



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 Masonry Stone Mine (quarry) Project in Sy.no.186/1A2, 186/1A/4/5 at Neriya Mangalam Village, Kavalangad Panchayat, Kothamangalam Taluk, Ernakulam district, Kerala by Shri. K.M. Abdul Rasheed – Managing Director, Ever One Properties India (pvt) Ltd for the quarry project - Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 838/SEIAA/EC3/2716/2015

dated, Thiruvananthapuram 7-10-16

- Read:-
1. Application dated 14/07/2015 submitted by Sri. K.M. Abdul Rasheed (Managing Director) M/s Ever-One Properties India Pvt. Ltd. Pareekanni P.O, Uppukuzhi, Kothamangalam, Ernakulam,
 2. Minutes of the 48th meeting of SEAC held on 6/7-11-2015.
 3. Minutes of the 55th meeting of SEAC held on 10/11-05-2016.
 4. Minutes of the 54th meeting of SEIAA held on 21-07-2016.

Environmental Clearance No. 157/Q /2016.

Sri. K.M. Abdul Rasheed (Managing Director) M/s Ever-One Properties India Pvt. Ltd. Pareekanni P.O, Uppukuzhi, Kothamangalam, Ernakulam, Kerala vide his application received on 14/07/2015, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy.no.186/1A2, 186/1A/4/5 at Neriya Mangalam Village, Kavalangad Panchayat, Kothamangalam Taluk, Ernakulam district, Kerala in an area of 4.9286 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-11011/47/2011-1A.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. Other details of the project are as under:

Basic information

Name of project		Quarry project of M/s Ever-One Properties India Pvt. Ltd	
Brief description of the project		Quarry project with an area of 4.9286 ha. & Production capacity of 2,00,000 MTA	
Category/Subcategory & Schedule		Category B2 & Schedule 1 (a)	
Location Sy no/ district, Taluk/ village etc.		Survey Nos. 186/1A2, 186/1A/4/5, Neriymangalam Village, Kavalangad Panchayat, Kothamangalam Taluk, Ernakulam District, Kerala	
GPS co-ordinates		Latitude (N)	10°02' 09.10" to 10° 01' 47.80"
		Longitude (E)	76°43' 32.27" to 76°43' 23.92"
for Mining projects	Extent of area (in hectares)	4.9286 ha.	
	Minimum and maximum height of excavation (MSL)	44 m MSL and 89m MSL	
	Life of mine proposed	About 8.5 years	
	Ultimate depth of mining (in MSL)	39 m. MSL.	
	Distance from the adjacent quarry	There is no other quarry in operation within a circumference of 500m from the proposed quarry project.	
	Capacity of production	2,00,000 MTA	
	Details of project cost	About Rs. 3.72 Crores	
CRZ recommendations		Not Applicable	
Forest clearances		Not Applicable	
Does it attract violation proceedings		No	
EnvmtMgmt plan/ Eco restoration plan (brief details)		AIR POLLUTION	MANAGEMENT PLAN: <ul style="list-style-type: none"> Laying of haul road as per the standards, black topping of permanent haul road and service road to avoid or eliminate air – borne dust. To avoid the dust generation from the drilling operations, wet drilling method will be adopted. Drill machines will be equipped with dust collectors. Use of appropriate explosives for blasting and avoiding overcharging of blast holes. Controlled blasting techniques will be adopted. Watering of haul road and other road at regular intervals. Provision of dust filters/ mask to workers working at highly dust prone and affected areas. Provision of green belt all along the

		<p>periphery of the lease area.</p> <ul style="list-style-type: none"> • Periodical monitoring of ambient air quality in and around the lease area. <p>The extracted mineral will be transported from the quarry to the end user by adopting following measures so as to minimize dust emissions.</p> <ul style="list-style-type: none"> • In case of long transportation the trucks after loading will be covered with tarpaulin sheets. • Speed of the vehicles will be maintained within the prescribed limits. <p>Trucks will not be over loaded and will be maintained to the body level.</p>
	WATER POLLUTION	<p>Provisions of a storm water collection pond of total capacity about 8,000 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.</p>
	NOISE	<ul style="list-style-type: none"> • Proper maintenance of machinery, equipments and improvement on design of machines. • Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas. • Creation of wide green belt of dense foliage between mine areas and residential colonies. • Proper training to personnel to create awareness about adverse noise level effects. <p>Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions.</p>
	Solid waste Management	<p>Topsoil Management</p> <p>A total estimated quantity of 29,572 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. Precaution 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.</p> <p>Overburden Management</p> <p>About 9,857 cu. m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, OB can be reutilized as soil base for plantation</p>
	Eco restoration	<p>The year wise programme of eco-restoration for the life of mine, about 4,000 trees will be planted in an area of 43786 ha.</p>

