



Proceedings of the State Environment Impact Assessment Authority Kerala

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

Sub: - SEIAA- Environmental clearance for the quarry project in Sy. No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Eranad Taluk, Malappuram District- EC Granted- Orders issued.

STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 902/SEIAA/EC1/3463/2015

Dated, Thiruvananthapuram 22/02/2017

- Read: - 1. Application dated 19/8/2015 submitted by Sri. A.M.Muhammed Ali, Managing Partner, M/s.Mubaraq Granites, West Chathallur.P.O., Othayi Edavanna, Malappuram District, Kerala – 676 541
2. Minutes of the 55th Meeting of SEAC held on 10/11/20-05/2016.
3. Minutes of the 57th Meeting of SEAC held on 16/17/-06/2016.
4. Minutes of the meeting of 58th SEIAA held on 8/09/2016
5. Minutes of the meeting of 59th SEAC held on 11/12-07/2016.
6. Minutes of the 61st meeting of SEIAA held on 30/11/2016.
7. Minutes of the 63rd meeting of SEIAA held on 31/01/2017.

Environmental Clearance No. 19/2017

Sri. A. M. Muhammed Ali, Managing Partner, M/s Mubaraq Granites, West Chathallur P.O., Othayi, Edavanna, Malappuram, Kerala-676 541, vide his application received on 19-08-2015, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Eranad Taluk, Malappuram District, Kerala. The project comes under Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the project are as follows:

Basic Details	
Name of the Project	Quarry project of M/s Mubaraq Granites
Survey Numbers	Survey No. 93/1 pt, 94 pt, 95 pt, 96 pt Perakamanna Village, Eranadu Taluk, Malappuram District, Kerala for an area of

	4.8157hectares
Village	Perakamanna
Tehsil	Eranad
District	Malappuram
Extent of land in hectors	4.8157 hectares
Is the property forest land/Govt. land/ own land	Private own land
Latitude (N)	11°15'37.19"N to 11°15'24.16"N
Longitude (E)	76°06'53.01"E to 76°06'43.26"E
Extent of area (in hectares)	4.8157 hectares
Minimum and maximum height of excavation (MSL)	115 m MSL to 240 m. MSL
Life of mine proposed	About 4 years
Distance of mining area from nearest human settlement	About 231m in NW side from the site.
Ultimate depth of mining (in MSL)	115m MSL.
Distance from the adjacent quarry	There is no quarry in operation within 500m.
Cluster condition (if any)	There is no quarry in operation within 500m
Proposed production capacity	3,00,000 MTA
Expected life of mine	About 4 years
Expected cost of the project	Rs. 1.92 Crores
Interlinked project (if any)	Stone Crusher proposed within the site
Whether CRZ is applicable	NA
Status of litigation/complaint/cases	No
Permanent or temporary change on land use, land cover or topography	The project site is private owned land. There is expected to be change in the land use as mining area in the core zone. The highest elevation of the lease area is 240 m. MSL and lowest is 115 m MSL. As the proposed area is hilly, the drainage is towards south. However, any other significant impact will be confined within the lease area.
Topography of land and elevation	Part of the proposed land is exposed rock and the remaining land is covered with native trees, shrubs, herbs, grass, climbers, bushes etc. The topography of the lease area is hilly. The highest elevation of the proposed mining area is 240 m MSL and lowest is 115 m MSL. As the proposed area is hill rock, the drainage of the lease area is towards south. No habitants are located in the lease area.
Vegetation	Since, in part of the proposed area is an existing quarry and this area is devoid of any vegetation. The remaining area for proposed quarry has native trees, climbers, grass, shrubs, herbs etc. There is no existing building in the proposed area.
Nearest water body	Chaliyar River – about 3.5 km., S
Change in water bodies due to mining activities	No. The water body Chaliyar River is located at 3.5 KM South from the site.
Proneness to natural hazards	None
Environmental parameters considered	
WATER	
Water (expected use and sources in KLD) (In detail)	The total water requirement is about 16 KLD in which 2 KLD is for domestic which would be sourced from open well, 12

