**Validity expires on 23.01.2022**

सत्यमेव जयते

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

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

Sub: SEIAA - Environmental clearance for the quarry project in Sy. Nos. 16, 37/4, 39/1A at Kolavallur Village, Thalassery Taluk, Kannur District, Kerala by Mr.Keeran Kumaran - EC Granted-Orders issued

## State Environment Impact Assessment Authority, Kerala

**No. 938/SEIAA/EC4/4096/2015 dated, Thiruvananthapuram 24.01.2017**

Ref:
1. Application dated 06.10.2015 from Mr.Keeran Kumaran, Reenalayam, East Valliayi, Muthiyanga P.O., Pathayakkunnu, Kannur, Kerala State -670691
2. Minutes of the 57th meeting of SEAC held on 16/17-6-2016
3. Minutes of the 60th meeting of SEAC held on 28/29-7-2016.
4. Minutes of the 61st Meeting of SEAC held on 11-08-2016.
5. Minutes of the 60th meeting of SEIAA held on 27-10-2016

**ENVIRONMENTAL CLEARANCE NO.13/ 2017**

Mr.Keeran Kumaran, Reenalayam, East Valliayi, Muthiyanga P.O., Pathayakkunnu, Kannur, Kerala State -670691, vide his application received on 06-10-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 16, 37/4, 39/1A at Kolavallur Village, Thalassery Taluk, Kannur District, Kerala for an area of 2.9748 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) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. The proposed project site falls Latitude (N) 11°47'27.21"N to11°47'36.07"N Longitude (E) 75°38'06.32"E to75°38'12.04"E. Other details of the project are as follows:

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| File No. | **938/SEIAA/EC4/4096/2015** |
| Name of project | **Quarry project of Mr.Keeran Kumaran** |
| *Brief description of the project* | Quarry project with an area of 2.9748 hectares & Production capacity of 75,000 MTA |

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| *Category/Subcategory & Schedule* | | Category B/B2 & Schedule 1 (a) |
| *Location Sy no/ district, Taluk/ village etc.* | | Survey No. 16, 37/4, 39/1A of Kolavallor Village, Thalassery Taluk, Kannur District, Kerala |
| *GPS co-ordinates* | | Latitude (N): 11°47'27.21"N to 11°47'36.07"N<br>Longitude (E): 75°38'06.32"E to 75°38'12.04"E |
| *for Mining projects* | *Extent of area (in hectares)* | 2.9748 hectares |
| | *Minimum and maximum height of excavation (MSL)* | 90 m. MSL and 120 m MSL. |
| | *Life of mine proposed* | About 10 years |
| | *Ultimate depth of mining (in MSL)* | 90m MSL. |
| | *Distance from the adjacent quarry* | There is no quarry in operation within 500m from the proposed quarry. |
| | *Capacity of production* | 75,000 MTA |
| | *Details of project cost* | Rs. 2.0 Crores |
| | *Financial statement including funding source and details of insurance* | Insurance : Insurance to the quarry workers would be provided through insurance company.<br>Source of funding : Own source & Bank Loan |
| | *Activity schedule of the project* | |
| *CRZ recommendations* | | Not Applicable |
| *Forest clearances* | | |
| *Does it attract violation proceedings* | | Not Applicable |
| *EnvtMgmt plan/ Eco restoration plan (brief details)* | | **MANAGEMENT PLAN:** |
| | **Air pollution** | Mining activities will generate certain quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations.<br>➢ Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust.<br>➢ To avoid the dust generation from the drilling operations, wet drilling method will be adopted.<br>➢ Drill machines will be equipped with dust collectors.<br>➢ Use of appropriate explosives for blasting and avoiding overcharging of blast holes.<br>➢ Controlled blasting techniques will be adopted.<br>➢ Watering of haul road and other road at regular intervals.<br>➢ Provision of dust filters/ mask to workers working at highly dust prone and affected areas. |

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| | | ➢ Provision of green belt all along the periphery of the lease area.<br>➢ Periodical monitoring of ambient air quality in and around the lease area.<br>**The extracted mineral will be transported from the quarry to the end user by adopting following measures so as to minimize dust emissions.**<br>➢ In case of long transportation the trucks after loading will be covered with tarpaulin sheets.<br>➢ Speed of the vehicles will be maintained within the prescribed limits.<br>Trucks will not be over loaded and will be maintained to the body level. |
| | **Water pollution** | Provisions of a storm water collection pond of total capacity about 5,000 KL. The water requirement for sprinkling on sources of dust emission, on roads, landscaping etc. can be met from the stored rainwater in the pond. |
| | **Noise** | The major noise generating source from the proposed activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels:-<br>➢ Proper maintenance of machinery, equipments and improvement on design of machines.<br>➢ Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.<br>➢ Creation of wide green belt of dense foliage between mine areas and residential colonies.<br>➢ related health problems<br>➢ Proper training to personnel to create awareness about adverse noise level effects.<br>Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions. |
| | **Solid Waste Management** | **Topsoil Management**<br>A total quantity of 17,644 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.<br>**Overburden Management**<br>About 7,472 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul |

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| | | roads. At the end use, OB can be reutilized as soil base for plantation. |
| | **Eco restoration** | The year wise programme of eco-restoration for the life of mine, about 3,000 trees will be planted in an area of 2.9728 ha. |

| ***ABOUT THE PROJECT*** | |
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| ***Environmental parameters considered*** | ***Description*** |
| **WATER** | |
| Water requirement &sources | The total water requirement is about 5 KLD in which 1 KLD is for domestic which would be sourced from open well, 2 KLD for dust suppression system in mine and 2 KLD for plantation purposes and will be sourced from storm water pond. |
| RWH units proposed | Yes, Rain water collection pond. |
| Facilities for liquid waste treatment | Not Applicable |
| Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers? | No impoundment, damming, culverting, realignment for other changes to the hydrology of surface water courses. |
| Water quality meeting requirements | Water quality meeting requirements after the treatment of water (filtration, disinfection & sedimentation) |
| Does it have provisions for use of recycled water | No |
| **LAND** | |
| Proximity to forest lands | Aralam Forest, 12 km, NE |
| Access road to the site – Width & Condition | 7m tarred road, N |
| Storage of explosives /hazardous substances | Yes, Explosives will be stored as per Explosive Act / Rules. |
| Facility for solid waste mgmt | The municipal solid waste will be suitable disposed. |
| Topographic features/ slope | Part of the proposed land is exposed rock and the remaining land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. Slope towards NW |
| Proneness of the area for landslides | No |
| Significant land disturbance resulting in erosion, subsidence & instability | No |
| Top soil, overburden etc. | Top Soil =17,644 cu. m.<br>Over Burden =7,472 cu. m |
| **AIR** | |
| Air quality meeting requirements | Yes |
| Noise level meeting requirements | Yes |
| Likely emissions affecting environment | Diesel engine emissions & emissions from movement of vehicles like dumpers, compressor, trucks, tankers etc. will also generate. |
| **ENERGY** | |
| Energy requirement | The total power requirement will be 75 kW for compressors which will be operated by Diesel Engine. |

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| Energy sources | From diesel engine |
| Extent of usage of alternative energy resources | No |
| **BIODIVERSITY** | |
| Presence of any endangered species or red listed category | No |
| Loss of native species and genetic diversity | Yes, For the quarrying activity all of native tree species, shrubs, herbs, climbers etc. existing at project site will be cleared. |
| Likely displacement of fauna | No. |
| Any introduction of alien / invasive species | No |
| **SOCIAL ASPECTS** | |
| Proximity to nearest habitation | 137 m. SW side |
| CSR related to the project/ allocation/ time frame (details mandatory) | As a part of Corporate Social Responsibility, it is proposed to spend 9 lakhs (recurring)/year and 8 lakhs (non-recurring) expenditures towards community welfare activities during the next 5 years and to implement the schemes in consultation with the local panchayath. |
| **GENERAL** | |
| Does it propose environment management plan | Yes |
| Does it have eco restoration programmes | Yes |
| Sufficiency of parking spaces/ traffic management | Yes |
| Litigation/court cases, if any, against the project (provide details) | No |
| Right & nature of ownership of land | Private Land |
| Is the property forest land/govt. land/own land | Own Land |
| Details of Authorised Signatory | **Mr. K. KUMARAN**<br>Reenalayam, East Valliayi, Muthiyanga P.O.,<br>Pathayakkunnu, Kannur,<br>Kerala-670691. |
| Details of NABET approved EIA consultant organisation | **M/s Environmental Engineers & Consultants Pvt. Ltd.**<br>( Sr. No. 58 as per MoEF&CC list of Accredited Consultant Organization)<br>*Head Office :*-A1-198, JanakPuri, New Delhi.<br>*Branch Office:-*<br>C-306, Kanchanjunga Apartments,<br>Palarivattom P.O., Kochi, Kerala. |

2. The proposal was considered in the 57th meeting of SEAC held on 16/17-6-2016. The committee deferred the item for site inspection by a team consisting of Sri. John Mathai, Sri. Khaleel Chovva and Dr. Hari Kumar. Field visit to the second quarry project site of Mr.Keeran Kumaran in Kolavallur Village, Thalasserry Taluk, Kannur District, Kerala was carried out on 17.07.2016 by the sub-committee of SEAC, Kerala, comprising

Dr. P.S. Harikumar, Dr. K M Khaleel and Sri. John Mathai. The Proponent along with his team was present at the site at the time of site visit.

