

Geosand

Dt. 29-06-2018

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

Ref: Order No. 45/KNR/2017/DEIAA

:- Environmental Clearance No. 19/2017

Sub:-Environment Clearance - Quarry project at Thrippangattor Village, Thalassery Taluk, Kannur District, Kerala - Compliance Report - Second half-Reg.

Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 1.5176 Ha. by order No. 45/KNR/2017/DEIAA, dated 02-09-2017 by District Environmental Impact Assessment Authority, Kannur, Kerala. The compliance report of Second half (October 2017 – March 2018) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

M/s Chendayad Granites Pvt. Ltd.

Encl: - As Above

Chendayad Granites (P) Limited
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TO THE CONDITIONS OF

ENVIRONMENTAL CLEARANCE ORDER

NO: 45/KNR/2017/ DEIAA

Dated: 02-09-2017

BY

DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (DEIAA)
FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NOS. 275/1A
TRIPANGOTTUR VILLAGE, THALASEERY TALUK
KANNUR DISTRICT, KERALA

BY

M/S Chendayad Granites Pvt. Ltd
KANNUR DISTRICT, KERALA

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INTRODUCTION

Quarry project of **M/S Chendayad Granites Pvt. Ltd** is situated at Survey No. 275/1A, Trippangottur Village, Thalassery Taluk, Kannur District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by District Environmental Impact Assessment Authority, Kannur on 02-09-2017. As part of general condition No.37 of Environmental Clearance order, half yearly compliance report needs to be submitted by the project proponent. The compliance report of Second half to the specific condition, health conditions and general conditions of the Environmental Clearance order for the period of October 2017- March 2018 is being submitted.

COMPLIANCE REPORT

(SPECIFIC CONDITIONS)

PART A

PART - A - SPECIFIC CONDITIONS

01	A mines manager shall be appointed to control ,direct, manage	complied
	and supervise the quarrying operations required under the mines	
	Act ,1952	

As per the Mines Act 1952, the project proponent has appointed a mines engineers to control, direct, manage and supervise the quarrying operations. The certificate of Mines engineer is attached as **Annexure No.2** and Form D is attached as **Annexure No 3**.

02	Health and welfare for the persons employed shall be implemented	complied
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In association with Primary Health Centre of Local Self Government, the project proponent will conduct health check up for the labours. Other facility of housing, food, water and sanitation has been providing by the project proponent. The project is keeping a First aid box in the project site.

03	Controlled blasting should be practiced and blasting shall be done Complied	
	only during day time. The mitigate measures for control of ground	
	vibration to arrest the fly rocks and boulder should be	
	implemented.	

The controlled blasting with ordinary/electric delayed detonator is used in the Blasting. The blasting time in the quarry is in from 7 am to 6 pm. No work will be there in the quarry site at Night. The mitigate measures to arrest ground vibration and fly rock is detailed in General condition No. The board showing the blasting time is attached as **Plate No. 1**

04	Plantation shall be done which includes a green belt of adequate	Being
	width around the mining lease area excluding the rocky area, along	Complied
	roads, overburden dumps and non-mineralized area by planting	
	suitable native species in consultation with the local	
	DFO/Agriculture department.	

The project has taken the suggestion of agricultural department to plant the native species. The project proponent has started to plant various saplings in the project site to develop a green belt around the project area. Avenue tress also planted along the road side to minimise the dust emission.

05	The drains should be regularly de silted and maintained properly	Being
	check dam and gully checks shall be constructed wherever to	Complied
	required to arrest siltation. De siltation shall be done every year	
	before the onset of monsoon	

To arrest the quarry waste entering in to the public drain and stream, the project has constructed De siltation chambers. These chambers will be de silted during summer season.

06	Fencing shall be maintained properly all around the lease area.	Complied

To demarcate the land, the project has done fencing around the lease area. This was done by barbed metal wire.

07	The CSR need redrafting with inclusion of felt needs of the locality	Complied
	with special emphasize for implementing ground water recharging	
	water recharging techniques in and at the vicinity of the proposed	
	site.	

The project proponent has redrafted the CSR by including the ground water recharging techniques.

