ENVIRONMENT CLEARANCE COMPLIANCE REPORT (OCTOBER 2018-MARCH 2019)

for

GRANITE BUILDING STONE QUARRY (Minor Mineral)

Extent: 0.7082 Ha. (1.7499 Acres)

At

Sy No.

156

Village

Puthur

Taluk

: Thalasery

District

Kannur

State

Kerala,

'Granite Building Stone Quarry of Mr. C.G. George.'

Compliance Status of the General Conditions for Mining Projects Laid down by the State Environment Impact Assessment Authority, Kerala vide their Environment Clearance No. 04/2018 dated 23/02/2018.

SPECIFIC CONDITIONS

Sl. No	Condition	Status of Compliance
1	A Mines Manager shall be appointed to control, direct, manage and supervise Quarrying Operations as required under the Mines Act 1952.	A Permit manager is appointed to supervise Quarrying Operations.
2	Health and welfare measures for the persons employed shall be implemented.	Health and welfare measures for the employees is being implemented.
3	Controlled blasting should be practiced, and blasting should be done only during day time. The mitigating measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.	All precautionary measures are adopted while blasting operations are carried out. I. No secondary blasting like Pop Shooting or Plaster Shooting are undertaken for breaking down large boulders, to avoid Air Blast and Fly Rocks. Only rock breakers will be used for breaking down bigger boulders. II. Additional precaution of controlled blasting with sand bags and wire mesh/blasting pads are used so that there are no fly rocks from the blast
4	Plantation shall be done which includes a green belt of adequate width around the Mining Lease area excluding the rocky area, along roads, overburden dumps and non-mineralized area by planting suitable native species in consultation with the local DFO/ Agriculture Department.	A green belt of a width of 7.5 mts has been made along the periphery of the Lease area by planting local species saplings. Plantation at other places will be undertaken in a phased manner after starting Quarrying operations.
5.	The drains should be regularly desilted and maintained properly. Check dams and gully checks shall be constructed wherever required to arrest siltation. De siltation shall also be done every year before the onset of monsoon.	All civil structures made for arresting silt will be de silted before onset of Monsoon.
6	Fencing must be maintained properly all around the lease area.	The entire lease area is fenced and is well maintained.

7	The CSR should cover the felt needs of the locality with special emphasize for implementing ground water recharging techniques in and at the vicinity of the proposed site.	CSR is projected keeping in mind the requirements of the locality. CSR have be carried out. Remaining will be undertaken in a phased manner shortly. (Photos are attached as Annexure-8)
8	Appropriate sign boards should be displayed	Signboards have been displayed. (Photos are attached as Annexure-4)
9	The blasting time must be displayed and strictly adhered to.	Blasting time is displayed. (Copy is attached as Annexure-4)
10	Dust suppression mechanism must be in place.	Water tankers with sprinklers are in use.
11	A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the bio diversity assessment, etc.	No rare and endemic species is present in the lease area.
12	The PPV values must be less than 10 mm/sec.	PPV values will be kept below 10 mm/sec.
13	The green belt shall be provided along the periphery.	Green belt of 7.5 mts width has been provided along the periphery of the lease.
14	Where the height of the bench formed during earlier workings exceeds the maximum reach of the excavator engaged for work, such bench height shall be reduced from top to bottom.	Height of benches will be maintained as specified in the approved Mining Plan.
15	Loose or hanging rock or mineral boulder on the side wall shall be dressed down before engaging persons for work at the bottom of the bench.	Benches will be properly dressed by excavators or by manual means.
16	Permanent boundary pillars should be fixed by the proponent before commencing quarrying.	Permanent boundary pillars have been fixed. (photos are attached as Annexure-5)
17	No quarry blasting to be undertaken and sustained till warning time limit expires and/or when continuous 48 hours rainfall exceeds 8cms and blasting shall not be resumed until 24hours of rain free situation arises in the quarry locality based on the evaluation by the revenue officials.	Agreed.
18	All waste dumps and top soil dumps shall be properly stabilized using coir mats or bio regeneration. Proper drainage system	Coir mats shall be used to cover waste dumps. Proper drainage

	shall be provided so that water is properly	system shall be provided so as to
	diverted away from the dumps slopes with	avoid destabilizing of dumps.
	no disturbance to the stability of the	
	slopes.	
19	All dump slopes shall be sufficiently	All dump slopes will be stabilized
	stabilized by using appropriate species mix	as specified.
	of grass, creepers, shrubs and trees. This	_
	shall be done in consultation with the	,
	Forest department and local research	
	institutes and experts I stabilization of	
	mine dumps.	
	Garland drains of at least 2 mts width shall	Garland drains of 2 mt width shall
	be provided all along 7.5 mts buffer zone to	be made in October 2018.
20	divert the water from entering the Quarry	
The second secon	slopes. These drains shall be cleaned every	
	year before the monsoon season	
21	The water from the garland drainage shall	Only clear natural water is let out
	be directed to the silt settling ponds. The	into the natural water course.
	clarified overflow from the silt settling	
	ponds shall be directed to a Rain Water	
	Harvesting (RWH) pond before releasing	
	the clarified water to the natural water	
	course.	
22	A retaining wall of stone rubble with wire	Will be constructed.
	(2 mt) shall be constructed at the bottom	
	of the slope of the Quarry lease to arrest	
	any likely mesh of sufficient width and	
	strength (not less than roll of boulders	
	during heavy rainfall.	

