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### **Government of India** Ministry of Environment, Forest and Climate Change (Issued by the State Environment Impact Assessment Authority(SEIAA), Kerala)

To,

The Business O.S. GRANITES

Sajeev Kumar E, S/o Sankara Nair M, Meluveetil House, Mekkattyppadam, Trikkur P.O. Thrissur - 680306 -680306

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam.

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/KL/MIN/171945/2020 dated 24 Mar 2022. The particulars of the environmental clearance granted to the project are as below.

EC23B001KL123467 1. EC Identification No. 1844/EC1/2020/SEIAA 2. File No.

3. **Project Type** New 4. Category B2

5. Project/Activity including 1(a) Mining of minerals Schedule No.

O S Granites 6. Name of Project 7. Name of Company/Organization O.S. GRANITES

Kerala 8. **Location of Project** 9. **TOR Date** N/A

The project details along with terms and conditions are appended herewith from page no 2 onwards.

(e-signed) Dr Rathan Ü kelkar IAS Date: 24/08/2023 **Member Secretary** SEIAA - (Kerala)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please guote identification number in all future correspondence.

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# PROCEEDINGS OF THE STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY – KERALA, THIRUVANANTHAPURAM

(Present: Dr.H.Nagesh Prabhu IFS (Retd), Chairman, Shri.K.Krishna Panicker, Member, Dr. Rathan U.Kelkar IAS, Member Secretary)

Sub: SEIAA - Environmental Clearance for the Granite Building Stone Quarry project of Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur - Granted – Orders issued.

### State Level Environment Impact Assessment Authority, Kerala

#### Proposal No. SIA/KL/MIN/171945/2020

File No. 1844/EC1/2020/SEIAA

Ref: 1.Application from Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites received on 24.03.2022.

- 2. Minutes of the 144<sup>th</sup> SEAC meeting held on 6<sup>th</sup> to 8<sup>th</sup> June 2023.
- 3. Minutes of the  $129^{th}$  SEIAA meeting held on  $26^{th}$  &  $27^{th}$  July 2023
- 4. G.O(Rt.) No.29/2019/Envt dt.12.04.2019.

## **ENVIRONMENTAL CLEARANCE NO. 137/Q/2023**

Sri. Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur, submitted an application for Environmental Clearance via PARIVESH, for the Granite Building Stone Quarry for an area of 0.9905 Ha at Re-Survey No. 244 in Puthucode Village, Alathur Taluk, Palakkkad, Kerala. The project details are as follows:

SL.No.	Particulars	Details
1	Name of the	Granite Building Stone Quarry Project of Sri. Sajeev Kumar.E,
	Project	Managing Partner, M/s O.S Granites

2	Proposed Activity	Mining of Granite Building Stone Quarry
3	Name of the Sector & Schedule No. (in the EIA Notification, 2006)	Non Coal Mining, Activity 1(a), Category B2
4	Name & Address of the Project Proponent	Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur
5	Project Location  a) Re-Survey No:	244
	b) Village	Puthucode
	c) Taluk	Alathur
	d) District	Palakkad
6	Geo Co-ordinates	Latitude (N): 10° 38' 34.64"N to 10° 38' 37.55"N Longitude (E): 76° 25' 39.42"E to 76° 25' 44.08"E
7	Extent (in Hectare)	0.9905
8	Project Cost	2,75,00,000 ₹
9	Production capacity	2,20,600 m <sup>3</sup>
10	Date of Field Inspection	27.09.2023