80	Appropriates sign boards should be displayed.	Complied	
1		_	

The project has installed appropriate sign boards in the project site. The photographs of the Sign boards are attached as **Plate No. 8**

09	The blasting time must be displayed and strictly adhered to.	Complied

To provide notice to the labours and general public a board containing blasting time has displayed in the project site. The board showing the blasting time is attached as **Plate No. 1**

10 Dust suppression mechanism must be in place. Complied

To arrest the emission of dust from the project site, the project has installed sprinklers in the project site. Splashing of water can reduce the dust emission during the time of transportation.

13	A se	parat	e small plo	ot to be m	ain	taine	d in the	pre	emise	to preserve	Being
	rare	and	endemic	species.	lf	any	,listed	in	the	biodiversity	Complied
	asse	ssme	nt etc.								

The project has started to plant various saplings in the project site. The Project has demarcated a small plot to preserve the endemic species.

14	The PPV values must be less than 10 mm/sec.	Noted

The project proponent is following controlled blasting by using electric/ordinary delayed detonators. All blasting in the project site are controlled by a qualified person. Therefore the project proponent can limit the PPV under 10 mm/sec.

Ī	15	The green belt shall be provides around the periphery.	being
			complied

The project has provided Green belt around the project area. This will reduce air and noise pollution.

Where the height of the bench formed during earlier workings Noted exceeds the maximum each of the excavator engaged for work, such bench height shall be reduced from top to bottom.

The extraction of minerals will be from top to bottom. The maximum height of all benches will be 5 meters.

17 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.

Being Complied the bench.

The vehicles like JCB, breakers are used to remove the loose or hanging mineral boulders in the project site. The labours will work on the bottom bench only after clearing such loose minerals form the side wall.

18 Permanent boundary pillars should be fixed by the proponent complied before commencing quarrying

Permanent boundary pillars are fixed by the proponent before commencing quarrying to demarcate the project site. The photograph showing the boundary pillars are attached as **Plate No. 2**

No quarry blasting to be undertaken and sustained till warning time limit expires and /or when continues 48 hours cumulative rainfall exceeds 8 cm and blasting shall be resumed until 24hrs of rain free situation arises in the quarry locality based on the evaluation by the revenue officials.

This condition will comply by the project proponent when such situation arises.

20	All waste dumps and topsoil dumps shall be properly stabilized by	Being	
	using coir mats or bio regeneration. Proper drainage system shall	Complied	
	be provides so the water is properly diverted away from the dump		
	slopes with no disturbance to the stability of the slopes.		

The waste dumps and topsoil dumps are stabilised by using coir mats or bio regeneration. Proper drainages are constructed by the project proponent, which will help to manage the storm water during monsoon season.

21	All dumps slopes shall be sufficiently stabilized by using	Noted
	appropriate species mix of grass .creepers, shrubs &trees. This	
	shall be done in consultation with the forest department and local	
	research institution and experts in stabilization of mine dumps.	

The overburden and topsoil stacking is progressing, once it is attain its maximum capacity, the project will plant appropriate grass on the dump to prevent sliding and soil erosion.

22	Garland drains of at least 2m width shall be provided all along 7.5	Noted
	m buffer zone to divert the water from entering the quarrying	
	slopes. These drains shall be cleaned every year before the	
	monsoon season.	

The project proponent has constructed garland drain to catch the rain water along 7.5 m buffer zone. This can divert the storm water entering the quarrying slopes.

23	The water from the garlands drainage shall directed to the silt	Being
	settling ponds. The clarified overflow from silt settling ponds shall	complied

be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.

The water from the garlands drainage will direct to the silt settling ponds. The clarified overflow from silt settling ponds shall be directed to a Rain Water Harvesting (RWH) pond before releasing the clarified water to the natural watercourse.

A retaining wall of stone rubbles with wire mesh, of sufficient width and strength (not less than 2m) shall be constructed at the bottom of the slope of the quarry lease area to arrest any likely roll of boulders during heavy rainfall.

The project will construct a retaining wall with stone rubbles at the bottom of the slope. This will prevent sliding and slumping. This will be done at appropriate place in the mining area.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

HEALTH

O1 First Aid kit provide in the work site. It shall be periodically Complied maintained properly. Some labourers shall be trained on First Aid.

The project proponent is keeping first aid box in the project site. First Aid Box is periodically maintained properly. Some labourers in the Quarry are trained on First Aid.

02 Whole some drinking water should be provided. Complied

The project proponent has provided drinking water in the project site.

