# **ENVIRONMENT CLEARANCE COMPLIANCE REPORT** (April 2019-September 2019)

for

# GRANITE BUILDING STONE QUARRY (Minor Mineral)

Extent: 0.7682 Ha. (1.8982 Acres)

At

Sy No.

73/4,79,80/1C,81/1 & 81/2

Village

Patiam

Taluk

Thalassery

District

Kannur

State

Kerala,

'Granite Building Stone Quarry of Mr. C.G.GEORGE.' E.C.No:155/KNR/2017/DEIAA, Dated:5.01.2018

Compliance Status of the General Conditions for Mining Projects Laid down by the State Environment Impact Assessment Authority, Kerala vide their Environment Clearance No.81/2017 dated 05/01/2018.

## **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
5.	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 nonmineralized area by planting suitable native species in consultation with the local DFO/ Agriculture Department.  The drains should be regularly desilted	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.  All civil structures made for arresting
J,	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.	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 activities is carried out in phased manner. (Photos are attached as Annexure-6)
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.
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 shall be provided so that water is properly diverted away	Coir mats shall be used to cover waste dumps. Proper drainage system shall be provided so as to avoid destabilizing of dumps.

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	from the dumps slopes with no	
	disturbance to the stability of the	
	slopes.	
19	All dump slopes shall be sufficiently	All dump slopes will be stabilized as
	stabilized by using appropriate species	specified.
	mix 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.	
20	Garland drains of at least 2 mts width	Garland drains of 2 mt width will be
	shall be provided all along 7.5 mts	constructed.
	buffer zone to divert the water from	
	entering the Quarry slopes. These	
	drains shall be cleaned every year	
	before the monsoon season	
21	The water from the garland drainage	Only clear natural water is let out into
	shall be directed to the silt settling	the natural water course.
	ponds. The clarified overflow from the	
	silt settling ponds shall be directed to a	
	Rain Water Harvesting (RWH) pond	
	before releasing the clarified water to	
3	the natural water course.	
22	A retaining wall of stone rubble with	Will be constructed.
	wire (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.	
CHARLES IN CONTANT COLORS	of boulders during heavy rainfall.	

# GENERAL CONDITIONS OF HEALTH

Sl.No.	Conditions	Status of compliance
1	First Aid kit provided in the work site.	First Aid kits are provided in the work
	It shall be periodically maintained	site and key personnel will be trained
	properly. Some labourers shall be	to render first aid in case of
	trained on First Aid.	emergencies.
2	Wholesome drinking water should be	Wholesome potable drinking water is
	provided.	provided
3	Premises should be maintained as wet	Dust will be suppressed at the source.
-2-	to suppress the dust.	57-489
4	Sanitary type of latrines and urinals	Latrines and urinals are provided.
5	should be provided.	
5.	Resting place to be provided for	Resting place is provided to workers.
	workers	
6	'No Smoking' board should be	'No Smoking' board is exhibited. (Copy
	exhibited according to COTPA act.	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	Emergency contact numbers of Key

	route to hospital and contact no. etc.	persons, Hospitals, police station, etc.
	should be available	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.No	Condition	Compliance 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 made functional.
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.	We have implemented CSR activities. The balance agreed commitments and will be undertaken shortly.
	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,	Lease area is fenced off. Sign boards have been erected at prominent places. (Photos are attached as Annexure-5)
9	markings, etc.) shall be protected at all times and shall be conspicuous.	Nogogomy processtions while blacting
10	Warning alarms indicating the time of	Necessary precautions while blasting

