



सत्यमेव जयते

Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: SEIAA- Environmental clearance for the proposed quarry project in Sy. No. 34/1 A at Kariavattom Village, Perinthalmanna Taluk, Malappuram District, Kerala by Sri. N. Muhammed Ali for M/s. Pathippara Granite Quarry-Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

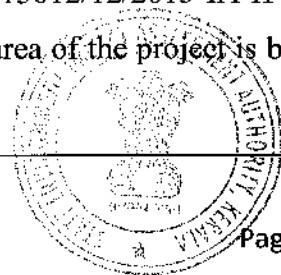
No. 757/SEIAA/KL/332/2015

dated, Thiruvananthapuram 01-06-2016

- Read:-**
1. Application dated 05-12-2014 submitted Sri. N. Muhammed Ali, Proprietor, M/s. Pathippara Granite Quarry, Naranuthodi House, Pattikad Post, Malappuram District-679325
 2. Minutes of the 46th meeting of SEAC held on 29/30-09-2015.
 3. Minutes of the 54th meeting of SEAC held on 06/07-04-2016.
 4. Minutes of the 53rd meeting of SEIAA held on 24-05-2016.

Environmental Clearance No. 89/2016.

Sri. N. Muhammed Ali, Proprietor, M/s. Pathippara Granite Quarry, Naranuthodi House, Pattikad Post, Malappuram District vide his application received on 02/02/2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 34/1 A at Kariavattom Village, Perinthalmanna Taluk, Malappuram District, for an area of 1.893 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the proposal are as follows:



Basic information about the project	
Name of the Project	M/s Pathipara Granite Quarry
Survey Numbers	34/1A.
Village	Kariavattom
Tehsil	Perinthalmanna
District	Malappuram
Extent of land in hectares	1.893 ha.
Is the property forest land/Govt. land/ own land	Private own land
Latitude	11°00'49.77"N to 11°00'58.16"N
Longitude	76°15'21.89"E to 76°15'30.83"E
Cluster condition (if any)	There is no quarry in operating within 500 m. radius.
Proposed production capacity	58, 896 MTA
Expected life of mine	About 5 Years
Total Project cost	About Rs. 20 Lakhs.
Interlinked project (if any)	Nil
Whether CRZ is applicable	Not applicable
Status of litigation/complaint/cases	Nil as stated by the proponent.
Permanent or temporary change on land use, land cover or topography	<p>Most of the mining area is already under quarrying. The topography will be changed after the quarrying of Building stone as per the Mining plan. Conventional Open cast Semi Mechanized Mining with 5.0 meter vertical bench with a bench width of 5.0 meter is proposed. Mining will be carried out upto the ultimate pit depth at 52 m MSL</p> <p>At end of the mine life, thick plantation will be developed on the top benches and partly backfilled mine void. Water body will be developed in the remaining mined out pit in the lower benches.</p>
Topography of land and elevation	<p>The lease applied area is elevated terrain, sloping towards North western side, The hard rock terrain of this rock formation falls under the Archaean to late Proterozoic groups comprises of predominantly charnockite, Khondolite group of rocks and their magmatic derivatives, supracrustal sequences intruded by ultramafic complexes, basic dykes and granites.</p> <p>Peninsular gneiss forms the oldest rock formations, in which the massive formation of charnockite lies over with rich accumulation of recent quaternary formation. On regional scale the charnockite body trends N20°W-S20°E with dipping towards SW-80°.</p>