O3 Premises should be maintained as wet to suppress the dust. complied

The project proponent splashing water on haulage roads and loading and unloading point to reduce the emission of dust

O4 Sanitary type of latrines and urinals should be provided. Complied

Sanitary type of latrine and urinals are arranged by the project proponent to every labours in the project site. the photograph of the sanitary type of latrines and urinals are attached as **Plate No 3**

05 Resting place should be provided for workers. Complied

The project has arranged adequate rest rooms in the project area for the workers.

06 'No Smoking' board should be exhibited according to COTPA Act. Complied

The project proponent has displayed No smoking area in the project site. The photograph of the No smoking Board is attached as **Plate No.4**

07	Work should not be done in night.	Complied

No work will be carried out in the quarry during night time. The working time of quarrying is from 7 am to 6 pm.

80	Details of nearest hospitals, shortest route to hospitals and contact	Complied
	no etc. Should be available.	

Details of nearest hospital, Fire station, Police station, etc are available in the project site. the photograph of theemergency contact numbers are attached as **Plate No. 5**

09	Approach roads should be maintained properly.	Being
		complied

The approach road has been properly maintaining by the project proponent to arrest the dust emission and easy transportation.

COMPLIANCE REPORT

(GENERAL CONDITIONS)

PART B

PART - B - GENERAL CONDITION

01	Rain Water Harvesting capacity should be installed as per the	Will be	
	prevailing provisions of KMBR / KPBR, unless otherwise specified.	Complied	

Compliance:

As part of water conservation and to collect rain water from the entire mining area, the project will develop one rain water harvesting pond in the quarrying area. The storm water flow is leading to the pond through natural drainage. The work of rain water harvesting will start after lease execution.

02	Environment Monitoring Cell (EMC) as agreed under the affidavit	Complied
	filed by the proponent should be formed and made functional.	

Compliance:

The Environmental Monitoring Cell (EMC) was formed with Mr. C.G George as head of the monitoring cell. The EMC meeting will arrange regularly to evaluate and monitor the specific, health and general conditions stipulated in the Environmental Clearance (EC) order. The details of the EMC members is given in **Table No. 1**

<u>Table 1 - Environmental Monitoring Cell (EMC)</u>

SI. No.	Post	Name					
1	Head of monitoring cell	C G George					
2	Member	Jovin George					
3	Member	Malla Suresh					

03	Suitable avenue trees should be planted along either side of the	complied
	tarred road and open parking areas, if any, inclusive of approach	
	road and internal roads.	

Green belt is an important component in the mining sector. To reduce air and noise pollution, the project proponent has planted 75 different avenue trees along either side of the road. There is also natural vegetation including trees, shrubs and climbers are presents in the project area.

04	Maximum possible solar energy generation and utilization shall be	Will	be
	ensured as an essential part of the project.	comp	olied
			, u

Compliance:

The project has yet to install solar panels/solar street lights in the project site to use maximum renewable energy to reduce electrical consumption from KSEB.

05	Sprinklers shall be installed and used in the project site to contain	complied
	dust emissions.	-

Compliance:

The project splashes the haulage road and critical areas with the help of vehicles in regular intervals to arrest dust emissions from the road while transportation of materials. The sprinklers will also install in the project site for suppression of dust.

06	Eco-restoration including the mine closure plan shall be done at	Noted
	the own cost of the project proponent.	

Compliance:

Eco restoration is in an integral part of mining activity. The eco restoration and the mine closure plan will be done at the own cost of the project proponent as per the approved mining plan.

0	7	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 be	compli	
		reclaimed with stacked dumping and overburden and planted with	compil	ea
		indigenous plant species that are eco-friendly, if no other specific		
		condition on reclamation of pit is stipulated in the EC.		

To save rain water, ten percent of the excavated pit area will be retained as water storage area. This will help to improve the ground water table. The remaining area will be reclaimed with stacked dumping of overburden and top soil. As part of its eco – restoration plan, the project will plant indigenous plant species that are eco – friendly on the reclaimed area

08	Corporate	Social	Responsibility	(CSR)	agreed	upon	by	the	complied
	proponent	should b	oe implemented.						

Compliance:

As part of inclusive growth of the community, the project proponent executes various activities under Corporate Social Responsibility of the firm with the consultation of Panchayath. The main activities were under the sectors of education, housing, health etc. The details of CSR provided in the period of second half is mentioned in the **Table No.2**. The receipts of the CSR activity are provided at **Annexure No.1**.