	Blasting (to be done at specific timings)	is taken.
	has to be arranged as per stipulations of	
11	the Explosives department.  Control measures on noise and	Noice and vibrations are kept within
11	vibrations prescribed by KSPCB should	Noise and vibrations are kept within KSPCB prescribed norms.
	be implemented	I. Use of sharp drilling, delivery
	be impremented	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	Quarrying activities limited to
	to daytime as per KSPCB	daytime.
40	guidelines/specific conditions.	
13	Blasting should be done in a controlled	Blasting is done in a controlled
	manner as specified by the regulations of the Explosives department or any	manner and is done technically as prescribed by the mining statutes.
	other agency.	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	Blasting supervision and control is
	supervise/control the Blasting	done by a Mining Official having
<u>سا د</u>	Operations	DGMS Certificate.
15	Access road to the quarry shall be	Access road to the Quarry is tarred.
	tarred to contain dust emissions that	
	may arise during transportation of materials.	
16	Overburden materials should be	Overburden material is used for road
	managed within the site and used for	making and as a filler along the Green
	reclamation of Mine Pit as per Mine	Belt for plantation purpose.
Of the second	closure Plan/specific conditions	
17	Height of Benches should not exceed 5	Agreed.
	M and width should not be less than 5	
	M, if there is no mention in the Mining	
10	Plan/specific conditions  Mate to reduce fly rock blact to a	Controlled blacting technique is
18	Mats to reduce fly rock blast to a	Controlled blasting technique is

	maximum of 10 PPV should be provided	adopted. PPV is kept to a minimum.
		Delay detonators are used.
19	Maximum depth of Mining from general ground level at site shall not exceed 10 m	Agreed.
20	No Mining operations should be carried out at places having a slope greater than 45°	Agreed.
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.	Crusher unit is not installed within Mining Lease.
22	The workers on the site should be provided with the required protective equipment such as ear muffs helmet, etc.	Requisite Personal Protective equipments (PPE's) is provided as required to all employees.
23	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Garland drains are constructed
24	The transportation of minerals should be done in covered trucks to contain dust emissions.	All trucks transporting material are covered by firmly tied tarpaulin
25	The proponent should plant trees at least 5 times the loss that has been occurred while clearing the land for the project.	Local species saplings have been procured from the Forest dept, Kannur
26	Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.	Spent oil is reused as a lubricant for drilling.
27	Explosives should be stored in magazines in isolated place specified and approved by the Explosive Department.	Explosives is stored in a Licensed Explosives Magazine, which is approved by PESO. (Copy of the Explosive license is attached as Annexure-1)
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.	No dwellings are situated within 100 M from the boundary of the quarry.
29	100 M buffer distance should be maintained from forest boundaries	Mining area is not located near any forest areas.
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	process.
	competitive authorities including that	
	for blasting and storage of explosives.	
32	In the case of any change(s) in the	In case any change is required, a fresh
	scope of the Project, extent, quantity,	appraisal will be submitted for
	process of mining technology involved	obtaining Approval from the
	or in any way affecting the environment	Authority.
	parameters/impacts as assessed, based	
	on 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.	

34		Agreed.
	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)	
	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 no's 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	

.36	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  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	A copy of the Clearance is submitted to the Pattiam Gram Panchayat.( Enclosed as Annexure-8)
	also be put on the website of the company by the proponent.	
37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional office of the MOEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office	Half yearly reports is submitted as stipulated. (photos and monitoring reports have been attached as Annexure-7)
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	No natural water course is