GENERAL CONDITIONS OF HEALTH

Sl. No	Conditions	Status of compliance
1	First Aid kit provided in the work site. It shall be periodically maintained properly. Some labourers shall be trained on First Aid.	First Aid kits are provided in the work site and key personnel will be trained to render first aid in case of emergencies.
2	Wholesome drinking water should be provided.	Wholesome potable drinking water is provided
3	Premises should be maintained as wet to suppress the dust.	Dust will be suppressed at the source.
4	Sanitary type of latrines and urinals should be provided.	Latrines and urinals are provided.
5.	Resting place to be provided for workers	Resting place is provided to workers. (photo of the resting place ia attached as Annexure 6)

6	'No Smoking' board should be exhibited according to COTPA act.	'No Smoking' board is exhibited. (Copy is attached as Annexure-4)
7	Work should not be done in night.	Work is done only during day light.
8	Details of nearest hospital, shortest route to hospital and contact no. etc. should be available	Emergency contact numbers of Key persons, Hospitals, police station, etc. is prominently displayed. (photo of the board is attached as Annexure-4)
9	Approach roads should be maintained properly	Approach roads are well maintained.

GENERAL CONDITIONS

Sl	Condition	Compliance Status
No	Condition	Comphance Status
1	Rainwater harvesting facility should be installed as per prevailing provisions of KMBR/KPBR, unless otherwise specified.	Not Applicable. No permanent structures constructed within Mining Lease.
2	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.	Environmental Monitoring Cell has been formed and is headed by Mr. C.G. George
3.	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including approach roads and internal roads.	Local species saplings procured from Forest department and planted before onset of monsoons.
4	Maximum Possible Solar Energy generation and utilization shall be ensured as an essential part of the Project.	Mine operates only during daylight hence there is no need for any additional lighting.
5	Sprinklers shall be installed and used in the Project Site to contain dust emissions.	Water tankers with sprinklers are in use.
6	Eco-restoration, including the Mine Closure Plan shall be done at the own cost of the Project Proponent.	Agreed.
7	At least 10 per cent of total excavated Pit area should be retained as water storage area and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly, if no other specific condition on reclamation of the Pit is stipulated in the EC.	Agreed.
8	Corporate Social Responsibility (CSR) agreed upon by the Proponent should be implemented.	CSR is projected keeping in mind the requirements of the locality. CSR have be carried out. Remaining will be undertaken in a phased manner shortly. (Photos are attached as Annexure-8)

9	The Lease area will be fenced off with barbed wires to a minimum height of 4 ft around, before starting of Mining. All the boundary indicators (boards, stores, markings, etc.) shall be protected at all times and shall be conspicuous. Warning alarms indicating the time of Blasting (to be done at specific timings) has to be arranged as per stipulations of the Explosives department.	Lease area is fenced off. Sign boards have been erected at prominent places. (Photos are attached as Annexure-5) Necessary precautions while blasting is taken.
11	Control measures on noise and vibrations prescribed by KSPCB should be implemented	Noise and vibrations are kept within KSPCB prescribed norms. I. Use of sharp drilling, delivery of compressed air at optimal pressure. II. Proper maintenance of compressor, drilling machine, jackhammers and tipper trucks. III. Regular monitoring of noise levels are being done within the core zone and the buffer zone of the mining lease area.
12	Quarrying activities should be limited to daytime as per KSPCB guidelines/specific conditions.	Quarrying activities limited to daytime.
13	Blasting should be done in a controlled manner as specified by the regulations of the Explosives department or any other agency.	Blasting is done in a controlled manner and is done technically as prescribed by the mining statutes. Only a small diameter drill holes of 33/48mm diameter with 25mm cartridges slurry/ emulsion explosive are used for blasting, no large diameter holes are proposed for blasting. With optimum blast design, effective blasting techniques with delay detonators and low charges per delay, carte has been taken to limit the blast vibrations and the PPV value below 10mm per second.
14	A licensed person should supervise/control the Blasting Operations	Blasting supervision and control is done by a Mining Official having DGMS Certificate.
15	Access road to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.	Access road to the Quarry is tarred.

