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Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: SEIAA- Environmental clearance for the proposed quarry project in Sy. No. 1/1 (pt) of Ottappalam Village, Ottappalam Taluk, Palakkad District, Kerala by Sri. Shamsudheen. M.P- Granted – Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KERALA

No. 705/SEIAA/KL/5657/14

Dated, Thiruvananthapuram, 25.10.2017

- Ref: 1. Application received on 25.11.2014 Sri. Shamsudheen, M. P. (Chairman & Managing Director), M/s Dark Stone Land Developers Pvt. Ltd., Royal Plaza Building, Room No. 39, Mannarkkad Road, Perinthalmanna, Malappuram, Kerala - 679322
2. Minutes of the 64th meeting of SEAC held on 16th & 17th November, 2016.
3. Minutes of the 71st meeting of SEAC held on 20th & 21st April, 2017.
4. Minutes of the 74th Meeting of SEAC held on 14th & 15th June, 2017.
5. Minutes of the 72nd Meeting of SEIAA held on 01.08. 2017.
6. Affidavit received dated 19.10.2017 from Sri. Shamsudheen, M. P., M/s Dark Stone Land Developers Pvt. Ltd.

ENVIRONMENTAL CLEARANCE NO. 75/2017

Sri. Shamsudheen, M. P., Chairman & Managing Director, M/s Dark Stone Land Developers Pvt. Ltd, Royal Plaza Building, Room No. 39, Mannarkkad Road, Perinthalmanna, Malappuram, Kerala - 679322, vide his application received on 25.11.2014, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 1/1 (pt) at Ottappalam Village, Ottappalam Taluk, Palakkad District, Kerala. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 and as per O.M. No. L-11011/47/2011-IA.II(M) dated 18th May 2012 of Ministry of Environment and Forests. The project comes under Category B2 as per Notification No.S.O.141 (E) dt.15.01.2016 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. The proposed project site falls within Latitude 10°49'17.1"N- 10°49'23.5"N & Longitude 76°22'16.5"E- 76°22'27.5"E. The lease area consists of 4.7541 hectares, which is private land.

Details of the project as furnished by the applicant are as follows:-

BASIC INFORMATION OF QUARRY

PROJECT DETAILS	
File No.	705
Name /Title of the project	Quarry project of M/s DARK STONE LAND DEVELOPERS PVT LTD
Name and address of project proponent.	Mr. Shamsudheen M. P., Chairman & Managing Director M/s Dark Stone Land Developers Pvt. Ltd. Mangadam Parambath House, Manalaya P.O., Perithalmanna via, Malappuram District, 679 357.
Owner of the land	Mr. Shamsudheen M. P., Chairman & Managing Director
Survey No. District/Taluk/ and Village etc.	Survey No: 1 / 1 Ottapalam Village; Ottapalam Taluk, Palakkad District, Kerala
Details of period of lease or permit with number including the beginning and expiry date of lease/permit period (Copy to be attached)	NA
Present Status of the project	NA
Date & Year of starting the work of the quarry project.	NA
Whether the quarry is working at present or not ?	NA
If stopped working since when?	NA
Date of submission of Application	
Brief description of the project.	The proposed project is a granite stone quarry in an extent of 4.7541 Ha. The proposed project is in Category B2, since the proposed mining area is less than 5 Ha. The proposed rate of production for the mine is 1,52,000 MTA.
Details of Authorized Signatory and address for correspondence	Mr. Shamsudheen M.P. Chairman & Managing Director M/s Dark Stone Land Developers Pvt Ltd Mangadam Parabath House, Manalaya P.O. Perithalmanna Via, Malappuram Dist 679 357 9895 077 779 darkstonedevelopers@gmail.com
LAND DETAILS	
Extent of area in hectares	4.75 ha.