# **CER Details**

Financial Year	CER Activities	Project Cost
2021 2022	Coord Daws Warranda Dattala	Capital Coast
2021-2023	Grama Deepam Vayanasala, Pattola Supply of books and Magazine especially	Rs 250,000

	which improves the education and academics of students in the Puthucode Panchayath.  Total coast for supplying different kind books of famous authors is Rs 100,000, Coast for supplying different kinds of news papers, weeklies, monthly and annual periodic is Rs 51,000 for two years. 6 Nos Library Table with Chair(6 Packs)@ Rs 16,500 each	
2023-2026	Maintenance charge of Rs 5000/- per anum	Recurring Cost Rs 15,000
2021-2023	Primary Health Centre, Chanthappura Supply and installation of water treatment plant with capacity of 8 to 10 KLD including material and labour cost.	Capital Cost Rs 3,00,000
2023-2026	Maintenance charge of Rs 10,000/- per anum	Recurring Cost Rs 30,000
2021-2023	Sarvajana Higher Secondary School, Puthucode Supply of 5 Laptops and 1 Projector with screen for Smart class room. Laptop – Acer Extensa 15 Lightweight, 11th Gen, Intel core i3 processor with 15.6" Full HD Display, 8 GB RAM, 256 GB ROM and Intel UHD Graphics worth Rs 35,000. Projector – Ebson EB01 XGA 3300 lumens project with HDMI port worth Rs 45,000	Capital Cost Rs 2,30,000
2023-2026	Maintenance charge of Rs 5000/- per anum	Recurring cost Rs 15,000
2021-2023	Construction of Compound wall – 300 meter length and 2 meter hight. Earth work excavation 38.88 m3 @ 295.14 total Rs 11475.04, RR masonry with hard stone in foundation and plinth including material & labour 38.88 m3 7160 total Rs 2,78,380.80, Centering and shuttering for plinth belt 57.6 sqm @ 645.78 total Rs 37,196.93, Plinth Belt concreting including material & labour 5.76	Capital Coast Rs 9,00,000

	m2 @ 0021 26 total 56 620 62 Strail	
	m3 @ 9831.36 total 56,628.63, Steel reinforcement for RCC work 288 kg @ 97.69	
	total 28,134.72, Super structure work with	
	solid block (30x20x15 cm size) including	
	material & labour 53.28 m3 @ 6961.01 total	
	Rs 3,70,882.61, One side cement plastering	
	12mm plaster with 1:6 cement and sand 384	
	sqm @ 297.42 Total Rs 1,14,209.28. LS for	
	contingency Rs 3091.98	
	Contingency R8 3071.76	Recurring Cost
2023-2026	Maintenance charge of Rs 20,000/- per anum	Rs 60,000
2023-2020	Supply of Furniture for Class Room and	Capital Cost Rs
2021-2023	Office. 10 Nos Wooden Table @ Rs 8500	-
2021-2025		3,60,000
	each, 10 Nos Long Desk & Bench @ Rs	
	16,000 each, 3 Nos Library Table with	
	Chair (6 Packs) @ Rs 16,500 each, 10 Nos	
	Wooden Chair @ Rs 4500 each, 2 Nos	
	Wooden Rack @ Rs 9000 each	Dogumin - Cost
2022 2026	Maintanana ahazza af Da 10 000/	Recurring Cost
2023-2026	Maintenance charge of Rs 10,000/- per anum	Rs 30,000
2021-2023	Laksham Veedu Colony, Thachanadi	Capital Cost
	Installation of Rainwater Harvesting Tank (29	Rs 400,000
	m3 size, capacity of 29000 Ltr water) for the	
	provision of Safe and Sustainable drinking	
	water. Earth work excavation 64.06 m3 @	
	295.14 total Rs 18,907.85, PCC work	
	includes material and labour 2.29 m3 @	
	6772.66 total Rs 15,495.85, RCC works	
	includes labour and material 15.69 m3 @	
	10,334.17 Total Rs 1,62,284.46,	
	Reinforcement for RCC work 1430 Kg @	
	97.69 Total Rs 1,39,696.70, Centering and	
	Shuttering for wall 70.84 m2 @ 712.76 Total	
	Rs 50,491.92, Centering and Shuttering for	
	top slab 16.20 m2 @ 810.70 Total Rs	
	13,133.34,	
		D C
2022 2027	Maintanana aharra af Da 15 000/	Recurring Cost
2023-2026	Maintenance charge of Rs 15,000/- per anum	Rs 45,000