ABOUT THE PROJECT	
Environmental parameters considered	Description
WATER	
Water requirement & sources	The total water requirement is about 15 KLD in which 1 KLD is for domestic which would be sourced from open well, 12 KLD for dust suppression system in mine & in Ancillary Unit and 2 KLD for plantation purposes and will be sourced from storm water pond
RWH units proposed	Yes, Rain Water Collection Pond will be constructed.
Facilities for liquid waste treatment	Not applicable
Impoundment, damming, culverting, realignment or other changes to the hydrology of water courses or aquifers?	The run-off from the lease area will be suitably collected through channels and will be stored in storm water pond for further utilization in Mine/ Crusher units. However, all measures will be taken to not to disturb the natural drainage system of the surrounding area
Water quality meeting requirements	Water quality of well / open well to meet domestic requirements as per rules after treatment of water (filtration, disinfection & sedimentation).
LAND	
Proximity to forest lands	None within the study area
Access road to the site – Width & Condition	6 m. wide tarred road, S side
Storage of explosives /hazardous substances	Explosives will be stored as per Explosive Act / Rules.
Facility for solid waste mgmt	The municipal solid waste will be disposed of as per rules.
Topographic features/ slope	Part of the proposed land is already under mining and there is no vegetation in that area. Some part of the proposed land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc.. As the proposed area is low height hillocks, the drainage of the lease area is towards south and north-west side.
Proneness of the area for landslides	No.
Significant land disturbance resulting in erosion, subsidence & instability	No.
Top soil, overburden etc.	
AIR	
Air quality meeting requirements	To meet quality requirements as per rules
Noise level meeting requirements	To meet quality requirements as per rules
Likely emissions affecting environment	Diesel engine emissions & emission from movement of vehicles like dumpers, compressors, trucks, tankers etc.
ENERGY	
Energy requirement	The total power requirement will be 75 kW for compressors which will be operated by Diesel Engine.
Energy sources	Diesel engine for compressors and KSEB supply available at site for domestic purposes.
BIODIVERSITY	
Presence of any endangered species or red listed category	No

Loss of native species and genetic diversity	For quarrying activity native tree species, shrubs, herbs, climbers etc. existing at project site will be cleared from mining area.																			
Likely displacement of fauna	No																			
Any introduction of alien / invasive species	No.																			
SOCIAL ASPECTS																				
Proximity to nearest habitation	143m, S side.																			
CSR related to the project/ allocation/ time frame (details mandatory)	<table><tr><th colspan="3">Proposed common CSR Budget</th></tr><tr><th>Sl. No.</th><th>Particulars</th><th>Amount Rs.</th></tr><tr><td>1</td><td>Infrastructure development</td><td>Recurring : 2,00,000 Non Recurring : 1,00,000</td></tr><tr><td>2</td><td>Health Care</td><td>Recurring : 2,40,000 Non Recurring : Nil</td></tr><tr><td>3</td><td>Promotion of Education</td><td>Recurring : 2,50,000 Non Recurring : 3,85,000</td></tr><tr><td>4</td><td>Development of sports and culture</td><td>Recurring : 50,000 Non Recurring : 4,00,000</td></tr></table>		Proposed common CSR Budget			Sl. No.	Particulars	Amount Rs.	1	Infrastructure development	Recurring : 2,00,000 Non Recurring : 1,00,000	2	Health Care	Recurring : 2,40,000 Non Recurring : Nil	3	Promotion of Education	Recurring : 2,50,000 Non Recurring : 3,85,000	4	Development of sports and culture	Recurring : 50,000 Non Recurring : 4,00,000
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GENERAL																				
Litigation / court cases, if any, against the project (provide details)	Nil as reported by proponent																			
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.M. Abdul Rasheed (Managing Director) M/s Ever-One Properties India Pvt. Ltd. Pareekanni P.O., Uppukuzhi, Kothamangalam, Ernakulam, Kerala-686693.																			

2. The proposal was considered in the 48th meeting of SEAC held on 06th and 07th November, 2015 after the submission of mining plan as per KMMC Rule 2015. The Committee examined the proposal and noticed that the area proposed is almost 5 Ha, Hence it was decided to defer the item for field visit.

The field visit to the Quarry project site was carried out on 23.02.2016 by the sub-committee of SEAC, Kerala, comprising Dr. Jayson E.A, Dr. K.G. Padmakumar and Er. Sreekumaran Nair. The Proponent and other officials of the quarry were also present at the site. The details of the field inspection report are given below.

The proposed quarry area falling in own land lies in two blocks with moderate slopes to the South and North. The rock type is charnockite and its variants with dipping foliation in folded attitude. The crestal portions are covered with humus rich top soil and limited overburden. Dwelling units are

not seen in the immediate vicinity of 100 m. No cases are pending against this quarry as per the enquiry made by us. Quarry and crusher is situated in the same campus. Main production during the time of visit was sand. The proponent of the quarry is utilizing the land premises for growing poultry and cattle farming and fish culture in the built up ponds. For attempting such novel ideas, he has been awarded by an NGO. The quarry, has a the rare distinction of integrating diverse farming components in lands not used for quarrying, a biodiversity based farming system wherein the owner has tried to integrate as many farming enterprises as possible including tree crops, a model system for others to follow. This has given a unique ambience and commendable quality environment to the workers.