		KLD for dust suppression system in mine as well as ancillary unit (Crusher/M sand Unit) and 2 KLD for plantation purposes and will be sourced from storm water pond.
Sources of generation and facilities for liquid waste treatment (In detail)		There will be no industrial waste generation due to proposed project.
Facilities for liquid waste treatment(In detail)		There will be no industrial waste generation due to proposed project.
Water quality meeting requirements (In detail)		Water quality meeting requirements after the treatment of water (filtration, disinfection & sedimentation).
Water Regime (In detail)		Open Well, Storm water pond.
LAND		
Access road to the site –Width & Condition		7 m wide tarred road towards S
Proximity to forest lands		Nilambur Forest, 9 km, E
Storage of explosives /hazardous substances (In detail)		Considering low consumption, a 550 kg magazine is for storing the explosive. The magazines are exists within the complex
Hazardous waste management		<p>Industrial Waste Management There will be no industrial waste generation due to proposed project.</p> <p>Solid Waste Management About 6,025 cu. m. of top soil is estimated from the pit of the proposed mine. Other than top soil, about 12,050 cu. m. of overburden will be generated throughout the mine life.</p>
Facility for solid waste management (In detail)		It is estimated that around 6,025 cu. m. of top soil will be generated from the proposed pit, which will be properly stacked and will be utilized for plantation over the reclaimed areas. Also it is estimated that around 12,050 cu. m. of OB is generated which will be utilized in developing internal roads and at the end use the same will be used as soil base for reclamation.
Top soil, overburden etc. (In detail)		<p>Top soil : 6,025 cu. m.</p> <p>Overburden : 12,050 cu. M.</p>
EnvmtMgmt plan/ Eco restoration plan (brief details)	Air pollution	<p>MANAGEMENT PLAN:</p> <p>Mining activities will generate certain quantities of dust during drilling, blasting, loading and transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations.</p> <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.

		<ul style="list-style-type: none"> ➤ Provision of green belt all along the periphery of the lease area. ➤ 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	Provision of 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.
	Noise	<p>The major noise generating source from the proposed activity is working machinery, drilling, blasting and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels:-</p> <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. ➤ related health problems ➤ 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 6,025 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.</p> <p>Overburden Management</p> <p>About 12,050 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	The year wise programme of eco-restoration for the life of mine, about 4,600 trees will be planted in an area of 3.8275 ha.
NOISE		
Sources of noise pollution control measures(In detail)		Noise generated from various mining operation like drilling / blasting/ vehicular.

Noise level monitoring (In detail)	Yes, noise level monitoring carried out from an approved laboratory at site and report of the same is already submitted.					
AIR						
Likely emissions affecting environment (In detail)	Emissions from the vehicles only.					
By deposition of pollutants emitted to air into the land or into water (In detail)	There is no emission except vehicles.					
Air quality monitoring (In detail)	Yes, ambient air quality monitoring carried out from an approved laboratory at site and report of the same is already submitted					
ENERGY						
Energy requirement (In detail)	The total power requirement will be 75 kW for compressors which will be operated by Diesel Engine.					
BIODIVERSITY						
Presence of any endangered species or red listed category (In detail)	No.					
Loss of native species and genetic diversity (In detail)	The some area of proposed quarry has native trees, climbers, grass, shrubs, herbs etc					
Eco restoration programmes (In detail)	The year wise programme of eco-restoration for the life of mine, about 4,600 trees will be planted in an area of 3.8275 ha					
SOCIAL ASPECTS						
Proximity to nearest densely populated or build-up area (In detail)	Nearest Town Edavanna 5.5 km, SE direction					
	Proposed CSR Budget					
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 10%;">Sl.No.</th><th style="width: 50%;">Particulars</th><th style="width: 40%;">Amount Rs. In lakhs</th></tr> </thead> <tbody> <tr> <td>1</td><td>The proponent agreed to set apart Rs 10 lakhs (nonrecurring) and 11 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community in addition to the 1% of the profit towards the KSBB. The proponent also agreed to spend this amount in consultation with the local Panchayath.</td><td></td></tr> </tbody> </table>	Sl.No.	Particulars	Amount Rs. In lakhs	1	The proponent agreed to set apart Rs 10 lakhs (nonrecurring) and 11 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community in addition to the 1% of the profit towards the KSBB. The proponent also agreed to spend this amount in consultation with the local Panchayath.
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1	The proponent agreed to set apart Rs 10 lakhs (nonrecurring) and 11 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community in addition to the 1% of the profit towards the KSBB. The proponent also agreed to spend this amount in consultation with the local Panchayath.					
GENERAL						
Details of Authorised Signatory & Address for correspondence)	A. M. MUHAMMED ALI Managing Partner, M/S MUBARAQ GRANITES West Chathallur P.O., Othayi, Edavanna, Malappuram District, Kerala-676541.					

2. The proposal was placed in the 55th meeting of SEAC held on 10/11/20-05-2016. The Committee appraised the proposal based on Form 1, Form I A and Mining Plan and deferred the item for field visit and a report from Village Officer to clarify the nature of the ownership of the land may be produced at the time of the field visit.

The field visit to the quarry by the sub-committee was carried out on 05/06/2016 and the report is as follows:

"The sub-committee of SEAC consisting of Dr. P.S. Harikumar and Dr.Khaleel Chovva visited the quarry project on 5 June 2016 in Survey Nos. 93/1, 94, 95 and 96 of Perakamana village Edavanna, Malappuram. The proponent was present at the site. The quarry is an existing quarry with crusher unit.