within the site and used for reclamation of Mine Pit as per Mine closure Plan/specific conditions 17 Height of Benches should not exceed 5 M and width should not be less than 5 M, if there is no mention in the Mining Plan/specific conditions 18 Mats to reduce fly rock blast to a maximum of 10 PPV should be provided 19 Maximum depth of Mining from general ground level at site shall not exceed 10 m 20 No Mining operations should be carried out at places having a slope greater than 45° 21 Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow bricks envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB. The workers on the site should be provided with the required protective equipment such as ear muffs helmet, etc. 23 Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water. 24 The transportation of minerals should be done in covered trucks to contain dust emissions. 25 The proponent should plant trees at least 5 times the loss that has been occurred with elarifiers to be provised in the lower slopes around the core area to channelize storm water. 26 Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations. 27 Explosives should be stored in magazines in isolated place specified and approved by the Explosive Department. 28 A minimum buffer distance of 100 M from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided. 29 100 M buffer distance should be maintained from forest boundaries 4 Mining area is not located near any forest areas.	16	Overburden materials should be managed	Overhunden material is used for med
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	29	100 M buffer distance should be maintained	Mining area is not located near any
		from forest boundaries	

30	Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.	Consent from KSPCB under Air and Water Act(s) is obtained. (Copy of the consent is attached as Annexure-2)
31	All other statutory clearances should be	All statutory clearances obtained.
	obtained, as applicable, by project	The DGMS permission is under
	proponents from the respective competitive	process.
	authorities including that for blasting and	
22	storage of explosives.	, , , , , , , , , , , , , , , , , , , ,
32	In the case of any change(s) in the scope of	In case any change is required, a
	the Project, extent, quantity, process of mining technology involved or in any way	fresh appraisal will be submitted for
	affecting the environment	obtaining Approval from the
	parameters/impacts as assessed, based on	Authority.
	which only the EC is issued, the project	
	would require a fresh appraisal by this	
	Authority, for which the proponent shall	
	apply and get the approval of this Authority.	
33	The Authority reserves the right to add	Agreed.
	additional safeguard measures	
	subsequently, if found necessary, and to	
	take action including revoking of the	
	Environmental Clearance under provisions	
	of the Environment (Protection) Act,1986, to ensure effective implementation of the	
	suggested safeguard measures in a time	
	bound and satisfactory manner.	
		Agreed
34	The stipulations by the Statutory Authorities	
	under different Acts and Notifications	
	should be complied with including the	
	provisions of the Water (Prevention and control of Pollution) Act,1974, the Air	
	(Prevention and control of Pollution)	
	Act1981, the Environment (Protection)	
	Act,1986, the Public Liability (Insurance)	
Ŧ	Act,1991 and EIA Notification,2006	
35	The project proponent should advertise in at	Advertisements informing EC
	least 2 newspapers widely circulated in the	accordance to the Project is done
	region, one of which (both the advertisement	in 2 nos newspapers. (photos of
	and the newspaper) shall be in the	the newspaper advertisement is
	vernacular language informing that the	attached as Annexure-3)
	Project has been accorded Environment	
	Clearance and the copies of the Clearance letters are available with the State	
	Environment Impact Assessment Authority	
	(SEIAA) office and may also be seen on the	
	website of the Authority at	
	www.seiaakerala.org. The advertisement	
	9	

	should be made within 10 days from the date of receipt of the clearance letter and a copy of the same signed in all the pages should be forwarded to the Office of this Authority as confirmation	
.36	A copy of the clearance letter shall be sent by the proponent to the concerned Gram Panchayat/District Panchayat/Municipality/Corporation/Urban local Body and also to the Local NGO, if any from whom suggestions/representations, if any were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.	A copy of the Clearance is submitted to the Kunnothparamba Grama Panchayat on.
37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional office of the MOEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office	Half yearly reports will be submitted as stipulated.
38	The details of Environment Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times Roman font of size 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	Details of Environmental Clearances are prominently displayed at the entrance to the Mine. (photo of the sign board is Attached as Annexure-4)
39	The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.	Provided
40	No change in mining technology and scope of working should be made without prior approval of the SEIAA. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.	Prior approval from the SEIAA will be sought in case of change of mining technology.
41	The Project proponent shall ensure that no natural water course and/or water	No natural water course is obstructed. Necessary safeguard

	resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	measures will be taken to protect first order streams if originating from the mining lease in the future.
42	Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.	Monitoring of Ambient Air Quality will be carried out. Water sprinkling will be done at all places appropriately. (photos and monitoring reports have been attached as Annexure-7)
43	The top soil, if any, shall be temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The Over burden (OB) generated during the mining operations	Available top soil will be used at the Green belt for plantation. OB generated is used for plantation purposes along the Green/Safety zone.
	shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8 m and the width 20 m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo-textiles shall	
	be undertaken for stabilization of the dump. The entire excavated area should continue until the vegetation becomes self-sustaining	
44	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains shall be regularly de silted particularly after monsoons and maintained properly	Catch drains are made along the periphery of the mining lease.
45	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading points and transfer points-it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Regular water sprinkling is done on haul roads with water tankers.
46	Fugitive dust emissions from all sources should be controlled regularly. Water	Fugitive dust emissions is controlled.