However the owner was advised to construct a settling pond in the southern end of the quarry to ensure removal of suspended matter from the effluent water and ensure that the water left out only after sedimentation with only desirable level of particulate matter. As the effluent water may find its way to the Kaliyar River flowing on the southern side, this shall be insisted. Similarly a settling pond should be formed for the mines located in the northern area also Over Burden is stocked at separate locality. Presently the quarry is in two portions. The proponent has started forming 5 m benches in the mine. The crusher was not in operation on the day of visit and large stocks of sand were seen to be lifted out.

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

1. The quarry must be developed in a planned way following the top to bottom approach.
2. Over burden is to be stored in the designated places and provided with protective support walls.
3. The drainage from the proposed quarry must be channelised in such a way that the Kaliyar River is not influenced in any adverse manner. It is necessary to provide catch water drains at the lower levels of the lease area to safely dispose the storm water.
4. Proper desiltation traps and clarification mechanism (sedimentation pond) must be provided.
5. The approach road to the quarry from the main road must be maintained in good motorable condition by the proponent.
6. The blasting time must be displayed and strictly adhered to. Considering the proximity to the road it is better to restrict blasting to two times a day when the traffic in the road is least. The PPV values must be less than 10 mm/sec. Steps to be taken to limit fly rock to the quarry area.
7. Rain water harvesting as proposed in a 5,500 KL pond should be carried out.
8. Nine endemic plant species identified should be conserved as per the proposed conservation plan.

9. *Vegetation is seen all around the quarry but must be maintained till the entire life of quarry.*

Other items from general condition and CSR may be added. '

3. The 55th SEAC held on 10th, 11th and 20th of May appraised the proposal based on Form I, Pre-Feasibility Report, Mining Plan, and inspection report. The Committee decided to recommend for issuance of EC with the general conditions subject to the following specific conditions.

1. The quarry must be developed in a planned way following the top to bottom approach.
2. Over burden is to be stored in the designated places and provided with protective support walls.
3. The drainage from the proposed quarry must be channelised in such a way that the Kaliyar River is not influenced in any adverse manner. It is necessary to provide catch water drains at the lower levels of the lease area to safely dispose the storm water.
4. Proper desiltation traps and clarification mechanism (sedimentation pond) must be provided.
5. The approach road to the quarry from the main road must be maintained in good motorable condition by the proponent.
6. Rain water harvesting as proposed in a 5,500 KL pond should be carried out.

4. The 54th SEIAA held on 21st of May 2016 appraised the proposal based on the recommendations put forwarded by 55th SEAC mentioned in Para 3. Authority wanted a community oriented realistic CSR to be proposed by the proponent for issue of the Environmental Clearance with the above specific conditions and usual general conditions for mining projects. The Proponent has submitted a community oriented realistic CSR to SEIAA on 29-07-2016.

5. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed Masonry Stone Quarry project in survey No. 186/1A2, 186/1A/4/5, at Neriya Mangalam Village, Kavalangad Panchayath, Kothamangalam Taluk, Ernakulam District, Kerala for an area of 4.9286 ha., subject to above specific conditions stipulated in para 3, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I and other documents submitted to SEIAA and the mitigation measures proposed in the table in para 1 above. 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.

6. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above

undertakings and the conditions and undertakings in chapter 4 of Mining plan (Mining), Chapter 5 of Mining plan (Blasting), Chapter 11 (EMP) of the Mining Plan and Chapter 12 for 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.

7. Validity shall be 5 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 Building Stone Quarry project of Sri.K.M. Abdul Rasheed (Managing Director) M/s Ever-One Properties India Pvt. Ltd. Pareekanni P.O, Uppukuzhi, Kothamangalam, Ernakulam, Kerala subject to all the above mentioned conditions.

8. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised officers.

- 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, to take legal action under the Environment (Protection) Act 1986.
- iii) The given address for correspondence with the authorised signatory of the project is Sri.K.M. Abdul Rasheed (Managing Director) M/s Ever-One Properties India Pvt. Ltd. Pareekanni P.O, Uppukuzhi, Kothamangalam, Ernakulam, Kerala.

Sd/

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

To

Sri. K.M. Abdul Rasheed
Managing Director,
M/s Ever-One Properties India Pvt. Ltd.
Pareekanni P.O, Uppukuzhi,
Kothamangalam, Ernakulam, Kerala



Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
2. Additional Secretary to Government, Environment Department.
3. The District Collector, Ernakulam.
4. The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
5. The Secretary, Kavalanjgad Grama Panchayath, Kothamangalom, Ernakulam, 686 693.
6. Chairman, SEIAA
7. E.C File
8. Stock File
9. O/C

Forwarded/ By order

Rajendra

Administrator, SEIAA



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 up stream and down stream 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.

Rajeshwar

for

Member Secretary, SEIAA Kerala