		Capital Cost
2021-2023	Narayana UP School, Manapadam Supply and Installation of Fans and Lights in Class Room.10 Nos of Atomberg Renesa 1200 mm BLDC Motor ceiling Fan worth Rs 3300/-, V Guard Prime 1450 (1200 va 840w) Pure Sine Wave Inverter with 150 Ach Battery worth Rs 22,000, Lights and other fittings worth Rs 5000/	Rs 60,000
2023-2026	Maintenance charge of Rs 5,000/- per anum	Recurring Cost Rs 15,000
2021-2023	Taluk Headquarters Hospital, Alathur. Supply of Hospital and Medical equipment's for surgical ward, 14 Nos Medical Coat @ Rs 9000 each, 14 Nos Bed & Pillow @Rs 4000 each, 8 Nos IV Stand @ Rs 2700 each, 5 Nos Medicine Trolly @ Rs 8000 each, 14 Nos Bed Side locker @ Rs 4800 Each, 14 Nos Stool @ Rs 2400 each.	Capital Cost Rs 3,60,000
2023-2026	Maintenance charge of Rs 10,000/- per anum	Recurring Cost Rs 30,000
2021-2023	Supply of Water Purifier, Television and Sealing fan to Hospital Wards. Kent Supreme Plus RO+UV Water Purifier worth Rs 16,000, LG 32" HD Ready Smart LED TV worth Rs 18,000/- and Atomberg Renesa 1200 mm BLDC Motor ceiling Fan worth Rs 3300/-	Capital Coast Rs 1,40,000
2023-2026	Maintenance charge of Rs 10,000/- per anum	Recurring Cost Rs 30,000
2021-2023	Modification of Bathroom and Dressing room of Taluke Hospital, White vitreous china pedestral type water closet and fittings 4 nos @ 7089 total Rs 28,356, Material and labour cost for laying Cermaic glazed floor tiles of size 300x300 mm 250 sqm @ 1084 total Rs 2,71,000, Material & labour cost for fixing wall tiles 60 sqm @ 1205 total Rs 72,300. Providing and fixing wash basin 550x400 mm size 5 nos @ 3382 total Rs 16,910. Supply	Capital Cost Rs 2,00,000

	faucet, paper holder, (4 nos each)towel rod 5 nos, tap 9 nos, PVC pipes & fittings, total cost Rs 50,850.52	
		Recurring Cost
2023-2026	Maintenance charge of Rs 10,000/- per anum	Rs 30,000

### **EMP Details**

Environment Monitoring			
Activity	Capital Cost (Rs)	Recurring cost per year (Rs)	
a. Air Pollution Control - Dust Collector, Water sprinkler, Polythene sheet	Rs. 2,00,000/-	Rs. ,100,000/-	
b. Water Pollution Control - Garland Drains, Water storage Tank, Waste Tank, Check Dams, Silt traps	Rs. 3,30,000/-	Rs. 1,50,000/-	
c. Green Belt Development Including cost of afforestation - Saplings, Plant Guard including cost of Landscaping	Rs. 3,50,000/-	Rs. 50,000/-	
d. Solid Waste Management & Domestic Effluent management - Dumping Yard retaining wall, Sewage Treatment	Rs. 3,50,000/-	Rs. 60,000/-	
e. Occupational Health and Safety - Helmet, Mask, Hand Gloves, Mining Safety Shoes	Rs. 1,00,000/-		
f. Reclamation/Rehabilitation of Mined out Area - Saplings, Plant Guard including cost of Landscaping	Rs. 2,00,000/-	Rs. 50, 000/-	
TOTAL COST OF EMP	Rs. 15,00,000/-	Rs. 4,10,000/-	

2. In the 144<sup>th</sup> SEAC meeting, the Committee observed that the proposal is to extract granite building stone of 2,20,600 MT, average annual production is 55,750 TPA and life of mine is 5 years. The depth to watertable is reported as 20 m below ground level and the nearest

habitation is 305m. As per the report of the Wildlife Warden, the Peafowl Wild life Sanctuary is at 8.6 Km NE and Peechi Vazhani is 6.1 KM SW side of the area. The project proponent has submitted the proof of application submitted to SCNBWL for Wildlife Clearance. The area does not fall in any landslide hazard zone. The presentation was done in the 136<sup>th</sup> meeting and field inspection was conducted on 27.09.22. Based on discussions, the Committee recommended EC for a mine life of 5 years subject to certain Specific Conditions in addition to the General Conditions.