	spraying arrangements on haul roads, loading and unloading and transfer points should be provided and properly maintained.	
47	Measures should be taken for control of noise levels below 85 dB(A) in the work environment.	Adequate measures for noise control is adopted.
48	A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive, who will report directly to the head of the Organization.	An Environment Management Cell is set up under the control of the Mines Manager.
49	The funds earmarked for environment protection measures and CSR activate should be kept in a separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.	Funds earmarked for environment protection measures and CSR will be made available.
50	The Regional Office of MOEF and CC located in Bangalore shall monitor compliance of the stipulated conditions. The Project authorities should extend full cooperation to the Officer(s) if the Regional Office by furnishing the requisite data/information/monitoring reports.	We will extend full cooperation to any officer(s) from the Regional Office during his/their visit. All available data will be provided.
51	Any appeal against the Environment 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	Agreed.
52	Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under provisions of the Environment (Protection) Act, 1986.	Factual and true data will be submitted.
53	The SEIAA may revoke or suspend the order for non-implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of the environment protection	Agreed
54	The above conditions shall prevail not withstanding anything to the contrary, inconsistent or simplified, contained in any	Agreed

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	other permit, license on consent given by any other authority for the same project.	5
55	The order is valid for a period of 5 years of the expiry date of Mine lease period issued by the Government of Kerala, whichever is earlier	Agreed.
56	The Environment Clearance will be subject to the final order of the courts in any pending litigation related to the land or the project, in any court of law.	Agreed.
57	The Mining operations shall be restricted to above ground water table and it should not intersect ground water table.	Mining operations will be restricted to above ground water table and due care will be taken so as not to intersect ground water.
58	All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution checking center. Washing of all vehicles shall be inside the Lease area	Will ensure that all transportation vehicles have PUC issued by an authorized Pollution checking center.
59	Project proponent should obtain necessary prior permission of the competent authorities for drawl of necessary quantity of surface and ground water for the project.	Agreed.
60	Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six-monthly reports	No perennial nallah flows through the lease or exist around the Mine Lease.
61	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.	Occupational health surveillance will be undertaken

For 'Granite Building Stone Quarry Mr. C.G. George'.

Mr. C.G. George

(Owner) Date: 25.06.2019



भारत सरकार

GOVERNMENT OF INDIA

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO) कार्यालय उप-मुख्य विस्फोटक नियंत्रक

OFFICE OF THE DEPUTY CHIEF CONTROLLER OF EXPLOSIVES

केन्द्रिय भवन, काकनाङ, एरनाकुलम, कोच्चि, (केरल) - 682037

Kendriya Bhavan, Kakkanad, Ernakulam, Kochi, (KERALA) - 682037 Fax: (0484)2427276, Ph: 2427286, 2427296

No. E/SC/KL/22/746(E32353)

Dated:11.01.2010

To.

Shri C.G. George Chitteth House

Koothuparamba P.O.

Kannur Dist

Sub:

Explosive Magazine at Sy.88/1, Kolavallur, Thalassery, Kannur Dist. Licence No. E/SC/KL/22/746(E32353) in Form LE-3- your request for permission to use Explosives for extraction of Building Stone/ Granite – Reg.

Dear Sir.

It is noted that you have been issued quarrying lease Nos. 503/2009-2010/9867/M3/2009 and 504/2009-10/9868/M3/2009 dated 05.1.2010 by the Director of Mining and Geology, Trivandrum for extraction of Minor Minerals from Sy. No. 156 and 151/1 of Puthur Village, Thalassery Tk., Kannur District respectively under Kerala Minor Mineral Concession Rules, 1967.

The extraction of building stone/granite using explosives comes under the purview of Mines Act, 1952 and the use of explosives in areas coming under Mines Act is governed by Metaliferrous Mines Regulations, 1961. The competent authority for the administration of the above Act and regulations framed there under for the State of Kerala is Director of Mines Safety, Chennai. The applicability of Explosives Rules, 1983 is limited to that the explosives used in blasting operations in areas coming under Mines Act shall be of a class and make authorized by Chief Controller of Explosives, Nagpur and such explosives shall be stored in an explosive magazine duly licensed under Explosives Rules, 1983.

