COMPLIANCE REPORT

October 2022 - March 2023

COCHIN GRANITES PULICKAL ASSOCIAT ES

(Quarry Project)

ERNAKULAM DISTRICT KERALA

CGPA

COCHIN GRANITES PULICKAL ASSOCIATES

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DHO KURUVILLA

inaging Partner

Date.29-06-2023

To.

The Additional Principal Chief Conservator of Forests (C) Ministry of Environment, Forests & Climate Change, 4th Floor, E& F Wing, Kendriya Sadan, Koramangala, Bangalore - 560034

Sub.:- Environmental Clearance - Quarry project at Survey Nos. 283 and others at Mazhuvanoor Village and Sy. No. 284/1-2,284/1-3 and others at Arkapady Village Ernakulam District, Kerala-Compliance report - Second half reg.

Ref.1. File No. 1392/EC2/2019/SEIAAA dt. 11-10-2022

EC Identification No. EC22B001KL180424 dt. 11-10-2022 Ref.2.

Ref.3. Proposal No. SIA/KL/MIN/144152/2020 dt. 20-02-2020

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 8.7668 ha. by EC Identification No. EC22B001KL180424 dt. 11-10-2022 by State En ironmental Impact Assessment Authority, Kerala. The half yearly compliance report for the period of October 2022 - March 2023 to the specific and general conditions of the Environment Clearance order is enclosed. The quarry project is not in operation during the period of October 2022 - March 2023 due to the expiry of earlier mining lease in March 2022 and the new mining lease for the extend of 8.7668 ha. accorded the EC approval, has not yet been registered.

Thanking you. Yours respectfully, For M/s Cochin Granites Pulickal Associates

For Cochin Granites Pulickal Associates

Eldho Kuruvilla

Managing Partner

Managing Partner

Copy to:-The Member Secretary State Environment Impact Assessment Authority (SEIAA), Thiruvananthapuram, Kerala.

Encl: - As Above

Factory Location: Cheenikuzhy, North Mazhuvannoor P.O, Perumbavoor, Ernakulam Dist., Kerala, Pin: 686 689

COMPLIANCE REPORT

TO

THE CONDITIONS

OF

EC22B001KL180424

File NO. 1392/EC2/2019/SEIAA

BY

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA)

FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

Survey Nos. 283, 282/3-1,282/3-3pt at Mazhuvanoor Village and Sy. No. 284/1-2, 284/1-3, 284/2-2Pt., 284/2-3pt., 285/4, 283/2-5-2, 283/2-3-2, 282/1-3-1-2 at Arkapady Village

ERNAKULAM DISTRICT, KERALA

BY

M/S COCHIN GRNITES PULICKAL ASSOCIATES

ERNAKULAM DISTRICT

KERALA

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INTRODUCTION

M/s Cochin Granites Pulickal Associates quarry project is situated at survey no. 283 and others at Mazhuvanoor Village and Sy. No.284/1-2, 284/1-3 and others at Arkapady Village, Ernakulam District, Kerala. The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority vide file number 45/SEIAA/KL/7166/2012 dt 15.03.2013 for an area of 4.898.

Later, the project proponent has applied for expansion of existing project in February 2020 at SEIAA for an area of **8.7668** ha. After conducting EIA and public hearing, the project proponent has obtained Environmental Clearance vide EC Identification No. EC22B001KL180424 and file No. 1392/EC2/2019/SEIAAA dt. 11/10/2022.

The half yearly compliance report needs to be submitted as part of EIA notification, 2006 by the project proponent. The compliance report to the specific conditions and general conditions of the Environmental Clearance for the period of **October 2022 – March 2023** is being submitted.

The quarry project was not in operation this reporting period of October 2022 to March 2023 due to the expiry of mine lease issued by Directorate of mining and Geology, Kerala. The project proponent has submitted application for lease for an area of 8.7668 ha. and the same is under consideration of the Department of Mining and Geology.

COMPLIANCE REPORT
(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	The proponent shall carry out quarrying as per the approved	Noted for
	Mining Plan and the proponent should strictly follow the Kerala	compliance
	Minor Mineral Concession Rules 2015 and amendments thereby.	

The quarry project is yet to start, the application for lease is under consideration of Department of Mining and Geology. The proponent will carry out quarrying as per the approved Mining Plan and follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.

02	The EC shall be valid from the date of execution of permit/lease	Noted	for
	from the Department of Mining and Geology. The copy of the	complia	nce
	lease order should be provided to the SEIAA before commencing		
	the mining activity.		

The application for lease is under active consideration of Department of Mining and Geology. The copy of lease order will be submitted at SEIAA by the PP before commencing the mining activity.

(03	The EC issued will be subject to a review by SEAC after 5 years	Noted for
		through filed verification to ensure that mining is carried out	compliance
		sustainably as per the EC conditions.	

The PP will scrupulously follow the EC conditions stipulated in the EC order.

04	Green belt development in the buffer should be done in the first	Being
	year of the project itself and it should be nurtured and maintained	complied
	in subsequent years	

The PP started to plant various tree saplings at the buffer zone of 7.5 meters in the first five year of the project. The PP will deploy labors to nurture and maintain. The geotagged photograph of the planted saplings is attached as **Plate No.1**.

05	The garland canal, silt traps, siltation pond and outflow channel	Being
	should be provided considering the entire project area prior to the	complied
	commencement of mining.	

The project proponent has constructed silt traps and siltation pond and over flow channel in the project site. The garland canal is will be constructed for storm water management.

06	The garland drain along with silt traps, siltation tank and outflow	Noted for
	channel should be desilted and cleaned periodically and	compliance
	geotagged photographs should be incorporated in the Half Yearly	
	Compliance Report.	

As part of surface runoff management, the PP will employ labours for periodic desilt and cleaning of garland drain along with silt traps, siltation tank and outflow channel. The Geotagged photograph of the same will be submitted along with Half Yearly Compliance Report.

07	7	The impact of vibration due to blasting on the nearest houses and	Noted for
		built structures should be monitored in terms of peak particle	compliance
		velocity and amplitude for maximum charge per delay and	
		included in the Half Yearly Compliance Report.	

The PP will conduct a blasting study to assess the impact of vibration due to blasting on the nearest houses and build structures. The study report will be submitted at SEIAA along with Half Yearly Compliance Report (HYCR).

08	3	Compensatory afforestation should be done with indigenous fruit	Noted	for
		trees and the geotagged photographs of the afforested place	complia	nce
		should be submitted along with HYCR. The activity should be		
		commenced before the start of quarrying operations. The PP		
		committed planting of native trees @ 1:5 for every tree cut from		
		the project area.		

The compensatory afforestation will be done with indigenous fruit trees and the geotagged photographs of the afforested place will be submitted along with HYCR. These activity will be started before commencing mining activity.

0	9	Transportation of mined material should not be done during the	Noted for	
		peak hours in the forenoon (8.00am to 10.00am) and afternoon	compliance	
		(3.30pm to 5 pm).		

The transportation will be restricted as per the condition during the operational period.

10	Measures incorporated in the CER should be implemented in total Noted for				
	during the first two years and they should be operated and	compliance			
	maintained during the subsequent years till the mine closure plan				
	is implemented in total.				

The CER will be implemented in the first two year after execution of mining lease. The maintenance of activity done under CER till the mine closure plan.

11	As there are two more working quarries working within 500 Mts.	Noted	for			
	distance from the project site, all the mitigation plans suggested in	complian	ıce			
	the Environmental Management Plan derived based on the EIA					
	should be implemented for the entire area in consultation with					
	other project proponents. An Environmental Monitoring Cell					
	quarry owners and the compliance of this direction shall be					
	included in the HYCR.					

The PP will be implemented the all mitigations plans and Environment Management Plan mentioned in the EIA report for the entire area. An Environmental Monitoring Cell will be constituted for the for the entire area by incorporating all the quarry owners and the compliance of this direction will be included in the next compliance report. Discussions in connection with the constitution of EMC has been started with other quarry owners.

