



***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 -Application for environmental clearance for the proposed building stone quarry project, M/s Valorangal Quarry in Sy. Nos. 318/1/1, 318/1/2, 318/3 (pt), 318/4, 319/1 (pt), at Thiruvalli Village, Nilambur Taluk, Malappuram District, Kerala by Sri. Sivasankaran, P. - E.C- Granted- Orders issued

**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

No. **857/SEIAA/EC1/2981/2015**

*dated, Thiruvananthapuram 17-08-2016*

- Read:* -1.Application nil dated from Sri. Sivasankaran P, S/o Kunhiraman Nair, Pothalakkal House, Naduvath P.O., Wandoor (via), Malappuram district Kerala State -679328.
2. Minutes of the 52<sup>nd</sup> meeting of SEAC held on 8/9-02-2016.
  3. Minutes of the 51<sup>st</sup> meeting of SEIAA held on 29/03/2016.
  4. Minutes of the 54<sup>th</sup> meeting of SEIAA held on 21/ 06/2016.

**ENVIRONMENTAL CLEARANCE NO. 118/2016**

Sri. Sivasankaran P, S/o Kunhiraman Nair, Pothalakkal House, Naduvath P.O Wandoor (via) Malappuram, Kerala -679328., vide his application received on 29-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 318/1/1, 318/1/2, 318/3 (pt), 318/4, 319/1 (pt), at Thiruvalli Village, Nilambur Taluk, Malappuram District, for an area of 2.9103 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 project are as follows:

<b>Basic Details</b>	
<i>Name of the Project</i>	<i>Building Stone Quarry ,M/s Valoringal Quarry</i>
<i>Survey Numbers</i>	<i>Survey Nos. No.318/1/1 (pt), 318/1/2, 318/3 (pt), 318/4, 319/1(pt)</i>
<i>Village</i>	<i>Thiruvalli</i>
<i>Tehsil</i>	<i>Nilambur</i>
<i>District</i>	<i>Malappuram</i>
<i>Extent of land in hectors</i>	<i>2.9103 Ha</i>
<i>Is the property forest land/Govt. land/ own land</i>	<i>Own land</i>
<i>Extent of area (in hectares)</i>	<i>2.9103 Ha</i>
<i>Minimum and maximum height of excavation (MSL)</i>	<i>Minimum height of excavation-20m MSL, maximum height of excavation-85m MSL</i>
<i>Life of mine proposed</i>	<i>10years</i>
<i>Distance of mining area from nearest human settlement</i>	<i>228 m. towards North West</i>
<i>Ultimate depth of mining (in MSL)</i>	<i>20 M MSL</i>
<i>Cluster condition (if any)</i>	<i>Not applicable</i>
<i>Proposed production capacity</i>	<i>60,000 tonnes per year</i>
<i>Expected life of mine</i>	<i>10Years</i>
<i>Expected cost of the project</i>	<i>1.5 crore</i>
<i>Interlinked project (if any)</i>	<i>No</i>
<i>Whether CRZ is applicable</i>	<i>Not Applicable</i>
<i>Status of litigation/complaint/cases</i>	<i>Nil as declared</i>
<i>Permanent or temporary change on land use, land cover or topography</i>	<i>The mining activity will have localized impact and create physical change in the existing environment due to the change in the land use. At the end of life of mine, the excavated pit will be 2.2194 Ha, in which 1.9283 Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation and the remaining part 0.2910 Ha will be used as a water pond.</i>
<i>Topography of land and elevation</i>	<i>The topography of the lease area is hilly. The highest elevation of the lease area is 85 m MSL and lowest is 35 m MSL</i>
<i>Vegetation</i>	<i>Part of the proposed land is already under mining and the remaining land is sparsely vegetated having topsoil with average thickness of 1 m</i>
<i>Nearest water body</i>	<i>River – Chaliyar - 8 Km- NW (Aerial distance)</i>
<i>Change in water bodies due to mining activities</i>	<i>No, Natural drainage will remain unaffected</i>