		1 1 1 1 2 2
	natural water course and/or water resources shall be obstructed due to any	obstructed. Necessary safeguard measures will be taken to protect
	mining operations. Necessary safeguard	first order streams if originating
		from the mining lease in the
	measures to protect the first order streams,	TARK TO THE PARTY OF THE PARTY
	if any, originating from the mine lease shall be taken.	future.
42	Monitoring of Ambient Air Quality to be	Monitoring of Ambient Air Quality
	carried out based on the Notification 2009,	will be carried out. Water
	as amended from time to time by the Central	sprinkling will be done at all
	Pollution Control Board. Water sprinkling	places appropriately.
	should be increased at places loading and	
	unloading points & transfer point to reduce	
	fugitive emissions.	
9	The top soil, if any, shall be temporarily be	Available top soil will be used at
	stored at earmarked site(s) only for the	the Green belt for plantation.
	topsoil shall be used for land reclamation	OB generated is used for
	and plantation. The Over burden (OB)	plantation purposes along the
43	generated during the mining operations	Green/Safety zone.
	shall be stacked at earmarked dump site(s)	areen, surety zone.
	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	Catch drains are made along the
	the mine working, mineral and OB dumps to	periphery of the mining lease.
	prevent run off of water and flow of	peripres y est and mining reduce.
	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	
45	Effective safeguard measures such as	Regular water sprinkling is done
	regular water sprinkling shall be carried out	on haul roads with water tankers.
	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.	
46	Fugitive dust emissions from all sources	Fugitive dust emissions is
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	should be controlled regularly. Water	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	Adequate measures for noise
	noise levels below 85 dB(A) in the work	control is adopted.
	environment.	control is adopted.
40	Workship of the Control of the Contr	An Environment Managament Call
48	A separate environmental management cell	An Environment Management Cell
	with suitable qualified personnel should be	is set up under the control of the
	set up under the control of a senior	Mines Manager.
	executive, who will report directly to the	
	head of the Organization.	
49	The funds earmarked for environment	Funds earmarked for
	protection measures and CSR activate	environment protection measures
	should be kept in a separate account and	and CSR will be made
	should not be diverted for other purpose.	available.(Details of CSR activities
	Year wise expenditure should be reported to	carried out are attached as
	the State Environment Impact Assessment	Annexure-6)
	Authority (SEIAA) office.	
50	The Regional Office of MOEF and CC located	We will extend full cooperation to
	in Bangalore shall monitor compliance of the	any officer(s) from the Regional
	stipulated conditions. The Project	Office during his/their visit. All
	authorities should extend full cooperation to	available data will be provided.
	the Officer(s) if the Regional Office by	1
	furnishing the requisite	
	data/information/monitoring reports.	
51	Any appeal against the Environment	Agroad
31		Agreed.
	Clearance shall lie with the National Green	
	Tribunal, if preferred, within a period of 30	
	days as prescribed under Section 16 of the	
	National Green Tribunal Act, 2010	
52	Concealing the factual data or submission of	Factual and true data will be
	false/fabricated data and failure to comply	submitted.
	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.	
53	Commanda Com	Agrood
33	The SEIAA may revoke or suspend the order	Agreed.
	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	
54	The above conditions shall prevail not	Agreed.
	withstanding anything to the contrary,	1.0.00
	inconsistent or simplified, contained in any	

	other permit, license on consent given by any other authority for the same project.		
55	The order is valid for a period of 5 years the expiry date of Mine lease period issue by the Government of Kerala, whichever earlier	d	reed.
56	The Environment Clearance will be subject to the final order of the courts in any pending litigation related to the land or to project, in any court of law.		reed.
57	The Mining operations shall be restricted above ground water table and it should not intersect ground water table.	ot res tab	ning operations will be tricted to above ground water le and due care will be taken so not to intersect ground water.
58	All vehicles used for transportation and within the mines shall have 'PUC' certific from authorized pollution checking center Washing of all vehicles shall be inside the Lease area	te veh	ll ensure that all transportation nicles have PUC issued by an chorized Pollution checking nter.
59	Project proponent should obtain necessarior permission of the competent authorities for drawl of necessary quantities of surface and ground water for the projection.	y	reed.
60	Regular monitoring of flow rates and was quality upstream and downstream of the springs and perennial nallahs flowing in around the mine lease area shall be carriout and reported in the six-monthly reported.	er No the nd Lea d	perennial nallah flows through lease or exist around the Mine ase.
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.	Occupat be unde	ional health surveillance will rtaken.

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

(Mr. C.G. George) Owner

agent the

Date: 26.12.2019



### GOVERNMENT OF INDIA MINISTRY OF COMMERCE & INDUSTRY PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION(PESO) (Formerly Department of Explosives)

Kendriya Bhavan, Block C-2, 3rd Floor

CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037

Tele: 2427286 Fax: 2427276 Email: dycceernakulam@explosives.gov.in

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

Dated: 13/01/2015

Shri C. G. George.