12	All the concerns expressed during the Public Consultation	Noted for
	process should be addressed without fail and it has to be	compliance
	mentioned in the half yearly compliance report.	

The concerns expressed by the public during public consultation will be addressed without fail. The activities suggested will be implemented and incorporated in the HYCR.

13	As per OM no F.No.22-65/2017-IA.III dated 30th September	Noted	for
	2020, under Corporate Environmental Responsibility (CER) the	complia	nce
	project Proponent shall prepare an Environment Management		
	Plan (EMP) as directed by SEAC during appraisal, covering the		
	issues to address the environmental problems in the project		
	region, indicating both physical and financial targets year wise.		
	The EMP shall be implemented in consultation with local self		
	Govt. Institutions. The indicated cost for CER shall be 2% of the		
	project cost depending upon the nature of activities proposed.		
	The follow up action on implementation of CER shall be included		
	in the Half Yearly Compliance Report which will be subjected to		
	field inspection at regular intervals. A copy of the approved EMP		
	shall be made available to the concerned Panchayat for		
	information and implementation support.		

The mining operation is yet to start in the instant project site. The PP will be implemented the CER activities committed during the appraisal of the project. The activities proposed and the activities performed will be updated in the HYCR.

14	In the wake of occurrence of large scale landslides in the state, as	Noted for
	per the information provided by the Department of Mining &	compliance
	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.	

The project proponent will use NONEL technology for blasting to reduce the ground vibration. All blasting will be conducted under the supervision of qualified persons to avoid any untoward incidents.

15	Blasting mats should be used during rock blasting to contain the	Noted for	
	blast, prevent fly rocks and suppress dust.	compliance	

To prevent fly rocks and suppress dust, blasting mat will be used during blasting in the mine lease area.

16	16 Authority noticed including this quarry, there will be five quarries				
	covering about 22 Ha area within 500 m radius. There are many	complia	nce		
	crushers also working in this area. Combined impact of quarries				
	and crushers on the environment is to be studied in detail and an				
	environment management plan has to be prepared for treating				
	the whole area. The Project Proponent will take the responsibility				
	of preparing EMP with the support of other quarry owners for				
	treating the whole area, through a recognized and other quarry				
	owners will share the cost involved in preparation of EMP. The				
	EMP shall be approved by SEAC. All the quarry owners will carry				
	out the activities proposed in the EMP in their respective quarries				
	and meet the expenditure. All the quarry owners shall mention the				
	action taken to implement the EMP activities in their respective				
	half yearly compliance report.				

The project proponent is in discussion with other quarry owners to constitute an Environment Monitoring Cell including all quarry owners in the vicinity of 500 meter from the periphery of instant quarry project. The EMP suggested has approved by SEAC and SEIAA. The activities in the EMP plan will be implemented and the action taken report will be mention in the HYCR.

17	As per the directions contained in the OM F.No.22-34/2018-IA.III Noted for				
	dated 16th January 2020 issued by MoEF&CC, in obedience to compliance				
	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.

The mining activity is yet to start. The PP will undertake the restoration activities with stacked OB and topsoil in the mine lease area after extraction of minerals. A progressive mine closure plan will be implanted by which growth of fodder, flora, fauna can be assured.

Ī	18	The violation of EC condition may lead to cancellation of EC and	Noted for	r
		action under The Environment (Protection) Act 1986.	compliance	Э

The PP will be implemented all conditions stipulated in the EC order.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART - B - GENERAL CONDITIONS

01	The proponent should provide notarized affidavit (indicating the Complied						
	number and date of Environmental Clearance proceedings) that						
	all the conditions stipulated in the EC shall be scrupulously						
	followed.						

The PP has submitted a notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed at SEIAA. The copy of the same is attached as **Annexure No.1.**

02	All the statutory clearances should be obtained, as applicable, by	Complied				
	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.					

The PP has obtained all statutory clearances except the mining lease from Department of Mining and Geology. The details of statutory clearances are provided in the below table and attached as **Annexure from 2 to 6.**

SI. No	Clearances	Issuing Aut	hority	Issue date
01	Environmental Clearance	SEIAA		11-10-2022
02	Consent for Operation	KSPCB		04-11-2022
03	Explosive License	PESO		02-08-2022
04	Panchayat License	Grama	Panchayat	16-12-2022
		(Mazhuvano	oor)	
05	Panchayat License	Grama	Panchayat	18-01-2023
		(Vengola)		

03	The project proponent should advertise in newspapers that the	Complied
	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 www.seiaakerala.in. 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.	

The PP has published an advertisement in two local newspaper widely circulated in the region within the stipulated time, one of which was in the Malayalam language. The copy of EC signed in all pages has been submitted at SEIAA. The Copy of the same is attached as **Annexure No. 7.**

0	4	The proponent shall send a copy of the EC to concerned Grama	Complied
		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.	

The project proponent has submitted a copy of EC at Mazhuvanoor and Vengola Grama Panchayat. The copy of the same is attached as Annexure.No.5 & 6. The Environmental Clearance has been uploaded in the website of the company.

05	The lease area shall be fenced with barbed wire to a minimum	Complied
	height of 4ft around, before starting mining. All the boundary	
	indicators (boards, markings, etc) shall be conspicuous and	
	maintained at all times.	

The PP has installed fencing around the proposed mine lease area. The latitude and longitude and boundary pillar number has been marked on all boundary pillars. This will be maintained at all time. In addition to this sign boards will be installed. The photograph of fencing is attached as **Plate No.2**.

06	The details of Environmental Clearance should be prominently	Complied
	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.	

The details of Environmental has been 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 will be installed soon. The Photograph of the EC boars is attached as **Plate No.3**.

07	Explosives should be stored in magazines in isolated place	Will be
	specified and approved by the Explosives Department. Mats to	Complied
	reduce fly rock blasts to a maximum of 10 PPV should be	
	provided.	

The Explosive will be stored in magazine in isolated place. The PP has obtained explosive license and the same is attached as Annexure. Blasting mat will be used to prevent fly rock.

80	Warning alarms indicating the time of blasting (to be done at	Will be
	specific timings) has to be arranged stipulated by Explosive	Complied
	Department.	

The PP has installed warning alarm in the project site to provide warning to the public and labours that the blasting is going to happen. The blasting time is also displayed in the board.

09	Access roads to the quarry shall be black topped to contain dust	Complied
	emissions that may arise during transportation of materials. The	
	transportation of minerals should be done in covered trucks to	
	contain dust emissions.	

The PP has tarred and tiled the access road to reduce the dust emission from the road during transportation of vehicle. The transportation of minerals will be done in covered tricks to contain dust emissions.

10	A separate Environmental Management Cell (EMC) with suitable	Will be
	qualified personnel should be set-up under the chairmanship of a	Complied
	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.	

The PP will be constituted a separate Environment Monitoring Cell. An invitation will be given to the representative of Biodiversity Management Committee of the Panchayath to become a part of the EMC. The EMC will convene meetings once in six months to review the activities and the minutes of the same will be a part of the HYCR.

11	Quarrying has to be carried out as per approved mining plan with	Will be
	the suggestions from SEAC incorporated and following KMMC	Complied
	rules 2015 and the Amendments thereby.	

The mining will be carried out as per the approved mining plan. The KMMC rules 2015 and the Amendments, suggestions from SEAC will be incorporated and follow in the mining activity.

12	2	Quarrying has to be carried out as per approved mining plan with	Will be	
		the suggestions from SEAC incorporated and following KMMC	Complied	
		rules 2015 and the Amendments thereby.		

The mining activity is yet to start. The PP will conduct the extraction if minerals as per the approved mining plan with the suggestion from SEAC. KMMCR and subsequent amendment will be followed for the mining.