Details of method of working with phasing of activities, height, width of benches	<ul style="list-style-type: none"> • Open cast Semi-Mechanized Mining with 5.0 meter vertical bench with a bench width not less than the bench height is proposed. • Splitting of rock mass of considerable volume from the parent rock mass by jackhammer drilling and blasting. Occasionally hydraulic excavators are used for loading the Building Stone from pithead to the needy crushers. • Hydraulic excavators are attached with rock breakers for breaking large boulders to avoid secondary blasting.
Vegetation	<ul style="list-style-type: none"> • The vegetation observed within the area mainly comprised of Tropical Moist Deciduous & Tropical Semi Evergreen type. The lower slopes of the hilly terrain and plains are under rubber cultivation. Agricultural crop include marginal Oryza sativa (Paddy) and major horticultural crops grown in the area is banana and Jackfruit along with marginal spices cultivation. Groundwater supports the agriculture in the area. No forest observed within the 5 km study area.
Change in water bodies due to mining activities	Nil
Proneness to natural hazards	The project is located at Seismic Zone II and it is not prone to earth quake, land slide and flooding. There are no cloudburst and landslide reported so far.
Environmental parameters considered	
WATER	
Water (expected use and sources in KLD)	The total water requirement is about 8 KLD in which 1 KLD is for drinking purpose, 5 KLD for dust suppression system in mine and 2 KLD for green belt and the required water will be met from bore well and open well nearby area and also from pit water when available
Sources of generation and facilities for liquid waste treatment	The Building stone quarry will not produce any harmful liquid.
Water quality meeting requirements	<ul style="list-style-type: none"> • Construction of garland drains to divert surface run-off from virgin area away from mining area. • Construction of check dams / gully plugs at strategic places to arrest silt wash off from broken up area. • Collection of surface run-off from broken up area in mine pits for settling and only properly settled excess water from mine pit will be discharged to nearby users. • The storm water/ mine water will be used for dust suppression, greenbelt development, etc. • Periodic analysis of mine pit water and ground water quality in nearby villages.

	<ul style="list-style-type: none"> Domestic sewage from site office & urinals/latrines provided in ML is discharged in septic tank followed by soak pits.
Water Regime	<p>The quarry operation is well above the water table (40m in Summer and 35m in rainy seasons); hence the water table will not be affected in any manner.</p> <p>The seepage and rain water will be drained out from the pit by the 5H.P motor pump and will be discharged through filter media to boundary barrier for afforestation and excess water will be sprayed on haul roads to prevent dust propagation in to the atmosphere.</p>
LAND	
Access road to the site – Width & Condition	Public road and width is more than 10m
Storage of explosives /hazardous substances	Explosive shall be procured by License holder and explosives will be handled with utmost care in compliance of conditions imposed by Chief Controller of Explosive & Metalliferous Mines Regulation, 1961. Only competent and authorized persons will be allowed to handle the explosives as per MMR, 1961 and permission.
Hazardous waste management	No hazardous waste will be generated in the mine. No workshop is proposed in the mining area.
Facility for solid waste management	Top soil/OB to the tune of 6700m ³ will be generated during the life of the mine. The soil will be used for plantation and partial backfilling of the mined out void. The waste generated during quarrying activity is negligible rock mass during handling and re-handling. Hence, there is no waste in this quarrying operation. There is no other solid waste generation during the quarrying operation.
Top soil, overburden etc.	About 6700 m ³ soil/OB will be generated, which will be used in plantation and partial backfilling of the mined out void.
Proximity to forest lands	Kodikuthimala Forest: 5.1 Km South East
Proneness of the area for landslides	The areas are not susceptible to natural hazards like landslides, earthquake, it is a high stable land.
Significant land disturbance resulting in erosion, subsidence & instability	No, it is a high stable land.
NOISE	
Sources of noise pollution & control measures	<ul style="list-style-type: none"> Mining operation is being carried out by semi-mechanized method. Noise from operation of drill machine & hauling equipment's. <p>Mitigation Measures:- The following measures will be adopted to control the noise and vibration:</p> <ul style="list-style-type: none"> Proper and regular maintenance of machinery. Earmuffs and earplugs will be provided to the persons exposed to noise levels.