Proneness to natural hazards		No, quarry area is not susceptible to natural hazard as there is no history of such incidents
<b>Environmental parameters considered</b>		
<b>WATER</b>		
Water (expected use and sources in KLD)	Total water requirement for the proposed project has been estimated to be around 7.2 KLD. About 1.2 KLD is required for domestic consumption, 3.0 KLD is required for dust suppression and 3.0 KLD is required for green belt development. The required water will be met from open well & water pond within the project area.	
Sources of generation and facilities for liquid waste treatment	The domestic effluent to the tune of 0.8 KLD would be generated from the mine office will be treated through septic tank & soak pit.	
Water quality meeting requirements	Garland drains are provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining the adjoining surface water bodies / water courses. To arrest the silt, if any, carried by monsoon run-off will be contained by the settling pond from where only clear water will be let out to the natural water courses.	
Water Regime	The main source of water to the Thiruvalli Village is from groundwater (open wells and bore wells) and rain water sources. The depth to the groundwater level in this area ranges from about 7 to 10 m during pre-monsoon and from 5 to 7 m during post-monsoon	
<b>LAND</b>		
Access road to the site – Width & Condition	The public road leading to the quarry has a width of about 5m	
Proximity to forest lands	No forest land within 500m radius of the quarry site.	
Storage of explosives /hazardous substances	Explosives will be procured, stored, transported, handled and used in accordance with Indian Explosive Act 1884 & Rules thereof, MSIHC Rules 1989, Mines Act, 1952 and regulations there under.	
Hazardous waste management	Used oil from maintenance of DG sets, HEMM and tippers will be handled as per Hazardous Waste (Management Handling & Trans boundary Movement) Rules, 2008.	
Facility for solid waste management	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.	
Top soil, overburden etc.	Top soil-20,859 MT Overburden- 23,000 MT	
Env't Mgmt plan/ Eco restoration plan (brief details)	<b>MANAGEMENT PLAN:</b>	
	<b>Air pollution</b>	Dust released due to quarry activity (Heavy Earth Movers, Loaders, Rock breaker, etc) will be suppressed periodically by sprinkling of water. Water spraying before loading or any

		other handling operations for solid containing fines - to minimize air pollution. Stockpiles of aggregate shall be kept covered
	<b>Water pollution</b>	Garland drains are provided at the quarry top to regulate monsoon water and direct the same to the settling ponds / quarry pit to contain the quarry wash off and to avoid the same joining the adjoining surface water bodies / water courses.
	<b>Noise</b>	Plantation will be carried out all along the lease periphery, which acts as acoustic barrier for noise transmission.
	<b>Solid Waste Management</b>	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation work during mine closure plan.
	<b>Eco restoration</b>	For eco restoration about 1.9283 Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation
<b>NOISE</b>		
Sources of noise pollution control measures(In detail)	<ul style="list-style-type: none"><li>• Effective maintenance of machineries and vehicles at regular and frequent intervals.</li><li>• Plantation of green belt around the haul roads and lease periphery.</li><li>• Noise enclosure will be provided at source</li><li>• PPE's will be provided.</li></ul>	
Noise level monitoring	<ul style="list-style-type: none"><li>• Noise level should be monitored as per Environmental Management Plan and maintained the noise level with in prescribed limit, as per rule.</li></ul>	
<b>AIR</b>		
Likely emissions affecting environment	Fugitive Dust emission is the main pollutant, which will be generated from quarry activities and handling operations., mitigative measures proposed in the EMP shall be fully implemented	
By deposition of pollutants emitted to air into the land or into water	Dust will be generated, which will be suppressed by regular water sprinkling on haul roads, quarry benches and surrounding area.	
Air quality monitoring	Ambient Air Quality should be monitored as per Environmental Management Plan and the status should be maintained as per rules.	
<b>ENERGY</b>		
Energy requirement (In detail)	Energy requirement will be met from KSEB.	
<b>BIODIVERSITY</b>		