Chittath House, Kuthuparamba post, Town/Village - Kuthuparambu

District-KANNUR, State-Kerala, Pincode - 670643

Subject:

Possession for Use of of Explosives from magazine situated at Survey No(s).:88/1, Kolavallur, Thalassery Tk., Dist. KANNUR, Kerala -Licence No.: E/SC/KL/22/746(E32353) granted in Form LE-3 of Explosives Rules, 2008 -Amendment of Quantity of Explosives/Monthly Purchase Limit .

Sir(s),

Please refer to your letter No. nil dated 11/12/2014 on the subject cited above.

The Licence No.: E/SC/KL/22/746(E32353) is ferwarded herewith duly amended in respect of followings; THIS IS FOR ADDITIONAL QUARRY AT SY.No.73/81/1-2, PATTIAM VILLAGE, THALASSERY TALUK, KANNUR. VALID PERMISSIONS, AS APPLICABLE, FROM THE STATE GOVERNMENT AGENCIES SHALL BE IN POSSESSION..

The licence capacity at any one time shall not exceed the kinds and quantities mentioned below;

No	Explosive(s)	Class	Div	Sub Div	Capacity	Unit
1	Nitrate Mixture	2	0	0	150	Kg.
1		6	1	0	2000	Mtrs
2	Safety Fuse	6.	3	0	2500	Nos.
3	Electric Detonators	6	3	0	5000	Nos.
4	Ordinary Detonator	Se Secretaria de la la Galla	3			

Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)]: 20 times as above.

This Licence shall remain valid till 31st day of March 2019.

An amount of Rs. 2640/- balance is in your credit, which may be utilized for future transaction by quoting this reference.

For further renewal of licence, please follow the procedure under Rule 112 of Explosives Rules, 2008. Receipt of this letter may please be acknowledged.

Enclosures:

Deputy Chief Controller of Explosives

Copy Forwarded to:

District Magistrate, KANNUR, Kerala with reference to his Noc No: D4.5631/2005 Dated: 18/10/2005.

Superintendent of Police, KANNUR, Kerala

Deputy Chief Controller of Explosives Ernakulam



### KERALA STATE POLLUTION CONTROL BOARD

FILE NO.: PCB/KNR/ICO/OC/11/2018

Date of issue :2018-01-10

#### **CONSENT VARIATION ORDER**

Consent No: R15KANCTOA455875

### Ref: 1. Consent No:R15KANCTOA455875 dated 21/05/2015

The 'Integrated Consent to Operate' issued as per reference above to M/s Quarry Owned By CG George, Pattiam, Kuttiyeri poyil, Kannur is hereby modified & issued to M/s Quarry Owned By CG George, Pattiam, Kuttiyeri poyil, Kannur 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.

#### I. GENERAL

S.No.	Items	Description
1	1.1 VALIDITY	31/10/2022
2	1.5 SURVEY NUMBER	81/1,81/2
3	1.13 CAPITAL INVESTMENT	19.00 LAKHS
4	1.12 ANNUAL FEE	3670/-
5	1.18 PRODUCTS	Granite quarrying of 0.7682 Ha in RS NO.81/1,81/2 of Pattiam Village of Thalassery Thaluk.
6	1.12 FEE REMITTED	18350/-

### II. CONDITIONS

- 2.2 Application for renewal of consent shall be submitted before 30/07/2022.
- 2.5 Deleted.
- 3.2 Deleted.
- 3.3 Deleted.
- 4.1 Permanent fence made of wire mesh shall be provided and maintained along the boundary of the approved quarry area.
- 4.2 Deleted.

- 4.3 Deleted.
- 4.4 Deleted.
- 4.5 There shall be a minimum distance of 50 m from the boundary of the quarry to the nearest residence, places of worship, railway line, bridge, water body, public building and public road having vehicular traffic.
- 4.8 Location of quarry shall be as per the drawing attached. No change or alteration to the above shall be made.
- 4.11 Deleted.