- 3. In the 129<sup>th</sup> SEIAA meeting, the Authority decided to issue Environmental Clearance for the project life of 5 (five) years, for the quantity mentioned in the approved Mining Plan, subject to the following Specific Conditions in addition to the General Conditions.
  - **i.** The proponent shall not carry out any miming operation before getting clearance from SCNBWL as per OM dated 17<sup>th</sup> May 2022 of MOEF&CC as directed in H'ble Supreme Court order dated 26.4. 2023.
  - **ii.** The Project Proponent shall carry out quarrying as per the approved Mining Plan and the Specific Conditions mentioned hereafter. The Project Proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.
  - **iii.** The EC shall be valid from the date of execution of permit/lease from the Department of Mining and Geology. The copy of the lease order should be provided to the SEIAA before commencing the mining activity.
  - **iv.** The drain water quality should be monitored regularly by a NABL-accredited lab and clear water should be flowed into the natural stream. Geotagged photographs of the drainage and sampling site should be submitted along with HYCR.
  - **v.** Overburden should be stored at the designed place and gabbion wall should be provided for the topsoil and overburden storage sites
  - vi. Haulage Road should be developed prior to the commencement of mining.
  - vii. Environment Management Cell (EMC) should include an expert in environmental management.

- viii. Adequate energy conservation measures should be implemented including solar power installations. At least 40% of the energy requirement should be met from the solar power.
- **ix.** Make boundary fencing for demarcating proposed quarry site and submit the geo-tagged photos.
- **x.** Consent letter from the neighboring land owner for taking water from his abandoned quarry pit.
- **xi.** Development of green belt should be initiated prior to the commencement of mining using indigenous species.
- **xii.** Drainage system incorporating garland canal, silt traps, siltation pond and outflow channel connecting to a natural drain should be provided prior to the commencement of mining. Channel way should be developed as per the plan submitted for over flow water from the siltation pond to the natural stream.
- **xiii.** Garland drain, silt-traps, siltation ponds and outflow channel should be desilted periodically and geo-tagged photographs of the process should be included in the half-yearly compliance report (HYCR).
- **xiv.** CER Plan should be implemented within the first 2 years and it should be operated and maintained till the mine closure plan is implemented.
- **xv.** Transportation of mined material should not be done during the peak hours in the forenoon (8.00am to 10.00am) and afternoon (3.30pm to 5 pm).
- **xvi.** Adequate sanitation, waste management and rest room facilities should be provided to the workers.
- **xvii.** Adequate number of avenue trees of indigenous species should be planted along both sides of the haulage road.
- **xviii.** If the abandoned quarry located near to the site belong to project proponent, he/she shall carry out final closure plan within 6 months as per the approved mine closure plan and submit the progress of the closure activities along with the HYCR.
- **xix.** Adequate measures are to be taken to harvest the rainwater as per the guidelines issued by the Central Groundwater Authority
- **xx.** Blasting mats should be used during rock blasting to contain the blast, prevent fly rocks and suppress dust.