You may obtain necessary licenses/ clearance from various statutory bodies for extraction of minor minerals as mentioned below:

- The Quarrying permits/lease under Kerala Minor Mineral Concession Rules, 1967 revalidated from time to time.
- Permission/clearance from State Pollution Control Board under Environment (Protection) Act, 1986.
- Licence from local Panchayat under Panchayat Act.
- Permission/clearance under Mines Act, 1952.

Subject to the compliance of the above requirements as far as this office is concerned there would be no objection to the use of explosives from the subject magazine for extraction of minor minerals

This permission may be deemed to be withdrawn if any of the conditions subject to which the permission has been granted, has not been complied with/ violated. You may submit the copies of permissions/ licenses obtained under the above statutes for reference and record of this office.

(C.R. Surendranathan)

Dy. Chief Controller of Explosives.

ours faithfully.

Copy to:

The Jt. Chief Controller of Explosives, South Circle, Chennai.

The District Magistrate/ Addl. District Magistrate, Kannur Dist.



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man 10.04.2018

കട്ടാരുട്ടു പറസ് ഗ്രാമ പഞ്ചായത്തിൽ നിന്നും

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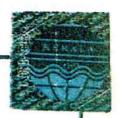
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Kannur Dist, Pin 670693

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KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/KNR/ICO/673/2010

Date of issue :17/01/2017

INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No: PCB/KNR/ICO-R/889/2016

Ref: 1. PCB/KNR/ICO/94/2010 DATED 10/08/2010 2. PCB/KNR/ICO/R1-343/2013 DATED 31/08/2013

The 'Integrated Consent to Operate' issued as per reference above to M/s QUARRY OWNED BY SRL C.G. GEORGE, ARAMKULAM, PANOOR, KANNUR DT - 670693 is hereby renewed up to 31/10/2019 and issued to M/s QUARRY OWNED BY SRL C.G. GEORGE, ARAMKULAM, PANOOR, KANNUR DT - 670693 The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

I. GENERAL.

S.No.	ltems	Description		
Î,	VALIDITY	31/10/2019		
2	ANNUAL FEE	Rs 4420/-		
.3	TOTAL FEE REMITTED	Rs 13260/-		
7	EXTENT OF AREA	0.7082 HECTARE IN SURVEY NO 156 OF PUTHOOR VILLAGE		

11. Stack Details

Stack No.	Source of	Emission	Stack Heig	ght above	Control
	Emission	Rate(Nm3/Hr)	Ground Level(In Meters)	Roof Level(In Meters)	Equipment

III. CONDITIONS

2.2 This integrated consent, unless withdrawn earlier and subject to condition No.1.1 shall be valid up to 31/10/2019. In case the operation of the quarry is to be continued thereafter application for the renewal of the consent shall be submitted through Board's online web portal www.krocmms.nic.in before 31/7/2019



- 3.13 Stands Deleted.
- 3.16 The operation of the unit shall be commenced only after obtaining clearance from all concerned authorities.
- 3.17 The consent issued from the Board will be valid only up to the period of validity of clearances from other concerned authorities. The consent is only with respect to the powers vested under the Water Act1974, Air Act 1981 and Rules there under.
- 3.18 The PM2.5 in ambient air at the boundary shall not exceed 60 µg/m3

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

DATE:17/01/2017

SIGNATURE & SEAL OF ISSUING AUTHORITY

Krishnan M.N Environmental Environmental

To

Sri. C.G. GEORGE

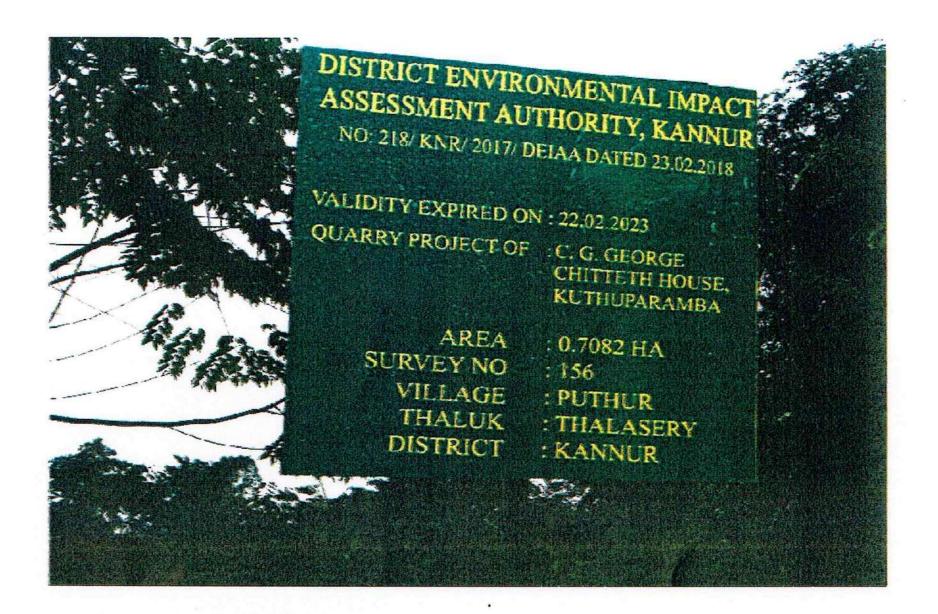
· Office of the QUARRY OWNED BY SRI. C.G. GEORGE, ARAMKULAM, PANOOR, KANNUR DT - 670693