13	Rain Water Harvesting facility should be installed as per the	Complied
	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.	

The PP has developed a rain water harvesting pond. The water from rain water will be used for dust suppression mechanism, crushing, gardening etc.

14	Maximum depth of mining shall be as per the mining plan and as	Will be
	per specific direction of SEAC after field inspection. The	Complied
	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°.	

As per the direction of SEAC, the project proponent has reduced the depth of mining, prepared the mining plan accordingly and got approval from the department of Mining and Geology. The maximum depth of mine will not go deeper than the local ground water table.

15	The height of any bench shall not exceed five meters and breadth	Will	be
	shall not be less than the height.	Complie	d

The height of any bench would not exceed five meters and breadth would not be less than the height. The mining will be done as per the approved mining plan.

16	The Project proponent shall ensure that no perennial or	Will be
	intermittent natural water course and/or water resources are	Complied
	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.	

There is no perennial or intermittent natural water course and/or water resources in the project site. The project proponent will construct necessary drainages for storm water management.

17	A minimum buffer distance specified as per existing rules and	Complied
	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.	

The project proponent has left adequate buffer distance from nearest dwelling units, forest boundaries, ecologically sensitive and archeologically important areas. The distance toward various features is being abide by the project proponent.

18	The proponent should plant seedlings at least 5 times of the loss	Being
	of trees that has occurred while clearing the land for the project	Complied
	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.

The project proponent has started to plant various tree saplings in the project site. An area for compensatory plantation as identified. The PP has deployed labours fir the upkeep and maintenance of the planted seedlings.

19	The proponent should ensure that the vegetation in the buffer is	Will be
	retained, maintained and strengthened with additions of native	Complied
	broadleaved plants.	

The project proponent has started planting of saplings in the buffer zone around the mine lease area. The existing vegetation at the 7.5 meter buffer zone will be maintained.

20	Eco-restoration including the closure of mine as per the	Will be
	progressive closure plan and final closure plan shall be done at	Complied
	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.	

The overburden removed from the project site during its operational period will be staked in a designated place and will be used for eco restoration in the mined out area. Theis will be done at the own cost of the project proponent. The available scientific standard will be followed.

21	At least 10 percent out of the total excavated pit area should be	Will be
	retained as water storage areas and the remaining area should	Complied
	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.

The PP will retain 10 percent if the total excavated pit area as water storage area and the remaining area will be reclaimed with staked dumping of Overburden and top soil and planted with suitable indigenous plant species. Monitoring and management of rehabilitated areas will be continued until the vegetation becomes self-sustaining.

22	Control measures on noise and vibration prescribed by KSPCB	Will be	:
	should be implemented. Quarrying activities should be limited to	Complied	
	day time as per KSPCB guidelines/specific conditions.		

To reduce noise and vibration the project proponent will follow the measures prescribed below

- 1. NONEL technique will be used for blasting operation
- 2. Development of Green belt around the mine lease area
- 3. Work during day time only
- 4. Regular maintenance of machineries
- 5. Pattern of blasting hole will be based on study etc.,

23	Periodical monitoring of the vibration at specified location	Will be
	(preferably at a distance of 50 m and 100 m) to be conducted and	Complied
	records kept for inspection. This could also form a part of the	
	compliance reports.	

The PP will conduct a vibration study at specific location as mentioned in the conditions. This will be kept in office and marked in the Half Yearly Compliance Report.

24	4	Speed of trucks entering or leaving the mine site is to be limited	Will be	1
		to moderate speed of 25 kmph to prevent undue noise from	Complied	
		empty trucks.		

The Project proponent will restrict the speed of trucks entering and leaving the mine site to 25 kmph to prevent noise from empty truck.

25	Acoustic enclosures should be provided to reduce sound Complied
	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.

The Project proponent has a crusher unit in the project site. The crushing machineries are housed with solid bricks to reduce the noise from crusher. In addition to that the PP has planted tree saplings. The DG sets in the project site is hgaving acoustinc enclosures. The noise level at the project site will be regularly monitored by a approved laboratory.

26	Blasting should be done in a controlled manner using NONEL	Will be
	technique as specified by the regulations of Petroleum and	Complied
	explosive safety organization (GOI) or any other concerned	
	authorized agency. A licensed person should supervise/ control	
	the blasting operations.	

The project proponent has appointed a qualified mines manger to supervise and monitor the blasting and extraction of minerals. The blasting will be done by NONEL.

27	Measures should be taken for maintaining noise levels below 85	Will be	
	dBA in the work environment.	Complied	

To reduce noise and vibration the project proponent will follow the measures prescribed below

- 1. NONEL technique will be used for blasting operation
- 2. Development of Green belt around the mine lease area
- 3. Work during day time only
- 4. Regular maintenance of machineries
- 5. Pattern of blasting hole will be based on study etc.,

- 6. Ear plug will be provided for labours
- 7. Closed cabin will be provided to the vehicles

28	Project proponent should obtain necessary prior permission of	Noted
	the competent authorities for drawing requisite quantity of surface	
	water and ground water for the project.	

Since the project are is in safe zone as per the CGWA, it is not necessary to take permission from the competent authorities for drawing surface water and ground water. The Project proponent has developed rain water harvesting pond in the project site for the use of crushing and other activities.

29	Regular monitoring of flow rates and water quality upstream and	Noted
	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.	

There is no springs and perennial nallahs flowing in and around the mine lease area. The rain water will be constructed and natural drain will be maintained for free flow of the surface runoff.

30	Catch drains and siltation ponds of appropriate size shall be	Will be
	constructed around the mine working, mineral and OB dumps, to	Complied
	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.	

The project proponent has constructed catch drain and siltation ponds in the project site. The PP is intending to construct more such infrastructure for de siltation process. The stored rain water will be used for suppression of dust, green belt development, crushing activities etc. The drain and settling ponds will be regularly desilted.

31	Regular monitoring of ground water level and quality shall be	Will be
	carried out around the mine area during mining operation. If any	Complied
	stage, if it is observed that ground water table is getting depleted	
	due to the mining activity; necessary corrective measures shall	
	be carried out.	

The PP has identified an observation well to monitor the ground water level. The water quality will be monitored by an approved laboratory. , if it is observed that ground water table is getting depleted due to the mining activity; necessary corrective measures will be carried out.

32	Garland drains and silt traps are to be provided in the slopes	Will be
	around the core area to channelize storm water. De-silting of	Complied
	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.	

The PP will be provided garland drains and silt traps in the slopes around the core area to channelize storm water. A labour will be deployed to desilt the garland drain, settling pond, de siltation traps etc. The PP will ensure clear water is letting out from the project site with the standard prescribed by the CPCB.

33	In the case of any change(s) in the scope of the project, extent,	Will be
	quantity, process of mining technology involved or in any way	Complied
	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.	

The PP will apply for fresh EC, if the PP wants to change the scope of the project in terms of extent, production etc. There is no plan to transfer the EC and scope of the project at present.

34	The stipulations by Statutory Authorities under different Acts and	Will be
	Notifications should be complied with, including the provisions of	Complied
	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.	

All stipulations and provisions under different Acts and Notification in connection mining sector will be followed.

35	The top soil, if any, shall be temporarily stored at earmarked	Will be
	place (s) and used for land reclamation and plantation. The over	Complied
	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.	

The PP will dump the OB and topsoil at earmarked area and it will be used for reclamation of the mined out area. The dumping will be in a scientific manner to prevent any type of sliding. The slope, height, width of dump will be as per the condition mentioned above. To stabilize the dump and to prevent sliding the PP will use geotextile, plant grass and other floral species and construct retaining walls.

36	All the mining equipment used in Mining like backhoe loaders and	Will be
	excavators cause pollution and hence shall be serviced regularly	Complied
	& maintained for their efficient functioning and for reducing	
	pollution. Disposal of spent oil from diesel engines should be as	
	specified under relevant Rules/ Regulations.	