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

DATE:10/01/2018

SIGNATURE & SEAL OF ISSUING AUTHORITY ENVIRONMENTAL ENGINEER



To

CG George Chitteth House, Kuthuparamba, Kannur

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000
- 2. For verifying this document please go to krocmms.nic.in 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 Online Consent Management and Monitoring System.

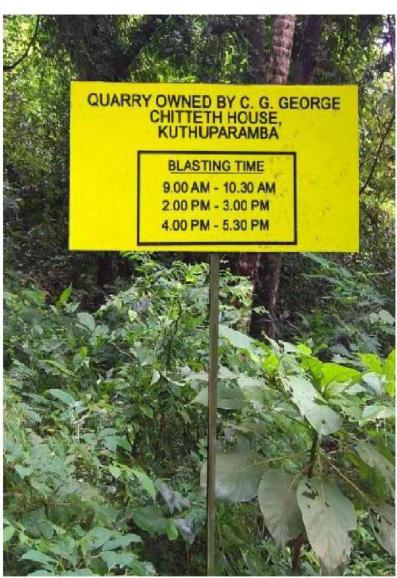
# Newspaper Advertisements in The Hindu and Deepika dated 01/06/2018





# Sign Boards







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# **Boundary Pillars and Fencing**





### Annuxure-6

	CSR						
	CG George Pattiam						
date	Discription	Amount					
19.8.2019	SRIKRISHNA JAYANTHI	5000					
3.4.2019	KATTILE PARAMBATH SRI MAKKAN KAVU VALLYAYI	2500					
23.10.2019	KUTTAMBALLY RAJAN CHIKITHSA SAHAYAM	15000					
5.9.2019	CHEGUVERA ARTS AND SPORTS CLUB	7500					
9.10.2019	KERALA KARSHAKA SANGAM	15000					
	Medical Aid						
19.6.2019	AKHIL VK CHIKITHSA SAHAYAM	25000					
21.08.2019	Wheel chair for Koothuparamaba	5000					
		75000					

List of CSR Annexure

# **CSR Activities**





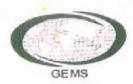




# **Monitoring of Air, Noise and Water**









(Analytical Laboratory, Consulting Engineers, Mine designers, Geologist & Surveyors) 3 rd Main Road, Basaveswara Badavane, HOSAPETE - 583201, Dist.., Bellary (Karnataka). Ph: +91-8394 651111, 229433

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





Certificate No: TC-5323

GEMS-LD/TF/11/01 Date: 29.07.2019

#### **Analysis Report of Ambient Air Quality Monitoring**

Granite Building Stone Quarry of

Shri. C.G. George,

Name of the Customer/Address

Extent: 0.7682 Ha. (1.8982 Acres)

Re-Sy. Nos. 81/1, 81/2, Pattiam Village, Thalassery Taluk,

Kannur District, Kerala State

Sample Description

**Ambient Air Quality Monitoring** 

Sample Collected By 3

GLOBAL Environment & Mining Services

Particulars of Sample Collected 4

: Combined Sampler (GTI-241)

5 Duration of the Monitoring 24 Hour of Sampling

Name of the Station 6

Core zone area (A1)

7 Sample Received

24.07.2019

Date of Analysis 8

26.07.2019

Date of Analysis Completion 9

29.07.2019

Sample Code

: GEMS/GBSQPGPL/AAQM/2019-20/1669

11 Report Number

: ULR-TC53231900000559F

### Results

Date of	PM10 [μg/m³]	PM2.5 [μg/m³]	SO <sub>2</sub> [μg/m <sup>3</sup> ]	$NO_2$ [ $\mu$ g/m $^3$ ]
Monitoring	IS : 5182: (Part 23) 2006 (RA 2012)	USEPA 2001	IS: 5182: (Part 2) 2001 (RF 2014)	IS : 5182: (Part 6) 2006 (RF 2014)
29.07.2019	42 -	23.6	14.6	12:6
Standard	100	60	80	80