Is the property forest land/Govt. land/own land/patta land	Private Patta Land	
Quantity of top soil/over burden produced and managed	No topsoil present and so recovery of topsoil Overburden generated will be insignificant and whatever generated will be used for road formation and backfilling	
Latitude and Longitude	Latitude (N)	10 ⁰ 49' 17.1" - 10 ⁰ 49' 23.5"
	Longitude (E)	76 ⁰ 22' 16.5" - 76 ⁰ 22' 27.5"
Topography of land and elevation	The topography of the lease area is hilly area covered with native tree, climbers, grass, shrubs, herbs etc.	
Slope analysis		
Will there be any significant land disturbance resulting in soil erosion, subsidence & natural drainage.	No	
Access road to the site width and condition	7 m. wide, tarred road.	
Will there be any adverse impact on the aesthetics of the proposal site	No	
MINING DETAILS		
Minimum and Maximum height of excavation.	240 MSL and 195 m. MSL	
Life of mine proposed.	About 12 Years	
Underground mining if any proposed	No	
Method of Mining	Open cast method	
Distance from the adjacent quarry	There is no operational quarry now within 500 m radius	
Cluster condition if any	No	
Has "No cluster certificate" submitted?	No, 500 m radius quarry details certificate from District geologist submitted.	
Distance from nearby habitation	Moochical Mammu Above 800 mts	
Distance from nearby forest, if applicable	Nil	
Distance from protected area, Wildlife Sanctuary, National Park etc.	Nil	
Distance from nearby streams/rivers/National Highway and Roads	No streams or rivers nearby. State Highway- Palakkad – Shornur	
Is ESA applicable? If so distance from ESA limit	NA	

Has approved mining plan, prepared by RQP submitted?	Yes	
Capacity of production in TPA	Proposed production capacity of 1,52,000 MTA	
Details of mining process	The mining will be done open cast Semi mechanized. The working will be done by forming benches of 5.0m (Average) height. The height of bench will not be kept more than 5.0m at a time and the width of the benches will be always kept safe according to provisions. Loading of material will be done with the help of shovel and excavators at face and at stock yard. The truck / tipper will be used for transportation of material from mine to the destination. First Rock bench will be opened by removal of Soil / Over Burden and then Stone will be mined out either by labor or with the help of Excavators/Rock Breaker.	
DETAILS OF PROJECT COST		
Total Cost	Rs. 4.5 Crores	
Financial Statement including funding source and details of insurance etc.	Own Source	
Management Plan	Air Pollution	Water sprinkling in regular intervals
	Water Pollution	No significant water pollution.
	Noise	Controlled blasting & timely maintenance of equipments
	Solid Waste Management	No solid waste generated
	Eco-restoration	Green belt construction in safety belt area, haul roads and reclaimed land areas
Whether Environment Management Plan or Eco restoration Plan satisfactory?	Yes	
Does it suggest mitigation measures for each activity	Yes	
If Pre-Feasibility Report (PFR) satisfactory	Yes	
Does it need public hearing	No	
Details of litigation and Court verdict if any	Nil	

Details of public complaint, if any	Nil
Details of statutory sanction required	
If CRZ recommendation applicable?	No
PART B	
ENVIRONMENT IMPACT ASSESSMENT AND MITIGATION MEASURES	
Details of water requirement per day in KLD	The total water requirement is about 14.5 KLD in which 2.5 KLD is for domestic 10 KLD for dust suppression & 2 KLD for plantation purposes
Water source/sources.	The total water requirement is about 14.5 KLD in which 2.5 KLD is for domestic which would be sourced from bore well, 10 KLD for dust suppression & 2 KLD for plantation purposes will be sourced from rain water harvesting / storm water pond.
Expected water use per day in KLD.	14.5 KLD
Details of water requirements met from water harvesting.	Yes, Rain water harvesting pit & Bore well
What are the impact of the proposal on the ground water?	Surface run-off from broken up area will be collected in mine pit for settling and will be used for dust suppression and plantation and for ground water recharge.
How much of the water requirement can be met from the recycling of treated waste water? (Facilities for liquid waste treatment)	No waste water treatment proposed since there is no significant waste water generated
What is the incremental pollution load from waste water generated from the proposed activities?	No water pollution caused due to mining since no huge water required and so no significant waste water generated
How is the storm water from within the site managed?	Storm water diverted & collected in settling tanks through garland drains
IMPACT ON BIODIVERSITY AND ECO RESTORATION PROGRAMMES	
Will the project involve extensive clearing or modification of vegetation (Provide details)	No
What are the measures proposed to minimize the likely impact on	Green belt development in safety belt area, side of haul roads and reclaimed land areas and addressed in detail of