The PP will regularly do the maintenance work of all machineries to reduce pollution, and efficient functioning. Disposal of spent oil will be done as per relevant rules and regulations.

37	All vehicles used for transportation and within the mines shall	Will be	
	have 'PUC' certificate from authorized pollution checking center.	Complied	
	Washing of all vehicles shall be inside the lease area.		

The all vehicles used for transpiration of materials will have PUC from authorized pollution checking center. The washing of the vehicle will be inside the lease area.

38	Effective safeguard measures such as regular water sprinkling	Will be
	shall be carried out in critical areas prone to air pollution such as	Complied
	haul road, loading and unloading points and transfer points and	
	having high levels of PM10 and PM2.5. 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.	

To reduce air pollution, the PP will do 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 PM10 and PM2.5. 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	Will be
	regularly. Water spraying arrangement at project site, parking	Complied

area, on haul roads, loading and unloading and at transport points should be provided and properly maintained.

The PP has installed permanent sprinklers along the road side, mist spray system near to the crushing area, and deployed a vehicle as mobile sprinkling unit to suppress the dust emission from the mine lease area and other critical area in the project site. During mine operation the project will increase the number of such system if it is needed.

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.

The mining operation is yet to start. The PP will implement activities committed under CER. The year wise expenditure will mentioned in the Half Yearly Compliance Report. This CER activities will be executed during the operation of mining.

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.

The project proponent will provide adequate personal protective equipment for the safety of labours. In addition to that, food, shelter first aid facility will be provided by the project proponent.

42	The proponent has to provide insurance protection to the workers	Will be	,
	in the case of existing mining or provide the affidavit in case of	Complied	
	fresh lease before execution of mining lease.		

The insurance protection will be provided for labours working in the mining area.

43	Occupational health surveillance program of the workers should	Will be
	be undertaken periodically to observe any contractions due to	Complied
	exposure to dust and take corrective measures, if needed. The	
	report of health surveillance programme should be included in the	
	half yearly compliance reports.	

To know the health status of each labours working in the mine lease area, the PP will conduct Occupational health surveillance program of the workers in association with health service providers. The medical report will be part of the half yearly compliance report.

44	The pits in the abandoned quarries and in the mined area shall	Will be
	be used for activities like water harvesting, aqua culture etc. in an	Complied
	eco friendly manner.	

The has been using the mined out area as rain water harvesting pond and aqua culture.

4	5	If Government land is partly or fully used for mining, the area	No Go	vt.
		shall be returned at the end of lease period after mine closure	Land	
		with separate demarcation with suitable survey marks	involved	

The instant project, extract the minerals from privet own land . There is no Govt. Land included in the EC obtained area.

46	Any accident occurring in the mined out area after the lease	Noted
	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.	

The will implement all safety measures in the project site. The condition is noted.

47	In case of transfer of EC the matter shall be intimated and	Will be	
	approval from the Authority shall be obtained as per the existing	Complied	
	norms.		

At present there is no plan for transfer of EC. The PP will inform the SEIAA in case the PP wants to transfer the EC and get its approvals to do the same.

48	The proponent shall submit Half Yearly Compliance Reports	Complied
	(1stof June & 1stof 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 31stMarch	
	every year.	
	1	

The PP will submit half yearly compliance report in time at 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 same will be uploaded in the website of the PP. The PP will submit from V to SPCB in the end of March of every year.

49	The project authorities should extend full cooperation to the	Will be
	officer (s) from the Regional Office of MOEF & CC located at	Complied
	Bangalore/SEAC/SPCB/CPCB/dept of Mining and Geology, while	
	monitoring compliance of the stipulated conditions, by furnishing	
	the requisite data/information/monitoring reports.	

The project proponent will 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	Noted
	the contrary, in consistent, or simplified, contained in any other	
	permit, license on consent given by any other authority for the	
	same project.	

The PP will give importance to the conditions stipulated in the EC to be implemented.

51	The Authority reserves the right to add additional safeguard	Noted
	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.	

The PP will implement, if the additional conditions is being imposed by the authority.

52	The EC given will be withdrawn at any time if the area is declared	Noted
	high hazardous by the SDMA.	

The condition is noted and agreed to comply.

Ī	53	The Environmental Clearance will be subject to the final order of	Noted
		the courts on any pending litigation related to the land or project,	
		in any court of law.	

There are no pending cases against the land at any court. The court order in connection with instant project will be abide by the PP.

54	Any appeal against this Environmental Clearance shall lie with	Noted
	the National Green Tribunal, if preferred, within a period of 30	

days as prescribed	lunder	Section	16 of	the	National	Green
Tribunal Act, 2010.						

There is no appeal against the Environmental Clearance at NGT till date.

55	Concealing the factual data or submission of false/fabricated data	Noted
	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.	

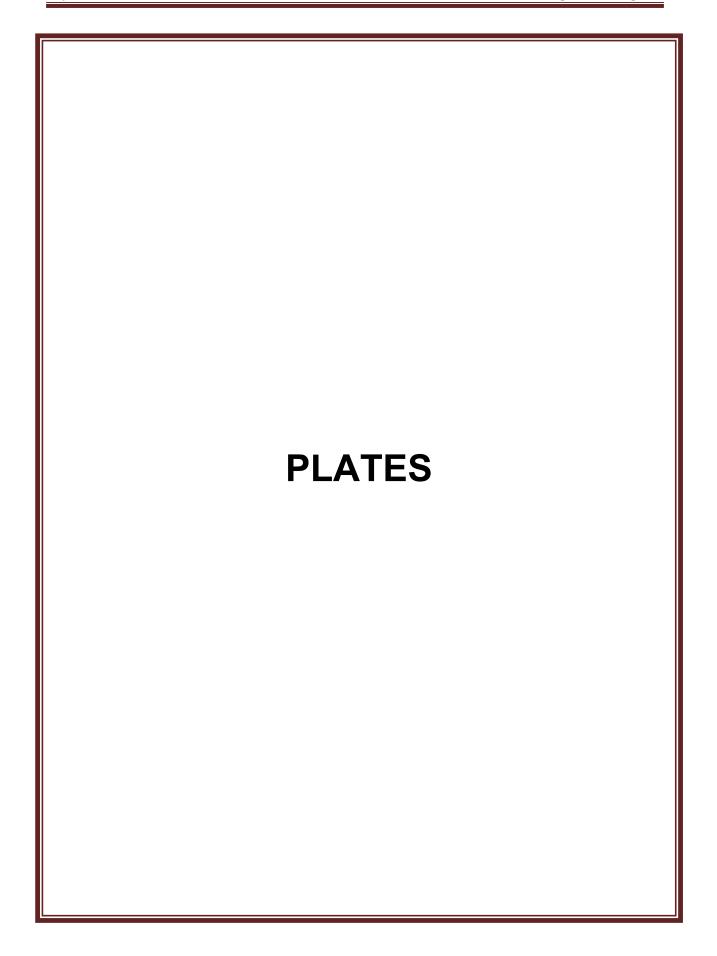
The PP did not conceal any fact to obtain Environmental Clearance. All data submitted at Authority is factual.

56	The SEIAA may revoke or suspend the order, for non-	Noted				
	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.					

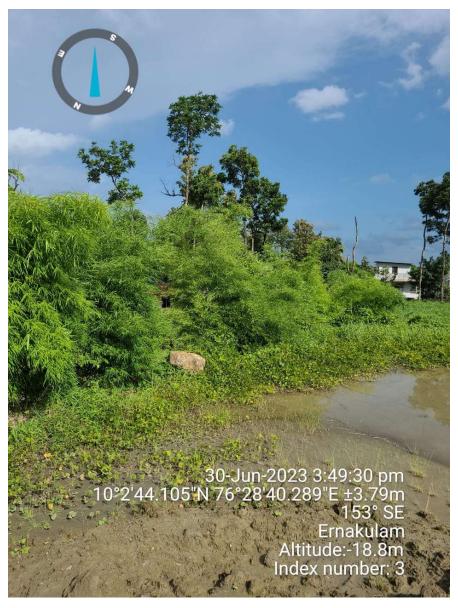
The PP will implement all conditions stipulated in the EC. The right of the SEIAA on alter / modify the conditions stipulated in the EC is noted.