- xxi. As per OM no F.No.22-65/2017-IA.III dated 30<sup>th</sup> September 2020, under Corporate Environmental Responsibility (CER) the Project Proponent should implement the Environment Management Plan (EMP)/CER as directed by SEAC during appraisal, covering the issues to address the environmental problems in the project region, from the beginning of the project, indicating both physical and financial targets year wise. The EMP/CER shall be implemented in consultation with Local Self Govt. Institutions. A copy of the approved EMP/CER shall be made available to the concerned Panchayat for information and implementation support. The indicated cost for implementation of CER activities shall be 2% of the project cost.
- **xxii.** In the wake of occurrence of large scale landslides in the state, as per the information provided by the Department of Mining & Geology, it is directed to use only NONEL (Non Electrical) technology for blasting to reduce the vibration of the ground, which is one of the causative factors that triggers landslides, formation of cracks in the surrounding buildings and disturbance to human and wildlife.
- **xxiii.** As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16<sup>th</sup> January 2020 issued by MoEF&CC, in obedience to the directions of the Hon'ble Supreme Court the Project Proponent shall, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. The compliance of this direction shall be included in the Half Yearly Compliance Report which will be monitored by SEAC at regular intervals.
- **xxiv.** The violation of EC condition may lead to cancellation of EC and action under The Environment (Protection) Act 1986.
- 4. Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the Granite Building Stone Quarry Project of Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur, for an area of 0.9905 Ha at Re-Survey No. 244 in Puthucode Village, Alathur Taluk, Palakkkad, Kerala for the project life of 5 (five) years, for the quantity mentioned in the approved Mining Plan, from the date of execution of mine lease /

permit, subject to the Specific Conditions in Para 3 above, and 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 Project Proponent will deemed to be a part of this Proceedings as if incorporated herein. Also the General Conditions for projects stipulated for mining (items 1 to 57), mentioned below will be applicable and have to be strictly adhered to.

- 5. The Environmental 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. The above undertakings and conditions and the undertakings of the Mining Plan in (Mining), (Blasting), (Mines Drainage), (Stacking of Mineral rejects and Disposal of waste), (Environment Management Plan) & (Progressive Mine Closure Plan) as submitted will be deemed to be part of this Proceedings as conditions as undertaken by the Project Proponent, as if incorporated herein.
- 6. Validity of the Environmental Clearance will be initially for a period of **Five (5) years** from the date of execution of valid mine lease / permit from Mining & Geology Department as per SO 1807(E) dated 12.04.2022 of MoEF & CC, subject to earlier review of EC in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.
- 7. Compliance with 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, Forest & Climate Change, 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, Palakkad
- 8. The Half Yearly Compliance Report (HYCRs) with name of the project, EC No. and date, the period of submission with its contents, compliance report and environmental monitoring data & covering letter have to be uploaded in the Parivesh Portal as O.M. F.No.IA3-22/1/2022-IA-III(E)-17264 dated 14.06.2022 and the website of the Project Proponent. Hardcopy of HYCRs shall not be acceptable.

**9.** The given address for correspondence with the authorised signatory of the project is Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur.

#### **GENERAL CONDITIONS**

- 1. 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.
- 2. All the statutory clearances should be obtained, as applicable, by the project proponent from the respective competent authorities including that for blasting and storage of explosives. Copies of all statutory clearances shall be submitted along with First Half Yearly Compliance Report.
- 3. The project proponent should advertise in news papers that the project has been accorded Environmental Clearance and copies of clearance letters are available in the Office of State Environment Impact Assessment Authority (SEIAA) and on the website of the Authority at <a href="www.seiaakerala.in">www.seiaakerala.in</a>. The advertisement should be in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language. The advertisement should be made within 10 days from the date of receipt of the Environmental Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- 4. The proponent shall send a copy of the EC 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 uploaded on the website of the company.
- 5. The lease area shall be fenced with barbed wire to a minimum height of 4ft around, before starting mining. All the boundary indicators (boards, markings, etc) shall be conspicuous and maintained at all times.
- 6. 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 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.
- 7. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department. Mats to reduce fly rock blasts to a maximum of 10 PPV should be provided.
- 8. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged stipulated by Explosive Department.
- Access roads to the quarry shall be black topped to contain dust emissions
  that may arise during transportation of materials. The transportation of
  minerals should be done in covered trucks to contain dust emissions.
- 10. A separate Environmental Management Cell (EMC) with suitable qualified personnel should be set-up under the chairmanship of a Senior Executive, who will report directly to the Head of the Organization. The Cell should have representative of Biodiversity Management Committee of the Panchayath and a representative of NGO, if any active in the area. The EMC should meet at least once in six months and review the activities and minutes should be a part of the compliance report.
- 11. Quarrying has to be carried out as per approved mining plan with the suggestions from SEAC incorporated and following KMMC rules 2015 and the Amendments thereby.
- 12. The quarrying operation (blasting) shall be restricted between 7 AM and 5PM
- 13. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- 14. Maximum depth of mining shall be as per the mining plan and as per specific direction of SEAC after field inspection. The maximum depth of mining should not be deeper than the local ground water table. No mining operations should be carried out at places having a slope greater than 45°.
- 15. The height of any bench shall not exceed five meters and breadth shall not be less than the height.