*"The project is located at about 2.5 km SSE of Cheruvancherry. The approach road, common to another quarry under appraisal, is presently through a katcha road that needs to be widened and surfaced. The land proposed to be quarried is owned by others but taken on lease by the proponent. The area includes part of an existing quarry operated with permit in the name of Mohanagiri Granites. The worked out part of the quarry presents steep cliff like faces. Benches are yet to be formed. Boundary is partly fenced and corner pillars erected with GPS coordinated painted on them. The proposed lease area includes the western slopes of a rubber plantation. Rock exposures are sparsely seen. The storm water from the entire area presently flows as sheet flow to the valley in the west. Crusher unit is not planned. Based on an overall evaluation of the site, following aspects may be considered before it is recommended for EC*

- *The entire quarry area should be fenced all around.*
- *The approach road must be well laid and properly surfaced.*
- *Working to be in the form of benches. Steep cliff like sections to be left as danger zones with proper sign boards.*
- *Top soil and Over burden should be stored in a designated place on the lower slope away from the working area.*
- *Catch water drain or similar mechanism to be provided along the lowest level of the quarry to collect and dispose storm water safely. It should be clarified before it is let out. The existing deep pit on the southern side can be maintained as RWH structure.*
- *Assurance that green belt will be provided around the periphery.*
- *Statutory facilities like drinking water, canteen, rest room etc. should be provided to the workers in the quarry.*
- *The quarry should have sign boards displayed at appropriate places.*
- *The CSR activity needs revision addressing the needs of the locality as suggested".*

3. The proposal along with the field visit report was placed in the 60th meeting of SEAC held on 28/29-7-2016. The item was deferred for considering in the next meeting.

4. The proposal was again considered in the 61st Meeting of SEAC held on 11th August 2016. The Committee after examining the mining plan, prefeasibility report, Field Inspection Report and the other documents and details provided by the proponent decided to recommend for issuance of EC subject to the general conditions in addition to the following specific conditions that:

- The entire quarry area should be fenced all around.
- The approach road must be well laid and properly surfaced.
- Working to be in the form of benches. Steep cliff like sections to be left as danger zones with proper sign boards.
- Top soil and Over burden should be stored in a designated place on the lower slope

away from the working area.

- Catch water drain or similar mechanism to be provided along the lowest level of the quarry to collect and dispose storm water safely. It should be clarified before it is let out. The existing deep pit on the southern side can be maintained as RWH structure.
- Assurance that green belt will be provided around the periphery.
- Statutory facilities like drinking water, canteen, rest room etc. should be provided to the workers in the quarry.
- The quarry should have sign boards displayed at appropriate places.
- The C.S.R activity needs revision addressing the needs of the locality as suggested.

The Proponent agreed to spend 9 lakhs (recurring)/year and 8 lakhs (non-recurring) expenditures towards community welfare activities during the next 5 years and to implement the schemes in consultation with the local panchayath.

5. The proposal was considered by the Authority in its 60th meeting held on 27.10.2016. The Authority decided to accept the recommendation of SEAC and issue Environmental Clearance on condition that mining may be started only after the specific pre mining conditions 1,2,4,7 and 8 are fulfilled. An affidavit to this effect must be submitted.

6. The Proponent submitted the affidavits stating that the premining conditions No.1, 2, 4, 7 & 8 have been fulfilled before starting / continuing with mining. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed Building Stone Quarry project of Mr.Keeran Kumaran, Reenalayam, East Valliayi, Muthiyanga P.O., Pathayakkunnu, Kannur, Kerala - 670691 in Survey No. 16, 37/4, 39/1A at Kolavallur Village, Thalassery Taluk, Kannur District, Kerala for an area of 2.9748 hectares, subject to the specific conditions as recommended by SEAC in para 4 above, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining, appended hereto will be applicable and have to be strictly adhered to.

7. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in 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.

8. 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.

9. 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, Pathanamthitta to take legal action under the Environment (Protection) Act 1986.

iii. The given address for correspondence with the authorised signatory of the project is Mr.Keeran Kumaran, Reenalayam, East Valliayi, Muthiyanga P.O., Pathayakkunnu, Kannur, Kerala - 670691.

Sd/-
**V.S.SENTHIL.I.A.S,**
**Member Secretary (SEIAA)**

To,

Mr.Keeran Kumaran,
Reenalayam, East Valliayi,
Muthiyanga P.O., Pathayakkunnu,
Kannur, Kerala - 670691

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. Director, Mining & Geology, Thiruvananthapuram -4.
4. District Collector, Kannur
5. Secretary, Kunnothparamba Panchayat, Kunnothparamba, Cheruparamba P.O, Thalaserry, Kannur, Kerala – 670 693
6. Chairman, SEIAA.
7. Website.
8. S/f
9. O/c

Forwarded/By Order

Rajendran

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. 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 simultancously 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 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 not withstanding 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.


Rajendran
Administrator
For Member Secretary, SEIAA Kerala