57	As per regulation no. 106(2) of metalliferous mines regulation	Will be
	under Mine act, the height of any bench shall not exceed six	Complied
	meters and breadth shall not be less than the height.	

The Project proponent will extract the mineral by creating benches in tune with the relevant rules and guidelines.

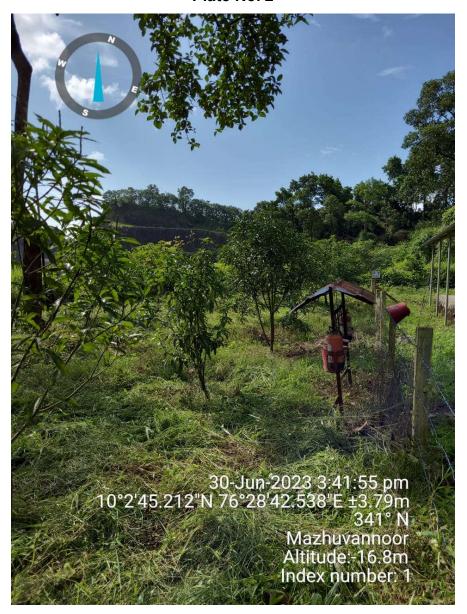






Saplings Planted

Plate No. 2



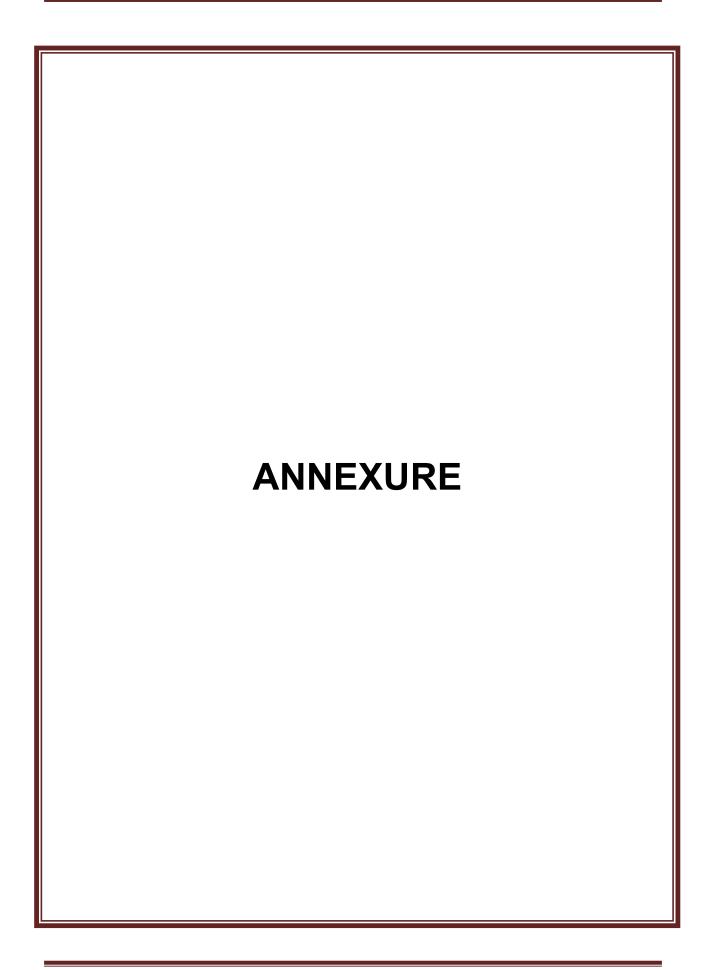
Fencing provided around the lease area

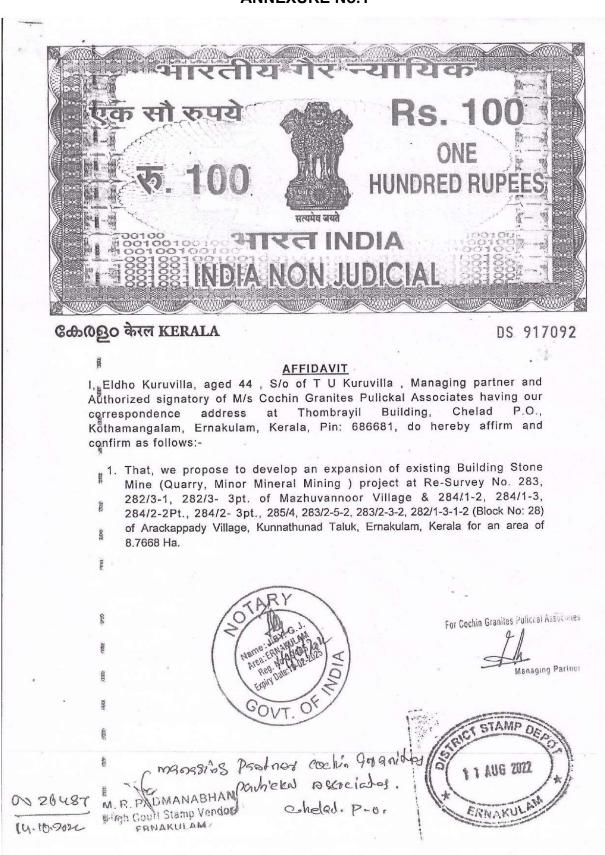
Plate No. 3

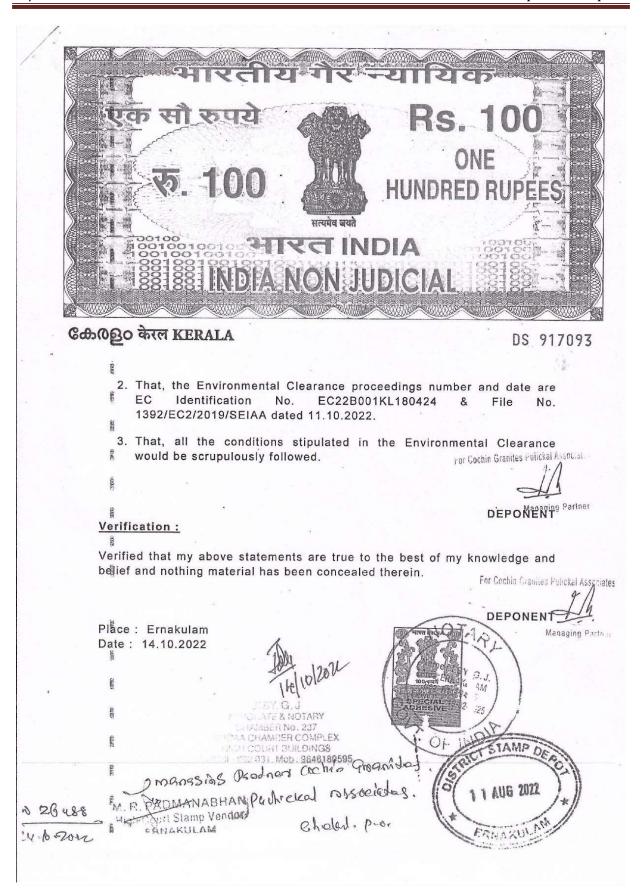




EC board







Copy of Affidavit



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. V. Venu IAS, Member Secretary)

Sub: SEIAA - Environmental Clearance for the Granite Building Stone Quarry Project of Sri. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates, Thombrayil Building, Chelad P.O., Kothamangalam, Ernakulam, Kerala. - Granted - Orders issued.