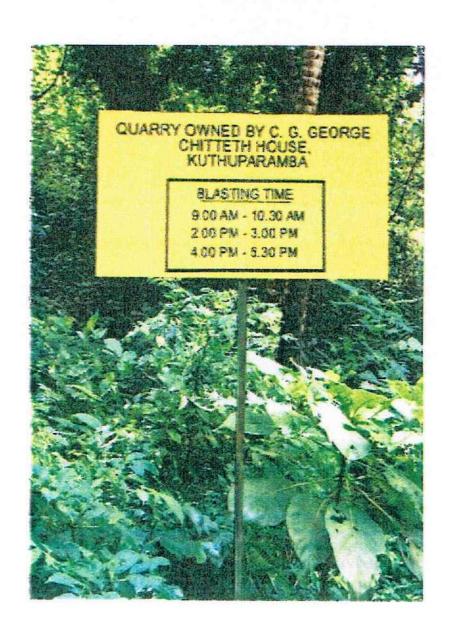
Newspaper Advertisements in The Hindu and Deepika dated 30/05/2018





Sign Boards

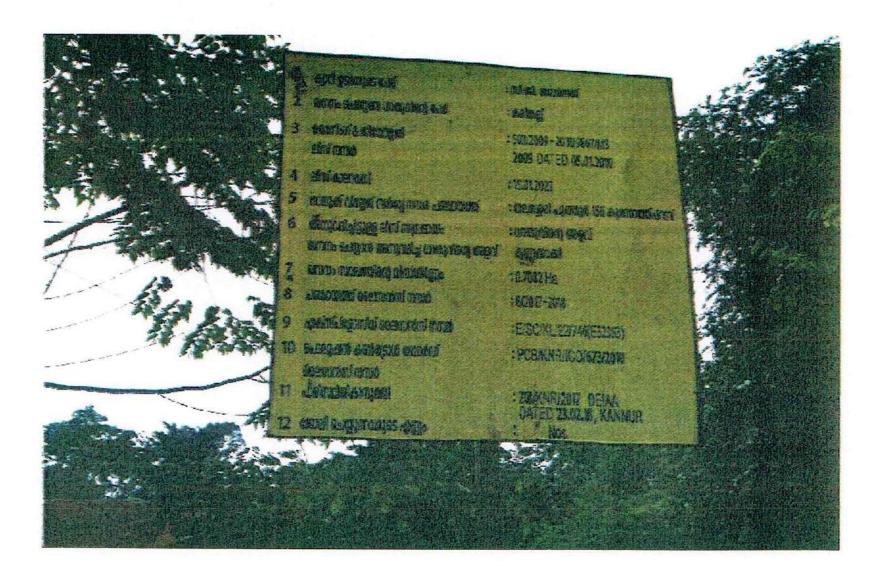






Annexure 4





Annexure 4



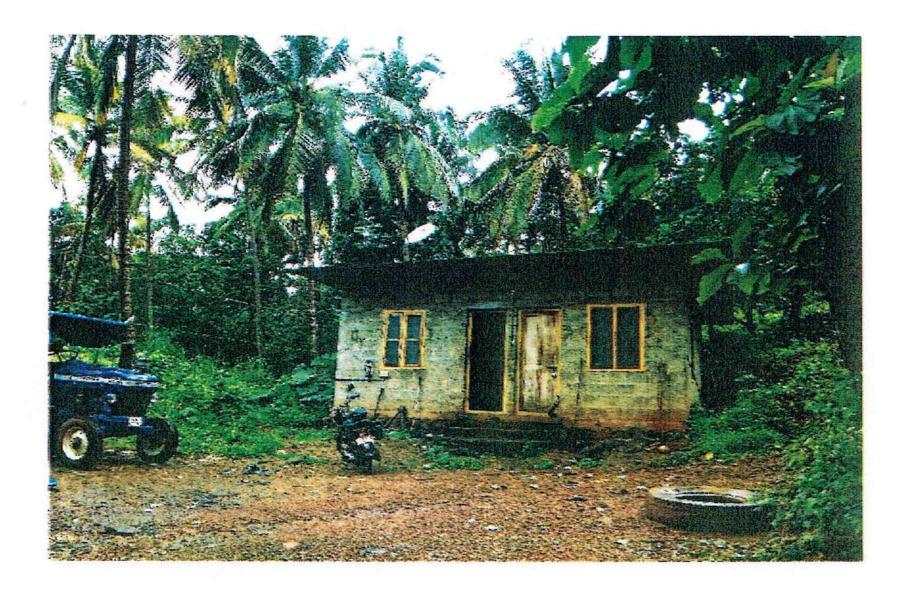
Boundary Pillars and Fencing





Annexure 6

Resting Place



Annexure-7

MONITORING PHOTOS AND MONITORING REPORT:



Annexure-7





GLOBAL Environment & Mining Services

(Analytical Laboratory, Consulting Engineers, Mine designers, Geologist & Surveyors) 3 rd Main Road, Basaveswara Badavane, HOSPET - 583201, Bellary Dist., (Karnataka).Ph: +91 8394 229433







e-mail: gems hpt@yahoo.com, gemslab.hpt@gmail.com,Website: www.globalmining.in

Certificate No: TC-5323

GEMS-LD/TF/23/01 Date: 21.01.2019

TEST REPORT OF WATER QUALITY DATA

Name of the Customer/Address

Granite Building Stone Quarry of

Mr. C.G. George,

Extent: 0.7082 Ha. (1.7499 Acres)

Sy. No. 156, Puthur Village, Talassery Taluk,

Kannur District, Kerala State.

Customer Reference

By hand

(Post/ Courier/e-Mail/By Hand)

Well Water

Sample Description 4 Sample Collected By

GLOBAL Environment & Mining Services.

Date of Sample Collection

16.01.2019

6 Date of Sample Receipt Date of Analysis

17.01.2019 18.01.2019

8 Date of Analysis Completion

19.01.2019

Report Number

GEMS/BNG/CGG/WW/263/2018-2019

S.No	Parameters	Result	Unit	APHA 22 nd Edition Method	IS 10500 - 2012	
		WW-01			Acceptable	Permissible
I	Colour	1.00	Hazen	APHA 2120 B	5	15
2	odour	Ag	-	APHA 2150 B	Agreeable	Agreeable
3	pH at 25 Deg Celcius	7.02		APHA 4500 B	6.5 - 8.5	No Relaxation
4	Taste	Ag	•	IS 3025 Part 8	Agreeable	Agreeable
5	Turbidity	0.52	NTU	APHA 2130 B	1.0	5.0
Chemical I	Parameters		*			1
6	Total dissolved solids	142.0	mg/l	APHA 2540 B	500	2000
7	Calcium as Ca	3.21	mg/l	APHA 3500 B	75	200
8	Magnesium as Mg	3.23	mg/l	APHA 3500 B	30	100
9	Chloride as Cl	7.23	mg/l	APHA 4500 B	250	1000
10	Fluoride as F	0.09	mg/l	APHA 4500 D	1.0	1.5
11	Conductivity	162	µs/cm	APHA 2510B		
12	Nitrate as NO:	5.60	mg/l	APHA 4500 E	45	No Relaxation
13	Sulphate as SO ₁	2.23	mg/l	APHA 4500 E	200	400
14	Total Alkalinity as CaCO:	2.25	mg/l	APHA 2320 B	200	600
15	Total Hardness as CaCO:	14.0	mg/l	APHA 2340 B	200	600
16	Iron as Fe	<0.10	mg/l	APHA 3500 B	0.3	1.0
17	Boron as B	Nil	mg/l	APHA 4500 B	0.5	1.0
Microbiolo	gical Parameters			10000000	7.2	
18	Coliform organism/100ml	Absent	MPN	IS 1622 1981		
19	E Coh Bacteria/100ml	Absent	-		Shall not be detected in a 100ml sample	
	-01 Near Core Zone	Ausen		IS 1622 . 1981	100111	Sample

Note: WW-01, Near Core Zone

INFERENCE

As per IS 10500 - 2012 Standards,

Report Status: - Measured Values for the above parameters are within the limit.