Table No.2 - Detail of performed activities under CSR

Sectors	Activities	Partners	Beneficiaries	Amount spent in Rs.	
Education					
	Donation	Jawahar Balavedi	Students	5,000	
Arts, Sports & Festival	Donation For Festival	Kaithery Muchilottu Bhagavathy Shetram	Public	5,000	
	Donation For Sports	Sangamitra arts & sports club	Public	10,000	
	Donation For Festival	Paid to Sreemuthappan Madappura Thira Maholsavam	Public	5,000	
	Donation For Festival	Paid to Paliyankkodu Bhagavathi Kavu	Public	20,000	
	Donation For Festival	Paid to Sree Paliyottukavu	Public	20,000	

		Bhagavathikavu		
	Donation For Festival	Paid to Kelumukku nattukoottam	10,000	
Donation F Festival		Paid to Cheekkilodu Kelumukku Nattukoottam	Public	10,000
Infrastruct ure Developme nt	Donation For Temple Construction	Cheruvanchery sree manikanda madam	Public	3,000
	Donation For Temple Construction	Paid to kurudankavu devi shetram nirmana fund	Public	40,000
Social	Donation for Environment	Green Belt	Public	10,000
	Donation	Kerala Water Authority	Public	4,600
Donation		Donation to Aaadharam Ezhuthu Association	Public	5,000
		Total		1,47,600

09	The lease area shall be fenced off with barbed wires to a maximum	Complied
	height of 4ft around, before starting of mining. All the boundary	_
	indicators (boards, stores, markings etc) shall be protected at all	
	times and shall be conspicuous.	

To demarcate the lease area, the project proponent has installed fencing around project site with barbed wires to maximum height of 4 ft. where Environmental Clearance obtained and lease obtained. This will help to prevent falling of animals/human

being/dumping of garbage etc. The proponent is intending to install fencing where ever it is missing.

1	0	Warning	alarms	indica	ting	the	time	of	blas	ting	(to	be	done	at	Complied
		specific	timings) has	to	be	arrang	ged	as	per	stij	oula	tions	of	
	Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.														

Compliance:

To give warning to the labours and community people prior to the blasting in quarry, the project installed warning alarms as per the stipulation of Explosive department in the quarry site. the photograph of the warning alarms are attached as **Plate No. 6**

Control measures on noise and vibration prescribed by KSPCB	Being
should be implemented.	complied

Compliance:

To reduce noise and vibration, the following measures are adopted in the project site.

- Proper maintenance of machinery and equipments
- > The machineries like breaker and excavator has well sound proof cabin so that the machine operators can work without stress due to the sound.
- > Personal protective devices i.e., ear plugs are provided to workers working in high noise areas.
- The mining activity held in day time only.
- Noise level at quarry site checked periodically.

Blast vibrations and control measures

- Controlled blasting technique is adopted in this project in order to reduce blast vibrations.
- Ordinary detonators are using for the blasting
- ❖ The maximum charge per delay is not more than 10kg to limit the PPV values to 10mm/sec.

Optimum delay sequence and stem to column ratio is maintaining to minimize the ground vibration intensity.

12	Quarrying activities should be limited to day time as per KSPCB	Complied
	guidelines/specific conditions.	

Compliance:

To reduce the adverse effect of Quarrying activities in the community, the mining activity will limit to day time as per KSPCB guidelines. The quarrying time is from 7 am - 6 pm.

•	13	Blasting should be done in a controlled manner as specified by the	complied
		regulations of explosives department or any other concerned	
		agency.	

Compliance:

The blasting is carrying out in controlled manner by using ordinary/ electric delayed detonators. All blasting activities are supervising by a qualified person with the specified regulations of explosive department. The blasting time is fixed at 9.00 am-10.30 am, 2.00 pm- 3.00 pm and 4.00 pm to 5.30 pm. The photograph of the Time showing blasting board is attached as **Plate No. 1.**

14	Α	licensed	person	should	supervise/control	the	blasting	Complied
	ор	erations.						

Compliance:

The project proponent has appointed mines manager and foreman in the site to supervise/control exploitation of minor minerals including blasting at the project site.

