broken up area. Collection of surface run-off from broken up area in mine pits for settling and only properly settled excess water from mine pit as per specific action of the PCB will be discharged. The storm water/ mine water will be used for dust suppression, greenbelt development, etc. Domestic sewage from site office & urinals/latrines will be discharged in septic tank followed by soak pits.
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Nil
Water quality meeting requirements	General water quality of the area is within permissible limits of Drinking water standards. Water quality requirements to meet as per rules applicable after treatment.
LAND	
Proximity to forest lands	Kodikuthimala Forest: 500 Meters East
Is the land assigned for any other special purpose; Give details	None. This is an existing mine previously worked under temporary permits.
Access road to the site – Width & Condition	300 m long unpaved approach road connecting SH-39.
Storage of explosives /hazardous substances	Licensed explosive magazine in the mine lease area.
Facility for solid waste management.	<ul style="list-style-type: none"> About 15,400 m³ top soil will be generated during the mine life, which will be used for partial backfilling in the mined out void and for plantation purpose. The entire quarried Building stone, irrespective of sizes will be saleable. Hence, there is no solid waste generation during this quarrying operation. The manure will be treated and used for green belt development.
Topographic features/ slope	<ul style="list-style-type: none"> This is an existing stone mine. The quarry site exhibits hilly terrain with gentle slope towards south. The elevation of mine lease area varies from 120 m to 190 m MSL. The applied area comprise of existing mine pits and coconut plantation and few other trees.
Proneness of the area for landslides	<ul style="list-style-type: none"> Systematic opencast mining with benches will be carried out. Ultimate slope of the mine will be maintained at 45°. Since the granite is hard rock formation, landslides are not envisaged. The area falls in seismic zone III and is moderately prone to seismic activities.
Significant land disturbance resulting in erosion, subsidence & instability	<ul style="list-style-type: none"> The land use of the mine lease area will changed to mine pits. Systematic opencast mining with benches will be carried out. Since the granite is hard rock formation, subsidence and instability are not envisaged.
Top soil, overburden etc.	<ul style="list-style-type: none"> About 15,400 m³ top soil will be generated during the mine life, which will be used for partial backfilling in the mined out void and for plantation purpose. There is no overburden anticipated presently in the lease applied

		area the entire Building stone will be utilized.
<i>EnvtMgmt plan/ Eco restoration plan (brief details</i>		<u>MANAGEMENT PLAN:</u>
	<i>Air pollution</i>	<ul style="list-style-type: none"> • Dust release to quarry activity should be suppressed periodically by sprinkling of water. • To avoid the dust generation from the drilling operations, wet drilling method should be adopted. • Drill machines should be equipped with dust collectors. • Use appropriate explosives for blasting and avoid overcharging of blast holes. • Controlled blasting techniques should be adopted. • Watering of haul road and other road at regular intervals. • Provide dust filters/ mask to workers working at highly dust prone and affected areas. • Green belt should be practiced along the periphery of the lease area. • Periodical monitoring of ambient air quality in and around the lease area. • During the transportation of the extracted mineral to the end user the following measures should be adopted to minimize dust emissions. • In case of long transportation the trucks after loading should be covered with tarpaulin sheets. • Speed of the vehicles should be maintained within the prescribed limits. • Trucks should not be over loaded and should be maintained to the body level
	<i>Water pollution</i>	<ul style="list-style-type: none"> • Garland drains and settling ponds should be provided at the quarry to contain the quarry wash off and to avoid the same joining the adjoining surface water bodies
	<i>Noise</i>	<ul style="list-style-type: none"> • Plantation should be carried out along the lease periphery, to act as acoustic barrier for noise control.
	<i>Solid Waste Management</i>	<ul style="list-style-type: none"> • Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.
	<i>Eco restoration</i>	<ul style="list-style-type: none"> • 5700 saplings will be planted in an area of 2.3 ha.mined out area including safety barrier zone. • The mine pit area will be converted to water reservoir for fisheries development in consultation with fisheries department. • Detailed Eco-restoration of the mining area is included in the EMP and approved mining plan.