Presence of any endangered species or red listed category (In detail)	There are no endangered or rare species in the area.				
Loss of native species and genetic diversity (In detail)	As per the ecological survey carried out , there are only few native species of shrubs, trees etc. these shall be planted during restoration and green belt area development.				
Eco restoration programmes (In detail)	For eco restoration about 1.9283 Ha will be reclaimed with stacked dumping and overburden and rehabilitated by plantation				
SOCIAL ASPECTS					
Proximity to nearest densely populated or build-up area (In detail)	Valoringal -250 m-NW				
CSR related to the project (In detail)	Sl. No	CSR Activities	Beneficiary	Year	Amount
	1	Financial support to Eriyad LP School for construction of ladies toilet.	Eriyad LP School	2017	1,00,000.00
	2	Renovation of Road work of Smashanam road, Valoringal.	Valoringal.	Yearly	1,00,000.00
	3	Donation to Wandoor Orphanage for improving infrastructure	Wandoor Orphanage	Yearly	50,000.00
	4	Instalation of rain water harvestin system for 3 houses near to quarry	Valoringal	Yearly	1,00,000.00
	Total				3,50,000.00
	GENERAL				
Details of Authorised Signatory & Address for correspondence)		Sri. Sivasankaran, P S/o Kunhiraman Nair, Pothalakkal House, Naduvath P.O. Wandoor (via) Malappuram -679 328.			
Details of NABET approved EIA consultant Organisation		M/s Overseas Min-Tech Consultants. 501, 5th floor, Apex Tower, Tonk Road, Jaipur (Raj.), Pin-302015, Rajasthan, India Email: info@overseasmintech.com Mo: 08233335564			

3. The proposal was considered by SEAC in its 52<sup>nd</sup> meeting held on 8/9-02-2016. The Committee appraised the proposal based on the Mining Plan, Prefeasibility Report, field inspection report and all other documents submitted along with the Form I application and recommended for issuance of Environmental Clearance with the following specific conditions, in addition to the general conditions stipulated for mining projects.

1. To the extent possible local Biodiversity Management Committee shall be involved in the environmental management/restoration activities.
2. Reclamation and eco-restoration should be done by planting native species.

4. The proposal was placed in the 51<sup>st</sup> meeting of SEIAA held on 29-03-2016. As the recommendation is without site inspection, Authority decided to depute the Chairman and Member for site inspection and to ascertain whether it is a working or new quarry.

5. Accordingly Chairman and Member inspected the building stone quarry project in survey Nos. 318/1/1, 318/12, 318/3 (Pt) 318/4, 319/1(pt) at Thiruvalli Village, Nilambur Taluk, Malappuram District owned by Sri. Sivasankaran, P on 30/05/2016. The site inspection report is as follows:

*"It was understood that the quarry was in operation since last 8 years with a short term quarrying permit issued by Mining & Geology Department. The extent of land in hectores is 2.9103 and the property is owned by the proponent. The topography of the lease area is hilly. The highest elevation of the lease area is 85m MSL and the lowest is 35m MSL. Ultimate depth of mining (in MSL) is 20m above MSL. There are four quarries working nearby but cluster condition is not applicable and the proposed production capacity is 60,000 tons per year. Chaliyar river is 8 km NW. The material exposed in the quarry is Charnokite, which is hard in nature and as per the seismic zone map, the project site falls under zone III. There is no forest land within the 10 km radius of the lease area. There are no habitations within 100 meters*

*On an overall evaluation, the inspection team is of the opinion that mining is done unscientifically with no bench formation. There is no fencing around the lease area and there are no sign boards. The flanks are steeply sloping to sub vertical and quarrying was not done with benches. Although the project proponent has agreed to remove a total quarterly of 20, 859 tons of top soil and 2300 tons of mine waste during the operation, and the same will be stocked at predetermined place and subsequently used for plantation and back filling of mine pits, it was not done, with the result that several meters of thick overburden*