Annexure No. 2 is showing the certificate of qualified person. The Annexure No. 3 Shows the Form D.

Access								dust	Being
emissions that may arise during transportation of materials.						Complied			

To reduce emission of dust through the vehicle movement, the access road from the entrance of project site to quarry is maintaining in good manner. The project splashes water on the road to arrest the dust production during summer season.

ſ	16	Overburden materials should be managed within the site and used	complied
		for reclamation of mine pits as per mine closure plan/ specific	
		conditions.	

Compliance:

The overburden and topsoil need to extract during the time of mining, these natural resources are being staked in the project site. This will be used for plantation, haulage roads and land filling in the mining area. No overburden will let out from the project site.

17	Height of the benches should not exceed 5m, and width should not	Being
	be less than 5m, if there is no mention is the mining plan/specific	complied
	conditions.	Complica

Compliance:

To enhance safety and conserve environment, the quarrying is carrying out as per mining plan. The project extracts the minerals by creating benches. The benches will not exceed 5 meters of height and the width of the bench will have minimum of 5 meters.

18	Mats to reduce fly rock blast to a maximum of 10 PPV should be	Noted
	provided.	

Compliance:

The project proponent use ordinary/electric delayed detonator. The blasting is under the supervision of qualified person. The new technology of delayed blasting can reduce the incident of fly rock. Blasting during unfavourable weather conditions will be avoided. During blasting it will maintain optimum delay sequence and stem to column ratio to minimize the fly rock distance. The project assures that the PPV is below 10 during blasting.

19	Maximum depth of mining from general ground level at site shall	Will	be
	not exceed 10m.	compl	ied

The depth of mining won't exceed beyond 10 meter or not below the level of the nearest stream bed, whichever is less. The exploration will be done as per the plan submitted before District Environment Impact Assessment Authority (DEIAA), Kerala.

20	No mining operations should be carried out at places having a	Noted
	slope greater than 45 ⁰ .	

Compliance:

In the project site, there is no mining operation is carried out with a slope greater than 45°.

	21	Acoustic enclosures should be provided to reduce sound	Will be
		amplifications in addition to the provisions of green belt and hollow	complied
		brick envelop for crushers so that the noise level is kept within	Compiled
Į		prescribed standards given by CPCB/KSPCB.	

Compliance:

To reduce the impact of sound to the labours in the unit, the project has provided ear plugs. Vegetation around the mining area will help to reduce noise and air pollution. This helps the noise level kept within prescribed standards. The project will try to enhance the vegetative cover by planting more tree saplings.

22	The workers on the site should be provided with the required Cor	mplied
	protective equipments such as ear muffs, helmet, etc.	

Compliance:

To ensure the safety of workers in working site, the project proponent arranged adequate Personnel Protective Equipments (PPE) such as helmets, ear plugs, safety belts, glows, etc.

Garland drains with clarifiers to be provided in the lower slopes Noted around the core area to channelize storm water.

Compliance:

The project proponent ensured that all storm water from the mining area will flow in to the pond creating at mining area. The project proponent is intending to create garland drains where it is necessary in the project area for storm water management.

The transportation of minerals should be done in covered trucks to complied contain dust emissions.

Compliance:

To avoid dust emission while transportation of materials, the project assured the trucks were covered before it leaving the project site

2	25	The proponent should plant trees at least 5 times of the loss that	Being
		has occurred while clearing the land for the project.	complied
			-

Compliance:

The project proponent has started to plant various saplings in the project area as a compensation of loss of trees while the project is clearing the land for mining.

26	Disposal of spent oil from diesel engines should be as specified	Noted
	under relevant Rules/Regulations.	

Compliance:

Disposal of spent oil from diesel engines will sell only to the approved recyclers/ local recyclers.

27	Explosives	should	be	stored	in	magazines	in	isolated	place	Complied
	specified ar	nd appro	ved	by the e	xplo	osives depar	tme	nt.		

As part of safety, Explosives are stored in magazine. The magazine is situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine was fenced with barbed metal wire.

ſ	28	A minimum buffer distance of 100m meter from the boundary of the	Complied
		quarry to the nearest dwelling unit or other structures, not being	
L		any facility for mining shall be provided.	