State Level Environment Impact Assessment Authority, Kerala

Proposal No. SIA/KL/MIN/144152/2020

File No. 1392/EC2/2019/SEIAA

- Ref: 1. Application from Sri. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates received on 20/02/2020.
 - 2. Minutes of the 130th meeting of the SEAC held from 4th to 06th July, 2022.
 - 3. Minutes of the 117th SEIAA meeting held on 30th & 31st August 2022.
 - 4 G.O (Rt.) No.29/2019/Envt dt.12.04.2019.

ENVIRONMENTAL CLEARANCE NO. 163/Q/2022

Sri. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates, Thombrayil Building, Chelad P.O., Kothamangalam, Ernakulam, Kerala., submitted an application for Environmental Clearance *via* PARIVESH on 20/02/2020 for the Granite Building Stone Quarry Project for an area of 8.7668 Ha. in Re-Survey Nos. 283, 282/3-1, 282/3- 3pt. of Mazhuvannoor Village & in Re Survey Nos. 284/1-2, 284/1-3, 284/2-2Pt., 284/2- 3pt., 285/4, 283/2-5-2, 283/2-3-2, 282/1-3-1-2 (Block No: 28) of Arackappady Village, Kunnathunad Taluk, Ernakulam, Kerala. The project details are as follows:

EC Identification No. - EC22B001KL180424 File No. - 1392/EC2/2019/SEIAA Date of Issue EC - 11/10/2022 Page 2 of 18

ENVIRONMENTAL CLEARANCE

Pro-Active and Responsive Facilitation by Interactive, Virtuous Environmental Single-Window Hub



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

Τo,

The MANAGING PARTNER COCHIN GRANITES PULICKAL ASSOCIATES THOMBRAYIL BUILDING, CHELAD P.O., KOTHAMANGALAM, ERNAKULAM, KERALA-686682 -686682

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/144152/2020 dated 22 May 2020. The particulars of the environmental clearance granted to the project are as below.

EC22B001KL180424 1. EC Identification No. 1392/EC2/2019/SEIAA 2. File No. 3. **Project Type** Expansion 4. Category B₂

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

Tine Protects Name of Project Expansion of Existing Building Stone Mine (quarry) project of M/s Cochin Granites Pulickal Associates at Survey Nos. 283, 282/3-1, 282/3-3pt of Mazhuvannoor Village and Survey Nos. 284/1-2, 284/1-3, 2

COCHIN GRANITES PULICKAL Name of Company/Organization **ASSOCIATES**

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

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

(e-signed) Dr. Venu V IAS Date: 11/10/2022 Member Secretary SEIAA - (Kerala)



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

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SL. No.	Particulars	Details		
1	Name of the	Granite Building Stone Quarry Project of Sri. Eldho Kuruvilla,		
	Project	Managing Partner, M/s Cochin Granites Pulickal Associates,		
2	Proposed Activity	Mining of Granite Building Stone		
3	Name of the Sector	Non Coal mining,		
	& Schedule No. (in	Activity 1(a), Category B2		
	the EIA			
	Notification, 2006)			
4	Name & Address	Sri. Eldho Kuruvilla,		
	of the Project	Managing Partner, M/s Cochin Granites Pulickal Associates,		
	Proponent	Thombrayil Building,		
		Chelad P.O.,		
		Kothamangalam,		
		Ernakulam, Kerala		
	Project Location			
	a) Re-Survey	283, 282/3-1, 282/3- 3pt. of Mazhuvannoor Village &		
	Nos.	284/1-2, 284/1-3, 284/2-2Pt., 284/2-3pt., 285/4, 283/2-5-2,		
5		283/2-3-2, 282/1-3-1-2 (Block No: 28) of Arackappady		
]		Village		
	b) Revenue Village	Mazhuvannoor and Arackappady		
	c) Taluk	Kunnathunad		
	d) District	Ernakulam		
		Latitude 10°02'42.8" N to 10°02'57.4" N		
6	Geo Co-ordinates	Longitude 76°28'32.4" E to 76°28'44.7" E		
7	Extent (in	Total 8.7668 Ha.		
	Acre/Hectare)	7.2831Ha. (Mazhuvannoor Village)		
		1.4837 Ha (Arackappady Village)		
8	Project Cost	Rs. 14.22 Crores		
9	Production Details	4,50,000 TPA		
10	Water	5 KLD (1 KLD for domestic consumption; 2 KLD for dust		
	Requirement	suppression and 2 KLD for green belt development).		
11	Date of Field	5-7-2021		
	Inspection			

EC Identification No. - EC22B001KL180424 File No. - 1392/EC2/2019/SEIAA Date of Issue EC - 11/10/2022 Page 3 of 18

CER Details

Sl. No.	Particulars	Amount	
	a. Revival of Cheenikuzhi Pond		
1.	b. Well Recharge (50 wells) - Rain Water Harvesting	D 40 I 11	
	c. Renewable energy (5 kWp solar plant, on grid and 20 solar lights)	Rs. 40 Lakhs	

- 2. In the 130th meeting of the SEAC, the Committee examined the proposal, discussed the field inspection report and evaluated the additional documents submitted by the proponent including the latest Mining Plan on 09.03.2022. The proponent revised the Mining Plan as per the observation made by the SEAC and accordingly the revised estimate of mineable reserve is 23, 14, 378 MT and the revised Life of Mine is 10 years. The Committee recommended the EC with a validity of 10 years subject to review by SEAC after 5 years through filed verification to ensure that mining is carried out sustainably as per the EC conditions, with certain Specific Conditions in addition to General Conditions.
- 3. In the 117th SEIAA Meeting, the Authority decided to issue Environmental Clearance initially for a period of 5 years, for the quantity mentioned in the approved mining plan and then to extend the EC period to cover the project life of 10 years, from the date of issuance of original EC, subject to the review by SEAC at the end of five years, to verify whether the Project Proponent has violated any of the EC conditions and thereby caused any damage to the environment in the project region by violating EC conditions.

The EC is subject to General Conditions and the following Additional Specific Conditions.

1. The proponent shall carry out quarrying as per the approved Mining Plan and the proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.

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- 2. 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.
- 3. The EC issued will be subject to a review by SEAC after 5 years through filed verification to ensure that mining is carried out sustainably as per the EC conditions.
- 4. Green belt development in the buffer should be done in the first year of the project itself and it should be nurtured and maintained in subsequent years
- 5. The garland canal, silt traps, siltation pond and outflow channel should be provided considering the entire project area prior to the commencement of mining.
- 6. The garland drain along with silt traps, siltation tank and outflow channel should be desilted and cleaned periodically and geotagged photographs should be incorporated in the Half Yearly Compliance Report.
- 7. The impact of vibration due to blasting on the nearest houses and built structures should be monitored in terms of peak particle velocity and amplitude for maximum charge per delay and included in the Half Yearly Compliance Report.
- 8. Compensatory afforestation should be done with indigenous fruit trees and the geotagged photographs of the afforested place should be submitted along with HYCR. The activity should be commenced before the start of quarrying operations. The PP committed planting of native trees @ 1:5 for every tree cut from the project area.
- 9. 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).
- 10. Measures incorporated in the CER should be implemented in total during the first two years and they should be operated and maintained during the subsequent years till the mine closure plan is implemented in total.

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11. As there are two more working quarries working within 500 Mts. distance from the project site, all the mitigation plans suggested in the Environmental Management Plan derived based on the EIA should be implemented for the entire area in consultation with other project proponents. An Environmental Monitoring Cell should be constituted for the entire area by incorporating all the quarry owners and the compliance of this direction shall be included in the HYCR.

12. All the concerns expressed during the Public Consultation process should be addressed without fail and it has to be mentioned in the half yearly compliance report.