vegetation (details of proposal for tree plantation/ landscaping)	the PFR in EC.
Is there any displacement of fauna – both terrestrial and aquatic. – If so what are the mitigation measures ? Presence of any endangered species or red listed category (in detail)	No
IMPACT ON AIR ENVIRONMENT	
What are the mitigation measures on generation of dust, smoke and air quality	Water sprinkling in regular intervals and green belt development
Details of internal traffic management of the site.	There will not be heavy traffic in the mine area.
Details of noise from traffic, machines and vibrator and mitigation measures	Drilling, Blasting & machineries will generate noise; required precautions will be taken to maintain the noise pollution. Proper & timely maintenance for Machineries will be done to reduce noise pollution. Green belt construction in safety belt area and haul roads will also help in controlling the pollution.
Impact of DG sets and other equipments on noise and vibration and ambient air quality around the project site and mitigation measures	Operation of machineries like DG will generate noise & small emission of dust & smoke, required precautions will be taken to maintain the noise pollution
Air quality monitoring in detail	Air Monitoring reports attached and also addressed in detail in the PFR of EC file
ENERGY CONSERVATION	
Details of power requirement and source of supply.	No electricity is needed since only diesel operated mining machineries are used for quarrying operations
Details of renewable energy (non – conventional) used.	Nil
RISK MANAGEMENT	
Are there sufficient measures proposed for risk hazards in case of emergency such as accident at the site?	Yes
Are proposals for fencing around the quarry satisfactory? Storage of explosives/hazardous substance in detail	Yes A dedicated place for storage of explosives by means of magazine is being provided with all the safety and statutory norms of DGMS and Mines Act.

Facility for solid waste management	No solid waste generated			
SOCIO ECONOMIC IMPACTS				
Will the project cause adverse effects on local communities disturbance to sacred sites or other cultural values. What are the safe guards proposed?	No adverse effects on local communities, this project will make more employment & income generation for local people directly & Indirectly. CSR Project proposed will be implemented which will help in development of local people livings			
Will the proposal result in any changes to the demographic structure of local population. If so, provide details.	No			
Are the CSR proposals satisfactory. Give details	Sr. No	Description	Approx. Amount proposed	Remarks
	1	Educational Assistance	Recurring = Rs. 5.50 lakhs Non-recurring = Rs. 3.50 lakhs	The summary of the report is provided.
What are the projects benefits in terms of employment potential?	The project will make more employment & income generation for local people directly & Indirectly			
PART C				
Details of NABET approved EIA Consultant engaged-Their name, address and accreditation details/RQP	Korah A.G, Anteril House, Moolendom P.O, Nattakom City, Kottayam District, Kerala 91 9447889626 RQP/BNG/362/2015/A			
SUMMARY AND CONCLUSION				
Overall justification for implementation of the project.	Granite Building Stone is the basic filling for Roads, Bridges and all other infrastructures like buildings. This project will improve the financial status of the common people around the project site. This project is environmentally compactable, financially viable and would be in the interest of construction industry thereby directly and indirectly benefiting the public			
Explanation of how adverse impact have been mitigated.	No significant adverse impact.			

2. The proposal was considered in the 64th meeting of SEAC, Kerala, held on 16th & 17th November, 2016. Further to the intimation the Proponent and the RQP attended the meeting and RQP made a power point presentation about the project. The Committee appraised the proposal based on the Mining Plan, Pre-feasibility Report and all other documents submitted along with Form.1.

From the submitted document it is seen that the area proposed is a virgin area having a height elevation of 245 MSL and lowest of 195 MSL. The Committee is of the opinion that the CSR proposed is too meagre and it has to be revised. The Proponent agreed to enhance the CSR to an amount of 6 lakhs for recurring activities and 7 lakh for non-recurring activities.

The Committee decided to defer the item for site visit to assess the ground realities.

Accordingly, field visit to the Quarry project site of M/s Dark Stone land developers Pvt. Ltd. in Sy. No. 1/1 (pt) at Ottappalam Village, Ottappalam Taluk, Palakkad District, Kerala application of Sri. Shamsudheen M. P. Partner (File No. 705/SEIAA/EC1/5657/2014) was carried out on 04.03.2017 by the Sub-Committee of SEAC, Kerala, comprising Dr. Jayson E.A. and Dr. K.G. Padmakumar. The Proponent was present at the site.

They reported that based on an overall evaluation of the site, following points may be considered:

- The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good motorable condition by the proponent. Buffer distance from the road near the quarry may not be required as it ends at the quarry.*
- Dust suppression mechanism must be in place.*
- Vegetation is seen all around the quarry but must be maintained till the entire life of quarry.*

Other items from general conditions and CSR may be added and recommended for approval.