Compliance:

To reduce the adverse impact on community life, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project. A minimum buffer distance of 100 meter from the boundary of the quarry to the nearest dwelling unit or other structures are maintained.

29	100	m	buffer	distance	should	be	maintained	from	forest	Noted
	bour	ndar	ies.							

Compliance:

The project is maintaining a minimum of 100 meter buffer distance from forest boundaries.

30	Consent from Kerala Pollution Control Board under Water and Air	Complied
	Act(s) should have been obtained before initiating activity.	_

Compliance:

The Project has obtained "Consent to Operate" (Renewal) from Kerala State Pollution Control Board. The copy of consent is provided in **Annexure No. 4**.

3	31	All other statutory clearances should have been obtained, as Complied	
		applicable, by project proponents from the respective competent	
		authorities including that for blasting and storage of explosives.	

The certificates obtained from concerned statutory authorities are enclosed in **Annexure No.4, 5, 6, 7& 8**. The details are given in **Table No 3**

TABLE 3 – APPROVALS FROM COMPETENT AUTHORITIES

Name of the Statutory approval	Name of the Statutory authority
"Consent to Operate"	Kerala State Pollution Control Board
Environmental Clearance order	State Environmental Impact Assessment Authority, Kerala
Explosive License	Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)
License for quarry operations	Gram Panchayath
Permit order	Directorate of Mining and Geology

	In the case of any change(s) in the scope of the project, extent	Will be
32	quantity, process of mining technology involved or in any way	complied
32	affecting the environmental parameters/impacts as assessed,	Complied
	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.	

Compliance:

At present there is no change in the scope of the project. The project will seek for a new Environmental clearance in the case of any change(s) in the scope of the project.

,	33	The Authority reserves the right to add additional safe guard	Noted
		measures subsequently, if found necessary, and to take action	
		including revoking of the environment clearance under the	
		provisions of the Environmental (Protection) Act 1986, to ensure	
		effective implementation of the suggested safeguard measures in a	
		time bound and satisfactory manner.	

The project is willing to add all possible additional safe guard measures subsequently if the authority found necessary.

34	The stipulations by Statutory Authorities under different Acts and	Noted
	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.	

Compliance:

The stipulated orders and directions under different act and notification including EIA notification will be scrupulously followed.

35	The project proponent should advertise in at least two local news	Complied
	papers widely circulated in the region, one which (both	
	advertisement and the newspaper) shall be in the vernacular	
	language informing that the project has been accorded	
	Environmental Clearance and copies of clearance letters are	
	available with the Department of Environment and Climate Change,	
	Govt. of Kerala and may also be seen on the website of the	
	Authority at www.seiaakerala.org. The advertisement should be	
	made within 10 days from the date of receipt of the Clearance letter	
	and the copy of the same signed in all pages should be forwarded	
	to the office of this authority as confirmation.	

Compliance:

An advertisement in two local newspapers regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala. The copy of the advertisement given in two local newspapers is provided at **Annexure No.9.** The details of the news papers are given in the **Table No.4.**

SI. No.News paperLanguageDate of edition1DeepikaMalayalam02-10-20172The HnduEnglish07-10-2017

Table No.4- Details of advertisement in news papers

36	A copy of the clearance letter shall be sent by the proponent to	Complied
	concerned Grama/District Panchayath / 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 Environment Clearance letter was submitted to the Panchayath Office. The project proponent did not receive any suggestions / representation from anywhere while the processing the proposal therefore did not give the copy of clearance letter to anyone. The Acknowledgement of the clearance letter sent to the panchayth is attached as **Annexure No. 10**

37	The proponent shall submit six monthly reports on the status of	Complied					
	compliance of the stipulated EC conditions including results of						
	monitored data (both in hard copies as well as by e-mail) and						
	upload the status of compliance of the stipulated EC conditions						
	including results of monitored data on their website and shall						
	update the same periodically. It shall simultaneously be sent to the						
	respective Regional Office of MoEF, Govt. of India and also to the						
	State Environment Impact Assessment Authority (SEIAA) office.						

Compliance:

The compliance report is being submitted to the District Environmental Impact assessment Authority, Kannur, State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore both in hard copy as well as mail. The results of Monitored data is attached as **Annexure No. 11, 12 & 13**

38	The details of Environmental Clearance should be prominently	Will be
	displayed in a metallic board of 3 ft x 3ft with green background	Complied
	and yellow letters of Times New Roman font of size of not less than	Compiled
	40. Sign board with extent of lease area and boundaries shall be	
	depicted at the entrance of the quarry, visible to the public.	