13. As per OM no F.No.22-65/2017-IA.III dated 30th September 2020, under Corporate Environmental Responsibility (CER) the project Proponent shall prepare an Environment Management Plan (EMP) as directed by SEAC during appraisal, covering the issues to address the environmental problems in the project region, indicating both physical and financial targets year wise. The EMP shall be implemented in consultation with local self Govt. Institutions. The indicated cost for CER shall be 2% of the project cost depending upon the nature of activities proposed. The follow up action on implementation of CER shall be included in the Half Yearly Compliance Report which will be subjected to field inspection at regular intervals. A copy of the approved EMP shall be made available to the concerned Panchayat for information and implementation support.

14. 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.

15. Blasting mats should be used during rock blasting to contain the blast, prevent fly rocks and suppress dust.

16. Authority noticed including this quarry, there will be five quarries covering about 22 Ha area within 500 m radius. There are many crushers also working in this area. Combined impact of quarries and crushers on the environment is to be studied in detail and an environment management plan has to be prepared for treating the whole area. The

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Project Proponent will take the responsibility of preparing EMP with the support of other quarry owners for treating the whole area, through a recognized and other quarry owners will share the cost involved in preparation of EMP. The EMP shall be approved by SEAC. All the quarry owners will carry out the activities proposed in the EMP in their respective quarries and meet the expenditure. All the quarry owners shall mention the action taken to implement the EMP activities in their respective half yearly compliance report.

17. As per the directions contained in the OM F.No.22-34/2018-IA.III dated 16th 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.

18. 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. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates, Thombrayil Building, Chelad P.O., Kothamangalam, Ernakulam, Kerala, for an area of 8.7668 Ha, in Re-Survey Nos. 283, 282/3-1, 282/3- 3pt. of Mazhuvannoor Village & Re Survey Nos. 284/1-2, 284/1-3, 284/2-2Pt., 284/2- 3pt., 285/4, 283/2-5-2, 283/2-3-2, 282/1-3-1-2 (Block No: 28) of Arackappady Village, Kunnathunad Taluk, Ernakulam, Kerala, initially for a period of 5 years from the date of execution of valid mining lease from the Department of Mining and Geology, as per SO 1807(E) dated 12.04.2022 of MoEF & CC, for the quantity mentioned in the approved Mining Plan, and to be extended to cover the project life of 10 years, from the date of issuance of original EC, subject to the review by SEAC at the end of five years, to verify whether the Project Proponent has violated any of the EC conditions and thereby caused any damage to the environment in the project region by violating EC conditions, 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

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submitted to SEIAA. The assurances and clarifications given by the proponent will be 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 the conditions and the undertakings in (Mining), (Blasting), (Mines Drainage), (Stacking of Mineral rejects and Disposal of waste), (Environment Management Plan) & (Progressive Mine Closure Plan) of the Mining Plan as submitted will be deemed to be part of this Proceedings as conditions as undertaken by the 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 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. The validity shall to extend to cover the project life of 10 years, as mentioned in para (4).
- 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, Ernakulam.
- 8. The Half Yearly Compliance Report (HYCRs) with its contents, covering letter, compliance report and environmental monitoring data have to be uploaded in the PARIVESH portal and the website of the Project Proponent. The HYCR with the name of the project, EC No and date & the period of submission should be sent to the Regional Office of MoEF & CC & to SEIAA by email only at email ID rosz.bng-mef@nic.in & seacseiaakerala@gmail.com, respectively. Hardcopy of HYCRs shall not be acceptable.

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9. The given address for correspondence with the authorised signatory of the project is Sri. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates, Thombrayil Building, Chelad P.O., Kothamangalam, Ernakulam, Kerala.

GENERAL CONDITIONS

- 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.
- 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 www.seiaakerala.in. 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

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- 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.
- 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.
- 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

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- 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

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- 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

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- safety organization (GOI) or any other concerned authorized agency. A licensed person should supervise/ control the blasting operations.
- 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

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- 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

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- levels of PM_{10} and $PM_{2.5}$. 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

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- be returned at the end of lease period after mine closure with separate demarcation with suitable survey marks.
- 46. 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 (1st of June & 1st 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 31stMarch 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

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- 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.
- 57. 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. Eldho Kuruvilla, Managing Partner, M/s Cochin Granites Pulickal Associates, Thombrayil Building, Chelad P.O., Kothamangalam, Ernakulam, Kerala

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Copy to,

- 1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th 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. The Director, Directorate of Environment & Climate Change, 4th Floor KSRTC Bus Terminal, Thampanoor, Thiruvananthapuram, Kerala- 695001.
- 4. The District Collector, Ernakulam.
- 5. The Director, Mining & Geology, Thiruvananthapuram -4.
- 6. The Member Secretary, Kerala State Pollution Control Board.
- 7. The District Geologist, Ernakulam.
- 8. The Tahsildhar, Kunnathunad Taluk, Ernakulam District.
- The Secretary, Mazhuvannur and Vengola Grama Panchayat, Kunnathunad Taluk, Ernakulam.
- 10. The Chairman, SEIAA.
- 11. Website.
- 12. S/f
- 13. O/c

Signature Not Verified
Digitally signed by Dr. Venu V IAS
Member Secretary
Date: 10/11/2022 3:38:57 PM

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Copy of Environmental Clearance



KERALA STATE POLLUTION CONTROL BOARD

FILE NO.: KSPCB/ER2/ICO/10013350/VAR/2022

Date of issue: 04-11-2022

CONSENT VARIATION ORDER

Consent No: KSPCB/ER2/ICO/10013350/VAR/2022

Valid upto: 30-09-2027

Ref:Consent no.R15ERNA-CTO-R-645328 dated 11.06.2018 valid up to 30.06.2023

The Integrated Consent to Operate issued as per reference above to M/s QUARRY OF COCHIN GRANITES PULICKAL ASSOCIATES , THOMBRAYIL BUILDING, CHELAD P.O , KOTHAMANGALAM, ERNAKULAM - 686681. (Represented by its Managing Partner, Shri. Eldho Kuruvilla) is hereby modified & issued to M/s QUARRY OF COCHIN GRANITES PULICKAL ASSOCIATES , THOMBRAYIL BUILDING, CHELAD P.O , KOTHAMANGALAM, ERNAKULAM - 686681. (Represented by its Managing Partner, Shri. Eldho Kuruvilla).

The consent(s)/ variation order(s) cited under reference are integral part of this consent variation order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

GENERAL CONDITIONS

1	Capital Investment	Rs.1422Lakh
2	Annual Fee	Rs.87,000/-
3	Fee remitted	Rs.4,50,000/-(Rs.15,000/- excess)
4	Land Area	8.7668На
5	Village	Arackappady,Mazhuvannoor
6	Sy. no.	283,282/3-1,282/3-3Pt,284/1-2,284/1-3,284/2-2 Pt,284/2-3 Pt,285/4,283/2-5-2,283/2-3-2,282/1-3-1- 2

SPECIFIC CONDITIONS

1.For renewal of the consent in case of continuance of discharge/operation of the industry, application in the prescribed form shall be submitted through the web portal of the Board for Online Consent Management & Monitoring system on or before 30.07.2027. Late application will be accepted with a fine or late fee as applicable.

2. This consent is issued based on the Judgement dated 25/10/2021 of the Hon'ble Supreme Court in CA No:6273/2021 and connected matters, Order dated 14/12/2021 of Hon'ble Supreme Court in MA.No:1904/2021, Judgement dated 10/11/2021 of Hon'ble High Court of Kerala in WP© 2773/2021 and Judgement dated 10/12/2021 of Hon'ble High Court of Kerala in WP© 27178/2021.

3. This consent is issued subject to any order that may be passed by the Honorable Supreme Court or the Hon'ble NGT in the connected matters.