	<ul style="list-style-type: none"> • Periodical medical checkup will be conducted. • The major noise generating source from the proposed activity is due to vehicular movement. <p>Mitigation Measures:-</p> <ul style="list-style-type: none"> • Vehicle speed will be maintained at 20 KMPH within the proposed mining area. • Proper training to personnel to create awareness about adverse noise level effects. • Planned noise monitoring at suitable locations in the proposed area and outside locations for proper effective remedial actions. • The greenbelt, which is being provided, will act as noise attenuator.
Noise level monitoring	Periodic noise monitoring at suitable locations in the mining area and nearby habitations to assess efficacy of adopted control measures.
AIR	
Air quality meeting requirements	Air quality will be monitored periodically as per Norms and Mitigation measures will be carried out to prevent dust and air propagation in to air.
Likely emissions affecting environment	Emission of SO ₂ & NO _x will be there due to use of diesel operated machinery and during blasting. Vehicular emission will be kept under control by proper maintenance.
By deposition of pollutants emitted to air into the land or into water	➤ During operation phase there will be dust emissions mainly from excavation, loading, unloading, mineral handling, transportation and mobile sources. Control measures like water sprinkling, green belt development etc. will be adopted to minimize the same. Thus, dust settling on land is expected to be very low and will be non-toxic.
ENERGY	
Energy requirement	<ul style="list-style-type: none"> • Mainly diesel will be used to operate mine machinery and equipment. The average diesel requirement will be 10-15 liters per hour. Around 100 LPD of HSD Diesel will be used for quarrying machineries. Diesel will be brought from nearby diesel pumps. • No electricity is required for quarrying operation. • Electricity for Mines office and Lights only at nights (working is restricted on day time only between 9Am to 5Pm) will be obtained from state electricity board. • DG sets will be provided for emergency use.
BIODIVERSITY	
Presence of any endangered species or red listed category	There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN.
Loss of native species	Not envisaged, except small bushes, no major vegetation

and genetic diversity	cover/valuable flora is found within the mining lease area. Re-plantation should be carried out at proper stage.	
Eco restoration programmes	During the mining operation, gap filling plantation will be carried out in the safety zone. Total 1200 trees of different native species will be planted in 0.40 ha (Safety Zone & Undisturbed area) and on top benches of mined out area so as to restore the natural eco-system.	
Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Lake	Kunthi River 11.3 Km SE. Kadalundipuzha, 5.7Km N Vellakulam 3.6 Km NE
	Reservoir	Nil
	Kodikuthimala Forest	5.1 Km South East

SOCIAL ASPECTS

CSR related to the project	Sl.No.	Sector	Amount Rs. In lakhs
	1.	Education	200,000/-
	2.	Health	150,000/-
		Total	350,000/- (Recurring: 300,000/- and Non-recurring: 50,000/-)
	The activities are planned keeping in view the present needs of the area. Further additional activities may be taken up in future in consultation with the local people and Grama Panchayath.		

GENERAL

Details of Authorised Signatory & Address for correspondence)	Sri. N. Muhammed Ali, Proprietor, M/s. Pathippara Granite Quarry, Naranuthodi House, Pattikad Post, Malappuram District-679325.
Details of NABET approved EIA consultant Organisation	M/s Anacon Laboratories Pvt. Ltd., QCI-NABET Accreditation for EIA Consultant vide letter No. NABET/EIA/RA015/042 dated 30/06/2014 for Sector (1) Mining of Minerals including Opencast/Underground Mining. Head Office: 60, Bajiprabhu Nagar, Nagpur-440033, Maharashtra. Ph: 0712-2242077, 9373287475. Fax: 0712-2242077 Email: anaconngp@gmail.com , anaconlabngp@gmail.com Website: www.anaconlaboratories.com , www.anacongarway.com

2. The proposal was first considered by SEAC in its 46th meeting held on 29/30-09-2015. The proponent along with the consultant attended the meeting and the consultant made a brief power-point presentation. This is an existing quarry but currently not working. Life of mine is 10 years. Kodithookimala is 5.3 Km from the proposed area. The proposed CSR is 0.80 lakh which is very meagre. The Committee decided to **defer** the item for field inspection and the production of more realistic social responsibility schemes on need based analysis. The sub-committee of SEAC

consisting of Dr. Khaleel Chovva and Dr. Harikumar visited the quarry project site on 13-12-2015.

The proponent Sri. N. Mohammed Ali was present at the site. Report was as follows:

"It is an existing stone quarry. No crusher unit in the mine lease area. Open cast semi mechanised method is practised. Benching is just started but not regular. The drainage from the quarry is collected in a pit. Vegetation is seen around the quarry which is having status of least concern. 1.893 ha area is proposed for quarrying. No houses or settlements are noticed in the nearby area.

Conditions to be added:

- 1. Benching method should be strictly practiced*
- 2. Quarrying should be strictly limited to proposed land only*
- 3. Proper fencing and sign boards must be placed all around*
- 4. The approach road is properly maintained. Entry of large vehicles may be restricted*
- 5. Retaining wall should be maintained at the lower slope to avoid leaching.*

Other general conditions should be applied".