AIR			
Air quality meeting requirements	<ul style="list-style-type: none">Air quality has been monitored at Quarry and nearby Thazhekod Village which is found within Permissible limit as per NAAQ Standard. Air quality will be maintained with in the permissible standard limit as applicable		
Noise level meeting requirements	<ul style="list-style-type: none">Noise levels has been monitored at Quarry and nearby Thazhekod Village which is found within Permissible limit as per CPCB Standard.Noise levels will be maintained with in the permissible standard limit as applicable		
Likely emissions affecting environment	<ul style="list-style-type: none">Dust emissions during mining activities and SO2 & NOx emissions during loading and transport activities. Noise will be generated due to mine machineries and transport vehicles.		
ENERGY			
Energy requirement	<ul style="list-style-type: none">10-15 litre diesel per hour. Electricity for office use and lighting for security during night.		
Energy Sources	<ul style="list-style-type: none">Diesel from nearby filling stations. Electricity from State Electricity Department.		
BIODIVERSITY			
Presence of any endangered species or red listed category	<ul style="list-style-type: none">None		
Loss of native species and genetic diversity	<ul style="list-style-type: none">Not envisaged, except small bushes and coconut & other plantation, no major vegetation cover/valuable flora is found within the mining lease area.		
Likely displacement of fauna	<ul style="list-style-type: none">None. This is an existing mine. No wild fauna is observed in the mine lease area.		
Any introduction of alien / invasive species	<ul style="list-style-type: none">Nil		
Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Kodikuthimala Forest	500 Meters East	
	Kunthi River	5.9 KM South	
	Kadalundipuzha	9.3 KM North	
	Silent Valley National Park	13.5 KM North East	
Sufficiency of parking spaces/ traffic management	<ul style="list-style-type: none">About 12 trips per day of 10 ton capacity trucks will be required for transport of building stone. The transport trucks will be parked within the mining area. Existing roads are sufficient to cater the stone transport activities.		
SOCIAL ASPECTS			
Proximity to nearest habitation	Nearest House at 100 m S		
CSR components suggested			
Sr. No	Sector	Approx. Amount proposed (Rs. in Lakh /annum)	Remarks
1.	Education	300,000/-	In addition to this further additional activities should be taken up in future in consultation with the local people and Grama Panchayath.
2.	Health	200,000/-	
3.	Community Development	50,000/-	
Total		550,000/- (Recurring: 500,000/- & Non-recurring:50,000/-)	

GENERAL	
ADDITIONAL CLARIFICATIONS	
Details of Authorised Signatory	Mr. Muhammed Haneefa Jailabdeen S/o, Mohamed Haneefa, (Owner of M/s VMR Granite Quarry), (V.M.R) Jamsenamanzil Pothanangadi Post, Vilgoaria, Malappuram District. Kerala – 679321. Mobile No. : 9947157425
Details of NABET approved EIA consultant organization	Anacon Laboratories Pvt. Ltd., Nagpur QCI-NABET Accredited EIA Consultant letter No. NABET/EIA/1316/RA005 valid upto Nov. 12, 2016 Under Category 'B' for Sector No. (1) Mining of Minerals Including Opencast/ Underground Mining.
<p>3. The proposal was first considered by SEAC in its 46th meeting held on 29/30-09-2015. Further to the intimation of SEAC, the proponent along with the consultant attended the meeting and the consultant made a brief power-point presentation.</p> <p>This is an existing quarry but currently not working. Life of mine is 10 years. Kodithookimala is 5.3 Km from the proposed area. The proposed CSR is 0.80 lakh which is very meagre. The Committee decided to defer the item for field inspection and the production of more realistic social responsibility schemes on need based analysis.</p> <p>4. The Subcommittee of SEAC visited the site and the details of inspection are furnished below:-</p> <p><i>"The subcommittee SEAC consisting of Dr. Khaleel Chovva and Dr.Harikumar visited the quarry project on 13-12-2015 in survey Nos. 34/1-A at kariavattom village, Perinthalmanna Taluk, Malappuram district of m/s Pathyppara granite quarry. The proponent Mr. N Mohamad Ali present at the site.</i></p> <p><i>It is an existing stone quarry. No crusher unit in the mine lease area. Open cast semi mechanised method is practised. Benching is just started but not regular. The drainage from the quarry is collected in a pit. Vegetation is seen around the quarry which is having status of least concern. 1.893 ha area is proposed for quarrying. No houses or settlements are noticed in the nearby area.</i></p> <p><i>Conditions to be added:</i></p> <ol style="list-style-type: none"> <i>1. Benching method should be strictly practiced</i> <i>2. Quarrying should be strictly limited to proposed land only</i> <i>3. Proper fencing and sign boards must be placed all around</i> <i>4. The approach road is properly maintained. Entry of large vehicles may be restricted</i> <i>5. Retaining wall should be maintained at the lower slop to avoid leaching</i> <p><i>Other general condition should be applied".</i></p> <p>5. On receipt of the inspection report and more realistic social responsibility schemes, the proposal was again considered by SEAC in its 54th meeting held on 6-7/4/2016. The Committee appraised the proposal based on Form I, Pre-Feasibility Report, Mining Plan & Field Inspection Report. The Committee decided to recommend issuance of EC with the general conditions along with following specific conditions.</p> <ol style="list-style-type: none"> 1. Benching method should be strictly practiced 2. Quarrying should be strictly limited to proposed land only 	