**INFERENCE** 

As per CPCB Standards,

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

\*\*End of Report\*\*

Analysed By

J.M. Thippeswamy Chemist

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

GEMS-LD/TF/11/01 Date: 29.07.2019

## **Analysis Report of Ambient Air Quality Monitoring**

Granite Building Stone Quarry of

Shri. C.G. George,

Extent: 0.7682 Ha. (1.8982 Acres) Name of the Customer/Address

Re-Sy. Nos. 81/1, 81/2, Pattiam Village, Thalassery Taluk,

Kannur District, Kerala State

Sample Description : Ambient Air Quality Monitoring

Sample Collected By : GLOBAL Environment & Mining Services 3

Particulars of Sample Collected : Combined Sampler (GTI-241)

Duration of the Monitoring 5 : 24 Hour of Sampling Name of the Station : Cheeratta (A2) 6

7 Sample Received : 24.07.2019 Date of Analysis 8 : 26.07.2019 Date of Analysis Completion 9 : 29.07.2019

Sample Code : GEMS/ GBSQPGPL/AAQM/2019-20/1670 10

Report Number : ULR-TC53231900000560F

### Results

Date of	PM10 [μg/m³]	PM2.5 [μg/m <sup>3</sup> ]	$SO_2$ [ $\mu$ g/m $^3$ ]	NO <sub>2</sub> [μg/m <sup>3</sup> ]
Monitoring	IS: 5182: (Part 23) 2006 (RA 2012)	USEPA 2001	IS: 5182: (Part 2) 2001 (RF 2014)	IS: 5182: (Part 6) 2006 (RF 2014)
24.07.2019	41.6	21.4	12.4	11.8
Standard	100	60	80	80

As per CPCB Standards, **INFERENCE** 

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

\*\*End of Report\*\*

Analysed By J.M. Thippeswamy Chemist

rathorized Signatory Ramakisama Reddy Technical Manager

#### Note:

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

Certificate No: TC-5323

GEMS-LD/TF/08/01 Date: 29.07.2019

#### TEST REPORT OF AMBIENT NOISE LEVEL MONITORING

Granite Building Stone Quarry of

Shri. C.G. George,

Extent: 0.7682 Ha. (1.8982 Acres)

Re-Sy. Nos. 81/1, 81/2, Pattiam Village, Thalassery Taluk,

Kannur District, Kerala State.

Ambient Noise Level Monitoring

**GLOBAL Environment & Mining Services** 

Digital LCD Sound Level Meter (E0-6080-W8NI)

24 Hour of Sampling

24.07.2019

29.07.2019

GEMS/GBSQPGPL/ANLM/2019-20/1671 & 1672

8 Sample Code

2

3

4

5

6

Report Number

Name of the Customer/Address

Particulars of Sample Collected

Duration of the Monitoring

Date of Analysis Completion

Date of Sample Received

Sample Description

Sample Collected By

ULR-TC53231900000561F

Date	24.07.2019	25.07.2019
Name of the Location	Core Zone	Cheeratta
Time (hrs)	N1	N2
6.00	44.6	42.2
7.00	46.0	44.6
8.00	47.4	44.6
9.00	51.2	48.4
10.00	53.5	46.8
11.00	54.4	44.4
12.00	56.8	43.4
13.00	55.6	43.4
14.00	56.8	45.2
15.00	56.5	46.4
16.00	58.4	52.6
17.00	56.2	50.2
18.00	54.6	50.6
19.00	50.8	48.4
20.00	44.2	45.6
21.00	43.6	43.6
22.00	42.0	41.8
23.00	38.6	38.2
00.00	37.0	38.4
01.00	37.2	36.6
02.00	37.0	35.8
03.00	37.0	35.2
04.00	37.2	35.3
05.00	37.3	35.4
Lmax	58.4	52.6
Lmin	37.0	35.2
Ld	54.33	47.515
Ln	39.317	38.915
Leq	53.0	48.1