3. The proposal was placed in the 71st meeting of SEAC held on 20th & 21st April 2017. The Committee appraised the proposal based on Form I, Pre-feasibility Report, Mining Plan, field inspection report of the Sub Committee and all other documents submitted with the proposal. The Committee decided to defer the item for further clarification regarding the nature of the ownership of the land.

The proponent had submitted the documents sought by 71st meeting of SEAC.

4. The proposal was considered in the 74th meeting of SEAC held on 14th & 15th June 2017. The Committee verified the additional documents submitted by the proponent and found satisfactory. Based on the Mining plan, Form.1, all other documents submitted with the proposal and the field visit report, the committee decided to Recommend for issuance of EC subject to the general conditions in addition to the following specific conditions.

1. *The approach road to the quarry from the main road should be maintained in a good motorable condition by the proponent.*
2. *Dust suppression mechanism must be in place*
3. *If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.*

The proponent agreed to set apart Rs.7 lakh (non-recurring) and Rs.6 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local body.

5. The proposal was placed in the 72nd meeting of SEIAA held on 01.08.2017. Authority accepted the recommendation of SEAC and decided to issue EC subject to general condition in addition to the following specific conditions.

1. *The approach road to the quarry from the main road should be maintained in a good motorable condition by the proponent.*
2. *Dust suppression mechanism must be in place*
3. *If any plant species endemic to Western Ghats are noticed in the area they shall be properly protected in situ or by transplanting to an appropriate location inside the lease area.*
4. *Vegetation is seen all around the quarry but must be maintained till the entire life of quarry.*

The proponent should set apart an amount of Rs.7 lakh (non-recurring) and Rs.6 lakh per annum (recurring) for CSR activities for the welfare of the local community in consultation with the local Panchayat. A notarised affidavit for the commitment of CSR activities and agreeing all the general and specific conditions should be submitted before the issuance of EC.

6. The proponent has submitted an affidavit vide reference 6th cited, satisfying all the above conditions. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed stone quarry project in in Sy. No. 1/1 (pt) at Ottappalam Village, Ottappalam Taluk, Palakkad District, Kerala of Sri. Shamsudheen. M.P, Chairman & Managing Director, M/s Dark Stone Land Developers Pvt. Ltd, Royal Plaza Building, Room No. 39, Mannarkkad Road, Perinthalmanna, Malappuram, Kerala - 679322 for an area of 4.7541 hectares, subject to the specific conditions as recommended in para 5 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 (items 1 to 61), 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 Planas 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, Palakkad 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. Shamsudheen, M. P., Chairman & Managing Director, M/s Dark Stone Land Developers Pvt. Ltd, Royal Plaza Building, Room No. 39, Mannarkkad Road, Perinthalmanna, Malappuram, Kerala – 679322.

Sd/-

JAMES VARGHESE.I.A.S,
Member Secretary (SEIAA)

To,

Sri. Shamsudheen, M. P.,
Chairman & Managing Director,
M/s Dark Stone Land Developers Pvt. Ltd,
Royal Plaza Building, Room No. 39,
Mannarkkad Road, Perinthalmanna,
Malappuram, Kerala – 679322

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. The Director, Mining & Geology, Thiruvananthapuram -4.
4. The Member Secretary, Kerala State Pollution Control Board
5. The District Collector, Palakkad
6. The District Geologist, Palakkad
7. The Tahasildar, Ottappalam Taluk, Palakkad District, Kerala
8. Chairman, SEIAA.
- ✓ 9. Website.
10. S/f
11. O/c

Forwarded/By Order



Administrator, SEIAA

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA


GENERAL CONDITIONS (for mining projects)

1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
5. Sprinklers shall be installed and used in the project site to contain dust emissions.
6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
7. At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly, if no other specific condition on reclamation of pit is stipulated in the E.C.
8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
9. The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.
10. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14. A licensed person should supervise/ control the blasting operations.
15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
19. Maximum depth of mining from general ground level at site shall not exceed 10m
20. No mining operations should be carried out at places having a slope greater than 45°.
21. Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
24. The transportation of minerals should be done in covered trucks to contain dust emissions.
25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
26. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
28. A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
29. 100 m buffer distance should be maintained from forest boundaries.

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

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




For Member Secretary, SEIAA Kerala