3. Proper fencing and sign boards must be placed all around
4. The approach road is properly maintained. Entry of large vehicles may be restricted.
5. Retaining wall should be maintained at the lower slope to avoid leaching.
6. The proposal was considered by SEIAA in its 53rd meeting held on 24-05-2016.

Authority found that the CSR undertakings are insufficient. It was decided to grant E.C after obtaining proper CSR undertakings from the proponent.

7. On submission of the revised CSR proposal, the application was again considered by SEIAA in its 55th meeting held on 16-07-2016. Authority examined the revised CSR undertaking and accepted the recommendations of SEAC and decided to grant E.C accordingly.

8. Environmental Clearance under the EIA notification 2006 is therefore granted to the quarry project of M/s VMR Granite Quarry in 2.90 ha comprised in Sy. No. 215/1A at Thazhekod Village, Perinthalmanna Taluk, Malappuram, Kerala subject to the specific conditions in para 5 above and general conditions for mining projects. The grant of E.C is also subject to production of non-cluster certificate, affidavit, general conditions stipulated for mining projects and the mitigation measures undertaken in the EMP in the PFR. However if any genuine complaints about the quarry is received, E. C issued shall be reviewed.

9. Validity shall be five years 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. Environmental Clearance is therefore granted to the quarry project of Sri. Mohammed Haneefa Jailabdeen, Proprietor, M/s. VMR Granite Quarry, (V.M.R) Jamsenamanzil, Puthanangadi Post, Vailangara, Malappuram -679321, Kerala, subject to the general conditions annexed hereto.

10. 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 revised CSR undertaking as relied on for grant of this clearance. The above undertakings and the conditions and undertakings in chapter 3 of Mining plan (Mining Area), Chapter 4 of Mining plan (Mining Activities), Chapter 5 of Mining Plan (Post Mine Plans), Chapter 6 of Mining Plan (Social Obligations), EMP of the pre-feasibility report, Chapter 11 of PFR (Disaster Management), and the entire 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.

Compliance of the conditions herein will be monitored by the Authority 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, Malappuram to take legal action under the Environment (Protection) Act 1986.

11. The given address for correspondence with the authorised signatory of the project is Sri. Mohammed Haneefa Jailabdeen, Proprietor, M/s. VMR Granite Quarry, (V.M.R) Jamsenamanzil, Puthanangadi Post, Vailangara, Malappuram District -679321, Kerala.

Sd/

V. S. Senthil, I.A.S
Member Secretary (SEIAA)

&

Additional Chief Secretary to Government
Environment & Forest Department
Government of Kerala.

To,

Sri. Mohammed Haneefa Jailabdeen,
Proprietor,
M/s. VMR Granite Quarry,
(V.M.R) Jamsenamanzil,
Puthanangadi Post,
Vailangara,
Malappuram - 679321.

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
2. Principal Secretary to Government, Environment Department.
3. The District Collector, Malappuram.
4. The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
5. The Secretary, Valakunnam Panchayath Office, Thazhekcode P. O., Vengra Via, Perinthalmanna Taluk, Malappuram
6. Chairman, SEIAA
7. Website
8. E.C File
9. Stock File
10. 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 proponent shall apply and get the approval of this Authority.
33. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
34. The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
35. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
36. A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
37. The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
39. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine

- working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of 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.
 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 this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
 54. The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.
 55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
 56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
 57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
 58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
 59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
 60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
 61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.



For Member Secretary, SEIAA Kerala

G. RAJENDRAN
Administrator
State Environment Impact Assessment Authority,
Pallimukku, Pettah
Thiruvananthapuram-695004
Phone: 0471-2742264