\*\*End of Report\*\*

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#### NOISE: (AMBIENT STANDARDS)

		Limit in dB(A) Leq		
Area Code	Category of Area	Day Time ·	Night Time	
, A	Industrial Area	75	70	
В	Commercial Area	65	55	
С	Residential Area	55	45	
D	Silence Area	50	40	

	Day time shall mean from 6:00 am and 10.00 pm
	Night time shall mean from in between 10.00 pm and 5.00 am
	Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
Note	Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority
	*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which relatable to human being
	A "decibel" is a unit in which noise is measured
	"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.



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2

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

Certificate No: TC-5323

GEMS-LD/TF/23/01 Date: 29.07.2019

### **Analysis Report of Drinking Water**

Granite Building Stone Quarry of

Shri. C.G. George,

Name of the Customer/Address Extent: 0.7682 Ha. (1.8982 Acres)

Re-Sy. Nos. 81/1, 81/2, Pattiam Village, Thalassery Taluk,

Kannur District, Kerala State

Sample Collected By **GLOBAL Environment & Mining Services** 

Sample type Well Water

4 Name of the location Buffer area (WW1)

Date of Sample Collection 24.07.2019 5 Date of Sample Received 6 26.07.2019 7 Date of Sample Analyzed 29.07.2019

10 Sample Code GEMS/GBSQPGPL/WW/2019-20/1673

**ULR** Number 11 ULR-TC53231900000562F

SI.	Parameters	Protocol	Unit	Results	Standards as per IS: 10500: 2012		
No.				Kesuits	Desirable Limits	Permissible Limits	
1.	pH	APHA 22 <sup>nd</sup> Edition 2012 4500 B (Pg No. 4-92 to 4-96)	-	7.20	6.5 to 8.5	No Relaxation	
2.	Conductivity	APHA 22 <sup>nd</sup> Edition 2012 2510 B (Pg No. 2-54)	μS/cm	148	-	-	
3.	Turbidity (NTU)	APHA 22 <sup>nd</sup> Edition 2012 2130 B (Pg No. 2-14)	NTU	0.20	1	5	
4.	Total Dissolved Solids	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 2-65)	mg/L	146	500	2000	
5.	Calcium as Ca	APHA 22 <sup>nd</sup> Edition 2012 3500 Ca B (Pg No. 3-84)	mg/L	16	75	200	
6.	Magnesium as Mg	APHA 22 <sup>nd</sup> Edition 2012 3500 B-Mg By Calculation	mg/L	5.62	30	100	
7.	Total Suspended Solids	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 2-66 to 2-67)	mg/L	1.22	2	-	
8.	Dissolved Oxygen	IS:3025 (part 38)- 1989, ,RA – 2014 Winkler titrimetric azide modification	mg/L	7.40	-		
9.	BOD 3 days at 27° C	IS:3025 (part 44) - 1993 , RA-2014;	mg/L	NIL		-	
10.	COD as O2	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 5-19 to 5-20)	mg/L	NIL			
11.	Dissolved Phosphate as P	IS:3025 (part 38)- 1988, RA – 2014, Stannous chloride method	mg/L	<0.01	*		
12.	Sodium as Na	APHA 22 <sup>nd</sup> Edition 2012 Na 3500 B (Pg No. 3-97 to 3-98)	mg/L	8.6			
13.	Potassium as K	APHA 22 <sup>nd</sup> Edition 2012 3500 B (Pg No. 3-87 to 3-88)	mg/L	0.56		-	
14.	Total Hardness as CaCO3	APHA 22 <sup>nd</sup> Edition 2012 2340 C (Pg No. 2-46)	mg/L	112	200	600	
15.	Chloride as Cl	APHA 22 <sup>nd</sup> Edition 2012 4500 Cl (Pg No. 4-72)	mg/L	16.0	250	1000	
16.	Total Iron as Fe	APHA 3500 B(Pg No. 3-77)	mg/L	0.20	0.30	No Relaxation	
17.	Sulphate as SO4	APHA 22 <sup>nd</sup> Edition 2012 4500 SO42 – E (Pg No. 4-190)	mg/L	94	200	400	
18.	Fluoride as F	APHA 22 <sup>nd</sup> Edition 2012 4500 F-D (Pg No. 4-87 to 4-88)	mg/L	0.20	1_1	1.50	
19.	Nitrate Nitrogen as NO3	APHA 22 <sup>nd</sup> Edition 2012 4500 NO3 E (Pg No. 4-125 to 4-127)	mg/L	10	45	No relaxation	
20.	Total Alkalinity as CaCO3	APHA 22 <sup>nd</sup> Edition 2320 B (Pg No. 2-35)	mg/L	36	200	600	
21.	Oil & Grease	APHA 22 <sup>nd</sup> Edition 2012 5520 B	mg/L	NIL	-	-	