- 16. The Project proponent shall ensure that no perennial or intermittent natural water course and/or water resources are 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.
- 17. A minimum buffer distance specified as per existing rules and statutory orders shall be maintained from the boundary of the quarry to the nearest dwelling unit or other structures, and from forest boundaries or any other ecologically sensitive and archeologically important areas or the specific distance specified by SEIAA in EC as per the recommendations of SEAC depending on specific local conditions.
- 18. The proponent should plant seedlings at least 5 times of the loss of trees that has occurred while clearing the land for the project and follow planting measures as suggested by SEAC. Suitable avenue trees should be planted along the sides of the approach road and internal roads and open parking areas, if any. Preference should be given to endemic native and fruit bearing species. Planting in buffer areas should be taken up beforehand. Proper upkeep and maintenance of planted seedlings shall be ensured by the project proponent.
- 19. The proponent should ensure that the vegetation in the buffer is retained, maintained and strengthened with additions of native broad leaved plants.
- 20. Eco-restoration including the closure of mine as per the progressive closure plan and final closure plan shall be done at the cost of the project proponent. This eco-restoration should follow scientific standards available for restoration, full recovery of the original vegetation and improving the resilience of different ecosystems. Overburden materials should be managed within the site and used for reclamation of mined pit as per mine closure plan / specific conditions.
- 21. 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 suitable indigenous plant species, if no other specific condition on reclamation of pit is stipulated in the E.C. Monitoring and management of rehabilitated areas should continue until the

- vegetation becomes self-sustaining.
- 22. Control measures on noise and vibration prescribed by KSPCB should be implemented. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
- 23. Periodical monitoring of the vibration at specified location (preferably at a distance of 50 m and 100 m) to be conducted and records kept for inspection.

  This could also form a part of the compliance reports.
- 24. Speed of trucks entering or leaving the mine site is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
- 25. Acoustic enclosures should be 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 standard limit indicated by CPCB/KSPCB.
- 26. Blasting should be done in a controlled manner using NONEL technique as specified by the regulations of Petroleum and explosive safety organization (GOI) or any other concerned authorized agency. A licensed person should supervise/ control the blasting operations.
- 27. Measures should be taken for maintaining noise levels below 85 dBA in the work environment.
- 28. Project proponent should obtain necessary prior permission of the competent authorities for drawing requisite quantity of surface water and ground water for the project.
- 29. 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 compliance reports to SEIAA.
- 30. 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, and for green belt development etc. The drains shall be regularly desilted and maintained properly, particularly after monsoon.

- 31. Regular monitoring of ground water level and quality shall be carried out around the mine area during mining operation. If any stage ,if it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
- 32. Garland drains and silt traps are to be provided in the slopes around the core area to channelize storm water. De-silting of Garland canal and silt traps have to be attended on a daily basis. A labour has to be specifically assigned for the purpose. The proponent shall ensure the quality of the discharging storm water as per the General Effluent Discharge Standards of CPCB.
- 33. 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 the E.C was issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority. In the case of transfer of ECs, the matter shall be intimated and get the approval from the Authority as per the existing norms.
- 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 top soil, if any, shall be temporarily stored at earmarked place (s) and 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 at 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. At critical points, use of geo textile shall be undertaken for stabilization of the dump. Protective wall or gabions should be made around the dump to prevent erosion / flow of sediments during rains. The entire excavated area shall be backfilled.
- 36. All the mining equipment used in Mining like backhoe loaders and