Compliance:

The conditions of the environmental clearance prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font. **Plate No. 7** is the photograph of the Metallic board.

39	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.							

Compliance:

An assurance in the form of affidavit was already submitted to DEIAA, Kannur.

40	No change in mining technology and scope of working should be	Noted
	made without prior approval of the SEIAA, No further expansion or	
	modification in the mine shall be carried out without prior approval	
	of the SEIAA, as applicable.	

Compliance:

The project proponent is not intending to expand the area of mine, technology and scope of working. The project will appear DEIAA, Kannur for Environment Clearance if the project wants to expand its scope.

41	The project proponent shall ensure that no natural water course	Noted
	and/or water resources shall be obstructed due to any mining	
	operations. Necessary safeguard measures to protect the first	
	order streams, if any originating from the mine lease shall be taken.	

Compliance:

There is no such natural water course or thodu is flowing along the project site. The project will ensure the natural runoff of storm water. No stream is originating from the lease area.

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 un loading points & transfer point to reduce fugitive emissions.

Compliance:

The project proponent has monitored the ambient air quality as per National Ambient Air quality Standard (NAAQS). The project is intending to increase the splashing of water and installed sprinklers at loading, unloading and transfer points. This activity can reduce the fugitive emission.

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 shall be staked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the bump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

Noted

Compliance:

To prevent the soil erosion, the top soil and overburden are stacked in a designated place within the project site. Only topsoil will be used for plantation. Overburden will be used for landfill and to construct haulage roads in the mining area. The excess will be stored in a designated place.

Catch drains and siltation ponds of appropriate size shall be complied 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 monsoon and maintained properly.

Compliance:

The project proponent has constructed effective garland drains to catch all the storm water during the time of monsoon season. These channels will direct the water to the rain water collection pond. All sediments and silts will settle at the bottom of the pond and only cleared water is letting out.

45 Effective safeguard measures such as regular water sprinkling shall be carries out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5}, such as haul road, loading an un loading points and transfer points – it shall be ensured that the Ambient Air Quality Parameters confirm to the norm prescribed by the Central Pollution Control Board in this regard.

Being complied

Compliance:

To prevent dust emissions, the project proponent installed sprinklers in critical areas to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The water spraying has been carried out regularly to arrest the dust emission. The vehicle for water spraying will be properly marinated.

Fugitive dust emission from all the sources should be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and at transfer point should be provided and properly maintained.

Compliance:

The project proponent splashes water in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points.

47 Measures should be taken for control of noise levels below 85 dBA complied in the work environment.

Compliance:

The main sound generating activities are the playing of jack hammer, breaker, vehicles and blasting operations. The level noise from all these activities will not go beyond 85dBA. The project proponent will take appropriate action to reduce the sound by employing possible measures. These are mentioned under the condition number 11.

A separate Environmental Management Cell with suitable qualified personal should be set up under the control of a senior executive, who will report directly to the Head of the Organization.

Compliance:

To monitor all conditions stipulated in the Environment Clearance and environment Management Plan, the project proponent constitutes an Environment Monitoring Cell with Mr. C.G George as the head of the Cell.

The funds earmarked for environmental protection and CSR Being activities should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact assessment authority (SEIAA) office.

Compliance:

The project proponent executes many activities under Corporate Social Responsibility (CSR) for community development. To implement these activities in a good manner, the project proponent will open an account for keeping the funds earmarked for environmental protection and CSR.

The Regional Office of MoEF &CC located at Bangalore shall Will be monitor compliance of the stipulated conditions. The project complied

authorities should extend full cooperation to the officer(s) of the regional Office by furnishing the requisite data/information/monitoring reports.

Compliance:

The project proponent will extent all possible cooperation to the officers form regional office of MoEF & CC and can produce all data/information/reports when they are asking for.

51	Any appeal against this environmental clearance shall lie with the							
	National Green Tribunal, if preferred within a period of 30 days as							
	prescribed under section 16 of the National Green tribunal Act,							
	2010.							