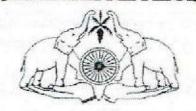
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		(Pg No.5-40 to 5-41)				
22.	Total Coliform count*	APHA 22 <sup>nd</sup> Edition 2012 9222 B (Pg No.9-66) Membrane filter technique	MPN/ 100ml	Absent	Shall not be detectable in any 100 ml sample	-
23.	Escherichia coli count*	APHA 22 <sup>nd</sup> Edition 2012 9222 B (Pg No.9-66) Membrane filter technique	E.Coli/ 100ml	Absent	Shall not be detectable in any 100 ml sample	

\*\*End of report\*\*

Analysed By Keerthana Yadav B.R Chemist K. Ramakrishna Reddy Technical Manager

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n	പാട്യം ഗ്രാമ പഞ്ചായത്ത്
mo 02/2019-20	
1994 ലെ കേരളാ പഞ്ചായ പ്രകാരവും	ത്ത് രാജ് ആക്ട് (1994 ലെ 13) 232, 233, 234, 254 എന്നീ വകുപ്പുകൾ അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു കൊടുത്തത്
ഫാക്ടറികള് , വൃവസ	ായങ്ങള് , സംരംഭങ്ങള് , മറ്റു സേവനങ്ങൾ എന്നിവയ്ക്കായി നൽകുന്ന ലൈസൻസ്
ലൈസൻസുടമസ്ഥന്റെ പേരും മേൽവിലാസവും	സി.ജി ജോർജ്ജ് ചിറ്റേത്ത് ഹൌസ്, കൂത്തുപറമ്പ്
എന്താവശ്യത്തിന് ലൈസൻസ് അനുവദിച്ചു എന്ന്	കരിങ്കൽ ക്വാറി
കെട്ടിടത്തിന്റെ നന്പരും സ്ഥാനവും	9 സർവ്വേ നം 81/1 ,81/2
ലൈസൻസിന്റെ കാലാവധി	2019-2024 947.
ലൈസൻസ് ഫീസ്	Rs. 50000
റിമാർക്ക്സ്	മറ്റു വകുപ്പുകളിൽ നിന്നും ലഭ്യമാക്കിയ സാക്ഷ്യപത്രങ്ങളുടെ കാലാവധി തീരുന്ന മുറയ്ക്ക് ആയത് പൂതുക്കി നൽകിയാൽ മാത്രമേ ലൈസൻസിന് 31-03-2024 വരെ സാധതയുണ്ടാകുകയുഒരു
സ്ഥലം: പത്തായക്കുന്ന് ക്രൂറ്റ് തീയതി: 03-04-2019	രക സമ്പൻ സ്വേഷം ന്യൂകള് ട്രി പാട്യൂട്ടഗ്രാമ്യ പഞ്ചായത്ത്
W. Co.	പി. ഒ. പത്തായക്കുന്ന്