- excavators cause pollution and hence shall be serviced regularly & maintained for their efficient functioning and for reducing pollution. Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- 37. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution checking centre. Washing of all vehicles shall be inside the lease area.
- 38. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution such as haul road, loading and unloading points and transfer points and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub>. 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.
- 39. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement at project site, parking area, on haul roads, loading and unloading and at transport points should be provided and properly maintained.
- 40. Corporate Environmental Responsibilities (CER) as prescribed by SEIAA/SEAC should be carried out leading to Environmental stability of the Project region. The activities carried out under CER should be a part of the half yearly compliance report. The certificates from the beneficiaries, if the CER part is completed should also be submitted to the State Environment Impact Assessment Authority (SEIAA) along with year wise expenditure.
- 41. The project proponent is responsible for implementing all the provisions of labour laws applicable from time to time to quarrying /Mining operations. The workers on the site should be provided with on-site accommodation or facilities at a suitable boarding place, protective equipment such as ear muffs, helmet, etc.
- 42. The proponent has to provide insurance protection to the workers in the case of existing mining or provide the affidavit in case of fresh lease before execution of mining lease.
- 43. Occupational health surveillance program of the workers should be

- undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed. The report of health surveillance programme should be included in the half yearly compliance reports.
- 44. The pits in the abandoned quarries and in the mined area shall be used for activities like water harvesting, aqua culture etc. in an eco friendly manner.
- 45. If Government land is partly or fully used for mining, the area shall be returned at the end of lease period after mine closure with separate demarcation with suitable survey marks.
- Any accident occurring in the mined out area after the lease period due to negligence in carrying out safety measures and non-closure, will lead to suspension of all EC obtained for mining by the Proponent.
- 47. In case of transfer of EC the matter shall be intimated and approval from the Authority shall be obtained as per the existing norms.
- 48. The proponent shall submit Half Yearly Compliance Reports (1<sup>st</sup> of June & 1<sup>st</sup> of December) 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 be simultaneously sent to the respective Regional Office of Ministry of Environment, Forests and Climate Change, Govt. of India and also to the Office of State Environment Impact Assessment Authority (SEIAA). The proponent has to submit Environmental statement in form V of Environment (Protection) Rules 1986 to SPCB on 31<sup>st</sup>March every year.
- 49. The project authorities should extend full cooperation to the officer (s) from the Regional Office of MOEF & CC located at Bangalore/SEAC/SPCB/CPCB/dept of Mining and Geology, while monitoring compliance of the stipulated conditions, by furnishing the requisite data/information/monitoring reports.
- 50. 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.

- 51. 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.
- 52. The EC given will be withdrawn at any time if the area is declared high hazardous by the SDMA.
- 53. The Environmental Clearance will be subject to the final order of the courts on any pending litigation related to the land or project, in any court of law.
- 54. 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.
- 55. 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.
- 56. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or any of the above conditions. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environmental protection.
- As per regulation no. 106(2) of metalliferous mines regulation under Mine act, the height of any bench shall not exceed six meters and breadth shall not be less than the height.

Sd/-

Administrator, SEIAA For Member Secretary, SEIAA

To,

Sri.Sajeev Kumar.E, Managing Partner, M/s O.S Granites, Room No. III/269, Chirammel House, Thrikkur P. O., Thrissur

### Copy to,

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.(through e-mail: rosz.bng-mefcc@gov.in)
- 2. The Additional Chief Secretary to Government, Environment Department, Government of Kerala
- 3. IGF (WL), MoEF&CC, Delhi
- 4. Chief Wildlife Warden, Kerala Forest & Wildlife Department
- 5. The Director, Directorate of Environment & Climate Change, 4th Floor KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala 695001.
- 6. The District Collector, Palakkad
- 7. The Director, Mining & Geology, Thiruvananthapuram -4.
- 8. The Member Secretary, Kerala State Pollution Control Board
- 9. The District Geologist, Palakkad
- 10. The Tahsildhar, Alathur Taluk, Palakkad
- 11. The Secretary, Puthucode Grama Panchayath, Palakkad
- 12. The Chairman, SEIAA.
- 13. Website.
- 14.S/f
- 15.O/c