3. On receipt of the inspection report and more realistic social responsibility schemes, the proposal was again considered by SEAC in its 54th meeting held on 6-7/4/2016. The Committee appraised the proposal based on Form I, Pre-Feasibility Report, Mining Plan & Field Inspection Report and decided to recommend to issuance of EC with the general conditions along with the following specific conditions.

1. Benching method should be strictly practiced
2. Quarrying should be strictly limited to the proposed land only
3. Proper fencing and sign boards must be placed all around
4. Retaining wall should be maintained at the lower slope to avoid leaching.

4. The proposal was considered by SEIAA in its 53rd meeting held on 24-05-2016. Authority accepted the recommendations of SEAC and decided to grant E.C with all the suggestions in the Inspection Report and general conditions on mining.

5. Environmental Clearance under the EIA notification 2006 is therefore granted to the quarry project of M/s Pathipara Granite Quarry in 1.893 ha comprised in Sy. No. 34/1A at Kariavattom Village, Perinthalmanna Taluk, Malappuram, Kerala subject to the specific conditions above and general conditions for mining projects. The grant of E.C is also subject to production of non-cluster certificate, affidavit, general conditions stipulated for mining projects and the mitigation measures undertaken in the EMP in the PFR. However if any genuine complaints about the quarry is received, E. C issued shall be reviewed.

6. 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. N. Muhammed Ali, Proprietor, M/s. Pathippara Granite Quarry, Naranuthodi House, Pattikad Post, Malappuram District, Kerala subject to the specific conditions as mentioned in para 3 above and the general conditions annexed hereto.

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 undertakings in chapter 3 of Mining plan (Mining Area), chapter 4 (Mining Activities), Chapter 5 (Post Mine Plans), Chapter 6 (Social Obligations), EMP in the pre-feasibility report, Chapter 11 of PFR (Disaster Management), and the entire Progressive Mine Closure Plan as submitted will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated herein.

Compliance of the conditions herein will be monitored by the Authority or its agencies and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.

- i) Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
- ii) Instances of violation if any shall be reported to the District collector, Malappuram to take legal action under the Environment (Protection) Act 1986.

8. The given address for correspondence with the authorised signatory of the project is Sri. N. Muhammed Ali, Proprietor, M/s. Pathippara Granite Quarry, Naranuthodi House, Pattikad Post, Malappuram District- 679325, Kerala.



Sd/
P. Mara Pandiyan., I.A.S
Member Secretary (SEIAA)
&
Additional Chief Secretary to Government
Environment & Forest Department
Government of Kerala.

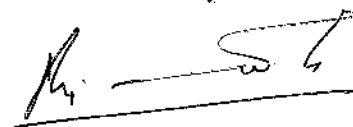
To,

Sri. N. Muhammed Ali,
Proprietor,
M/s. Pathippara Granite Quarry,
Naranuthodi House,
Pattikad Post,
Malappuram - 679325.

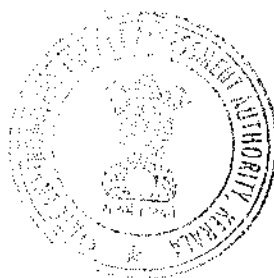
Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
2. Principal Secretary to Government, Environment Department.
3. The District Collector, Malappuram.
4. The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
5. The Secretary, Vettathur Panchayath Office, Thelakkad, Vettathur Road, Vettathur, Perinthalmanna Taluk, Malappuram-679325
6. Chairman, SEIAA
- ✓ 7. E.C File
8. Stock File
9. O/C.

Forwarded/ By order



Administrator
SEIAA



SECRET

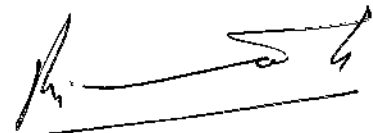
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

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 simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
39. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine

- working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul Road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
 46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
 47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
 48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
 49. The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
 50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
 51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
 52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
 54. The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.
 55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
 56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
 57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
 58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
 59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
 60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
 61. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.



For Member Secretary, SEIAA Kerala



G. RAJESH
Administrator

State Environment Impact Assessment Authority
Pollution Cell, 2nd Floor
Thiruvananthapuram, Kerala - 695 004
Phone: 0471-2549504