The following specific conditions have to be followed in addition to the general conditions stipulated for mining projects.

1. *Top soil and overburden should be stored in a designated place on the lower slope*
 2. *The quarry must be properly fenced and provided with danger signs.*
 3. *Storm water drained out must be provided with a mechanism of clarification. Periodic de-siltation is also mandatory*
 4. *Local biodiversity management Committee shall be involved in the environmental management/restoration activities.*
 5. *Reclamation and eco-restoration should be done by planting native species".*
3. 57th meeting of SEAC held on 16/17th June 2016 has considered the matter based on field inspection report and deferred the item for the production of copy of the Certificate 27 2(F) from the Village Officer.
4. On production of the Certificate 27 2(F) from the Village Officer, the proposal was again considered in the 59th meeting of SEAC held on 11th& 12th July 2016. The Committee after examining the mining plan, prefeasibility report, field inspection report and all other documents submitted, decided to recommend for issuance of EC subject to general conditions in addition to the following specific conditions for mining.
1. Top soil and overburden should be stored in a designated place on the lower slope
 2. The quarry must be properly fenced and provided with danger signs.
 3. Storm water drained out must be provided with a mechanism of clarification. Periodic de-siltation is also mandatory
 4. Local Biodiversity Management Committee shall be involved in the environmental management/restoration activities.
 5. Reclamation and eco-restoration should be done by planting native species.

The proponent agreed to set apart Rs 10 lakhs (non-recurring) and 11 lakhs per annum (recurring) for next 5 years for CSR activities for the welfare of the local community in addition to the 1% of the profit towards the KSBB. The proponent also agreed to spend this amount in consultation with the local Panchayath.

5. The proposal was considered by SEIAA in its 58th meeting held on 08- 09-2016. Authority decided that this being a working quarry, the details of the existing lease/permit to ascertain the duration of mining that has taken place and extent.

As per the minutes the proponent has submitted the copies of mining lease having validity up to September 2017.

- 6 The Authority in its 61st meeting held on 30/11/2016 decided to issue Environmental Clearance upto September 2017 . On condition that mining shall be continued only after fulfilling the above specific conditions suggested by SEAC. An affidavit to this effect shall be submitted.

The proponent vide his letter dated 19-12-2016 has requested that a valid Environmental Clearance is required to renew the mining lease for five years. Hence the validity of Environment Clearance may be extended for 5 years.

SEIAA in its 63rd meeting decided to issue Environmental Clearance for 5 years with validity from the date of issuance of EC.

7. Environmental clearance as per the EIA notification 2006 is hereby accorded for the proposed Quarry project in survey No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Eranad Taluk, Malappuram District, - subject to the specific conditions stipulated in para 4, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I and other documents submitted to SEIAA , 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.
9. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the 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 11 (EMP) of the Mining Plan and Chapter 5 of Mining plan (Blasting) 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.
10. 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. A. M. Muhammed Ali, Managing Partner, M/s Mubaraq Granites, Sy. No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Eranad Taluk,

Malappuram District, 4.8157 hectares subject to specific condition in para 4 & 6 above and addition the general conditions annexed hereto.

11. 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.
- 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.
 - Instances of violation if any shall be reported to the District collector, Malappuram to take legal action under the Environment (Protection) Act 1986.
 - The given address for correspondence with the authorised signatory of the project is Sri.A.M .Muhammed Ali, Managing Partner, M/s Mubaraq Granites, West Chathallur.P.O., Othayi, Edavanna, Malappuram District.
 - Clearance is therefore granted to the quarry project of Sy. No. 93/1 pt, 94 pt, 95 pt, 96 pt of Perakamanna Village, Eranad Taluk, Malappuram District, subject to specific condition in para 4 & 6 above in addition to the general conditions annexed hereto.

Sd/-

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

Copy to:-

Sri. A. M. MUHAMMED ALI
Managing Partner,
M/S MUBARAQ GRANITES
West Chathallur P.O., Othayi, Edavanna,
Malappuram District, Kerala-676541.

- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E& F Wing, II block, Koramangala, Bangalore-560034.
- Additional Chief Secretary to Government, Environment Department.
- The District Collector, Malappuram
- The Director, Mining and Geology Department, Kesavadasapuram, Thiruvananthapuram-4
- The Secretary, Edavanna Grama Panchayath, Malappuram
- Chairman, SEIAA
- E.C File
- Stock File
- O/c
- Web Site

Forwarded/By Order

Rajendran

Administrator SEIAA

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

GENERAL CONDITIONS (for mining projects)

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

Rajeshwar

For Member Secretary, SEIAA Kerala