Analyzed by Keerthana Yadav B.R Chemist

Authorized Signatory K. Ramakrishna Reddy Technical Manager

Note:

The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied

Water Samples will be destroyed after 15Days, Minerals 3 Months, Filter papers & Thimbles 7 Days and ILC samples from the date of issue of Month test certificate unless otherwise

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(Analytical Laboratory, Consulting Engineers, Mine designers, Geologist & Surveyors) 3 rd Main Road, Basaveswara Badavane, HOSPET - 583201, Bellary Dist., (Karnataka).Ph: +91 8394 229433







e-mail: gems hpt@yahoo.com, gemslab.hpt@gmail.com,Website: www.globalmining.in

Certificate No: TC-5323

GEMS-LD/TF/23/01 Date: 24.01.2019

TEST REPORT OF AMBIENT AIR QUALITY DATA

Name of the Customer/Address

: Granite Building Stone Quarry of

Mr. C.G. George,

Extent: 0.7082 Ha. (1.7499 Acres)

Sy. No. 156, Puthur Village, Talassery Taluk,

Kannur District, Kerala State

Customer Reference

By hand

(Post/ Courier/e-Mail/By Hand Name of the Station

Core zone area (A1)

Sample Description

Ambient Air Quality Monitoring

Sample Collected By

GLOBAL Environment & Mining Services Combined Sampler GTI-241

Particulars of Sample Collected Date of Sample Collection

18.01.2019

Date of Sample Receipt

21.01.2019

Date of Analysis

22.01.2019

10 Date of Analysis Completion

: 23.01.2019

11 Report Number

: GEMS/BNG/CGG/AAQ/264/2018-2019

	PM10 [μg/m³] IS: 5182: (Part 23) 2006		PM2.5 [μg/m³] USEPA 2001		SO ₂ [μg/m³] IS: 5182: (Part 2) 2001 (RF 2012)		NO ₂ [μg/m³] IS: 5182: (Part 6) 2006 (RF 2012)	
Duration of Monitoring								
	Result	STD	Result	STD	Result	STD	Result	STD
8 Hrs	41.18	100	11.26	60	10.01	80	9.82	80

INFERENCE

As per CPCB Standards,

Report Status: - Measured Values for the above parameters are within the limit.

Analyzed by J.M. Thippeswamy Chemist

Authorized Signatory K. Ramakrishna Reddy Technical Manager

Note:

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied
 - Water Samples will be destroyed after 15Days, Minerals 3 Months. Filter papers & Thimbles 7 Days and ILC samples from the date of issue of Month jest certificate unless otherwise
 - This report is not to be reproduced wholly or in-part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing Lotal liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only



GLOBAL Environment & Mining Services

(Analytical Laboratory, Consulting Engineers, Mine designers, Geologist & Surveyors) 3 rd Main Road, Basaveswara Badavane, **HOSPET – 583201**, Bellary Dist., (Karnataka).Ph: +91 8394 229433







e-mail: gems hpt@yahoo.com, gemslab.hpt@gmail.com,Website: www.globalmining.in

Certificate No: TC-5323

GEMS-LD/TF/23/01 Date: 18.01.2019

TEST REPORT OF AMBIENT NOISE LEVEL MONITORING

Name of the Customer/Address

: Granite Building Stone Quarry of

Mr. C.G. George,

Extent: 0.7082 Ha. (1.7499 Acres)

Sy. No. 156, Puthur Village, Talassery Taluk, Kannur District, Kerala State.

: By hand

2 Customer Reference (Post/ Courier/e-Mail/By Hand

Mail/By Hand

3 Sample Description4 Sample Collected By

Sample Collected By

Particulars of Sample Collected
 Date of Sample Collection

Date of Sample Collection
 Date of Sample Receipt

8 Method Adopted

9 Date of Download Data

10 Report Number

: Ambient Noise Level Monitoring dB(A)

: GLOBAL Environment & Mining Services

EQUINOX-EQ 107

15.01.2019

16.01.2019

: IS 9989 -1981Reaffirmed 2008

17.03.2019

: GEMS/BNG/CGG/ANLM/265/2018-2019

Date	15.01.2019
Time (hrs)	Core Zone N1
6.00	38.2
7.00	41.3
8.00	43.8
9.00	46.5
10.00	48.6
11.00	51.0
12.00	53.2
13.00	54.6
14.00	54.8
15.00	56.1
16.00	52.3
17.00	49.6
18.00	46.2
19.00	43.1
20.00	42.4
21.00	40.1
22.00	39.8
23.00	39.5
00.00	38.3
01.00	37.6
02.00	36.9
03.00	37.2
04.00	37.6
05.00	37.9
Min	36.9
Max	56.1
Day dB(A) Leq	50.9
light dB(A) Leq	38.5

J.M. Thippeswamy Chemist

Authorised Signatory K. Ramakrishna Reddy Technical Manager

Annexure-8

	C G George Sy no:156 Puthur Village CSR 1.9.2018 to 31.3.2019	
18/12/18	PRIYADHARSINI CULTUREL FORUM CHENDAYAD	100000
30/11/18	CMRDRF	77950
5/1/2019	Snehalayam	150000
22/1/19	SRI KOODATHIL MADAPPURA EAST VALLYAI	5000
31/1/19	Leela V P, Valiyaparambath kaovelikal po Puthur (house aid)	25000
21/2/19	AMBILAD SRI MAHAVISHNU KSHETHRAM	5000
	Total	362950

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