*is seen interspersed with cut out rocks throughout the quarry. The entire storm water from the quarry pit is let out without clarification to nearby areas. RWH, structures are not seen. Local biodiversity is considerably disturbed due to the mining activity. CSR component is not adequate.*

*However in the light of the recommendation of SEAC, EC may be issued with the following specific conditions, in addition to the conditions suggestion by SEAC.*

1. *Fencing should be done with barbed wires all around the lease area. The worked out area with very steep cliff like feature may be demarcated as danger zones with sign board.*

2. *Future quarrying must be done with benches in a planned manner.*
3. *Strom water drainage from the quarry must be let out only after clarifications.*
4. *Quarry pits should be filled with over burden and quarry waste and the remaining deep pits seen must be maintained as a RWH structure.*
5. *CSR needs redrafting with inclusion of felt needs of locality. It should ensure employment of the local people.*
6. *Reclamation and eco-restoration should be done by planting nature species.*
7. *An affidavit should be submitted by the project proponent to ensure that the specific and general conditions will be implemented immediately and effective monitoring should be done within three months to see that the project proponent has strictly adhered to these conditions".*

6. 54<sup>th</sup> meeting of SEIAA held on 21/ 06/2016 considered the report of site inspection and accepted the recommendations of SEAC and the additional conditions suggested by the SEIAA team and to issue E.C accordingly.

7. Environmental Clearance under the EIA notification 2006 is therefore granted to the quarry project of Sri. Sivasankaran, P., S/o Kunhiraman Nair, Owner, M/s. Valoringal Quarry, Pothalakkal House, Naduvath P. O., Wandoor (via), Malappuram district, Kerala State - 679328, in 2.9103 ha comprised in Sy. Nos. 318/1/1, 318/1/2, 318/3 (pt), 318/4, 319/1 (pt), at Thiruvalli Village, Nilambur Taluk, Malappuram District, subject to the specific conditions in para 3 and 5 above and the 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.

8. 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. Sivasankaran, P., S/o Kunhiraman Nair, Owner, M/s. Valoringal Quarry, Pothalakkal House, Naduvath P. O., Wandoor (via), Malappuram district, Kerala State -679328, subject to the above specific condition and the general conditions annexed hereto.

9. 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 Pre-Feasibility report (chapter 4) mining features, chapter 4 of mining plan on mining, chapter 5 (blasting), chapter 6 (drainage), chapter 7 (stacking of mineral rejects and disposal of waste) and Environment Management Plan in 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 affidavits will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated herein.

10. 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. Sivasankaran, P., S/o Kunhiraman Nair, Pothalakkal House, Naduvath P. O., Wandoor (via), Malappuram district, Kerala State -679328.

Sd/  
V.S. SENTHIL, I.A.S.,  
Member Secretary, SEIAA  
&  
Addl. Chief Secretary  
Environment & Forests Department  
Government of Kerala.

To,

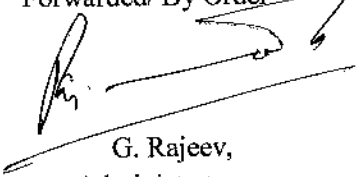
Sri. Sivasankaran, P.,  
S/o Kunhiraman Nair,  
Pothalakkal House,  
Naduvath P. O.,  
Wandoor (via),  
Malappuram- 679328.

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, II Block, Koramangala, Bangalore-560034
2. The Principal Secretary to Government, Environment Department, Government of Kerala
3. The District Collector, Malappuram
4. Director, Dept. of Environment and Climate Change, Govt. of Kerala, Tvm-24
5. Director, Mining & Geology, Thiruvananthapuram- 4.
6. The Chairman, Thiruvalli Grama Panchayat, Thiruvalli, Malappura- 676123.
7. Chairman, SEIAA, Kerala
8. Website
9. S/f,
10. O/c



Forwarded/ By Order

  
G. Rajeev,  
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 100 m 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](http://www.seiaakerala.org). The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
36. A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
37. The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
39. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul Road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
49. The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or 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

R. RAJENDRAN  
Registrar  
State Environment Impact Assessment Authority  
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