SIGNATURE OF ISSUING AUTHORITY

CHIEF ENVIRONMENTAL ENGINEER

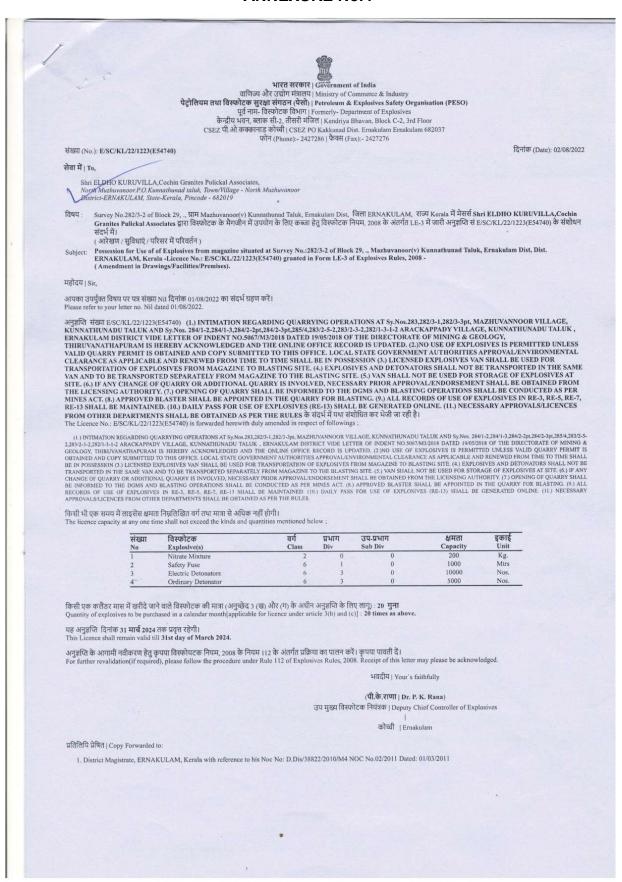
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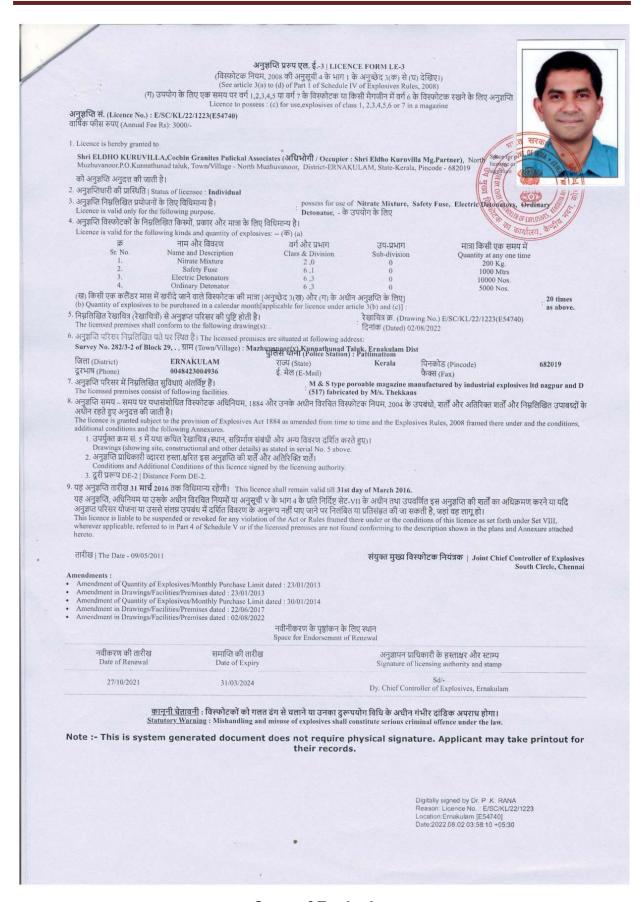
M/s QUARRY OF COCHIN GRANITES PULICKAL ASSOCIATES THOMBRAYIL BUILDING, CHELAD P.O , KOTHAMANGALAM, ERNAKULAM - 686681. (Represented by its Managing Partner, Shri. Eldho Kuruvilla)

E-Mail: eldhok@gmail.com Contact Number:9447707173,

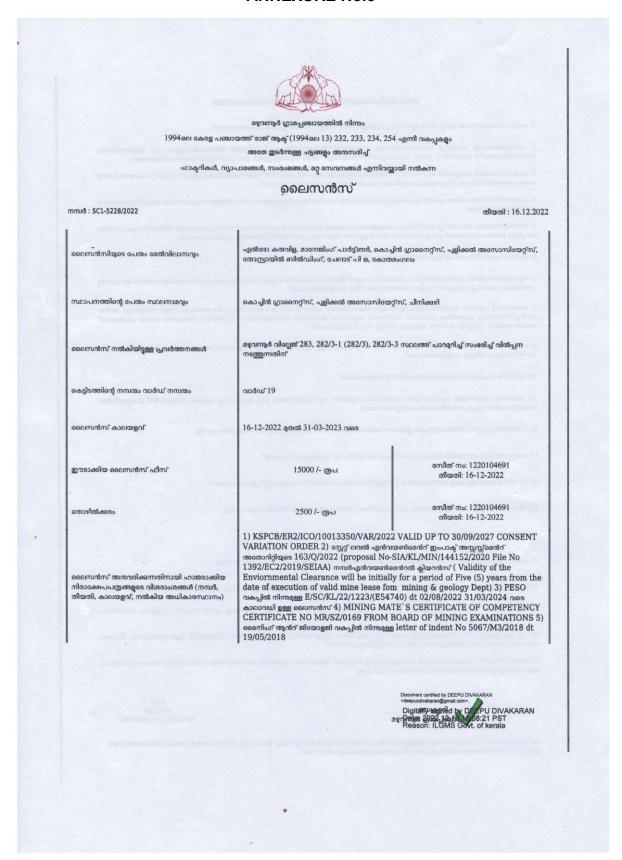
- 1. This digitally signed document is legally valid as per the Information Technology Act 2000
- 2. For verifying this document please go to www.keralapcbonline.com and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Phoenix website.

Copy of PCB Consent to Operate

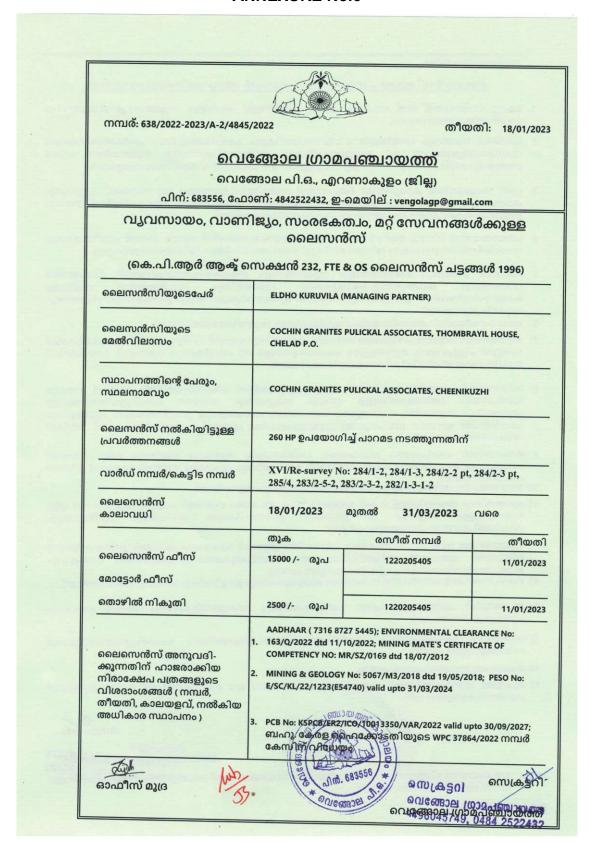




Copy of Explosive



Copy of Panchayat License from Mazhuvanoor



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Annexure No. 7.





Advt. in news paper