52	Concealing the factual data or submission of false/ fabricated data						
	and failure to comply with any of the conditions mentioned above						
	may result in withdrawal of this clearance and attract action under						
	the provisions of Environment (Protection) Act, 1986.						

53	The	SEIAA	may	revoke	or	suspend	the	order,	for	non	Will	be
	imple	ementatio	on of a	ny of the	spe	cific or this	s impl	ementat	ion o	f any	comp	olied
	of any of the above conditions is not satisfactory. The SEIAA											
	reserves the right to alter/modify the above conditions or stipulate											
	any f	urther co	nditio	n in the i	ntere	est of envir	onme	nt protec	ction.			

Compliance:

The project proponent is willing to implement the conditions stipulated in the Environment Clearance order. The project can execute all possible measures in the project site for the conservation of environment.

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

Compliance:

The project will give priority to the conditions stipulated in the Environment clearance Order for its execution.

55	This order is valid for a period of 5 years or the expiry date of mine Note	
	lease period issued by the Govt. of Kerala, whichever is earlier.	

56	The environmental clearance will be subject to the final order of the Noted			
	courts in any pending litigation related to the land or project, in any			
	court of law.			

Ī	57	The mining operation shall be restricted to above ground water	Will be	Ī
		table and is should not intersect ground water table.	complied	

Compliance:

The project proponent will restrict its mining operations above the ground water table.

58	All vehicle used for transportation and within the mine shall have	complied
	"PUC" certificate from authorized pollution taking center. Washing	
	of all vehicles shall be inside the lease area.	

Compliance:

As part of reduce air pollution, the project proponent is monitoring the pollution level of all vehicles playing in the project site. This monitoring conducts only in authorized pollution testing center.

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

Compliance:

At present, the need of prior approval is not necessary to draw ground water and surface water for the project.

60	Regular monitoring of flow rates and water quality upstream and	Noted
	down streams of the springs and perennial nallahs flowing in and	
	around the mine lease area shall be carried out and reported in the	
	six monthly report to SEIAA.	

Compliance:

There is no stream or springs flowing in and around to the mine lease area. The project will install de-siltation trap and other mechanism to prevent sediments and wastes from the mining area to the public drainage system.

61	Occupational health surveillance program of the workers should be complied	
	under taken periodically to observe any contractions due to	
	exposure to dust and take corrective measures, if needed.	

Compliance:

The project proponent has started an occupational health surveillance programme for the labours working in mining area in association with Primary Health center.

Plate No. 1



Board showing blasting time

Plate No. 2



Boundary Pillars

Plate No. 3



Sanitary Latrine and Urinals

Plate No. 4



No Smoking Board

Plate No. 5



Emergency Contact Numbers





Warning Alarms

Plate No. 7



Metallic Board

Plate No. 8



Sign Boards

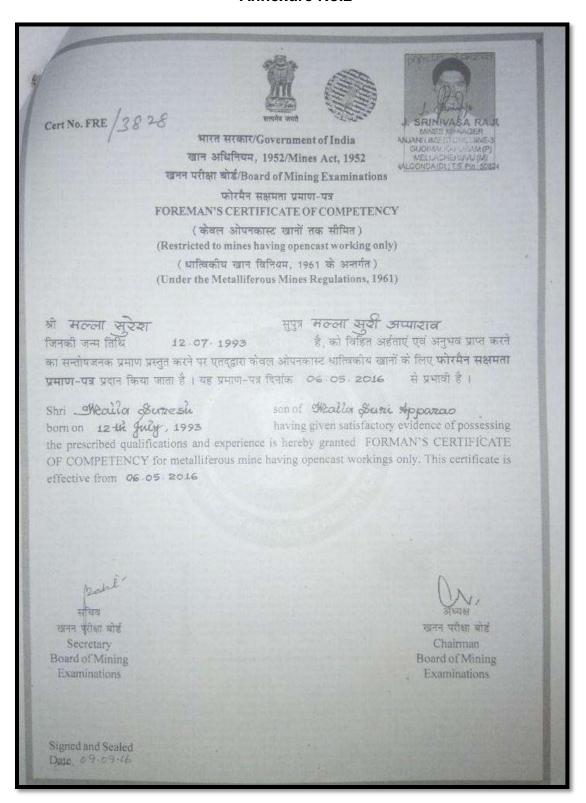




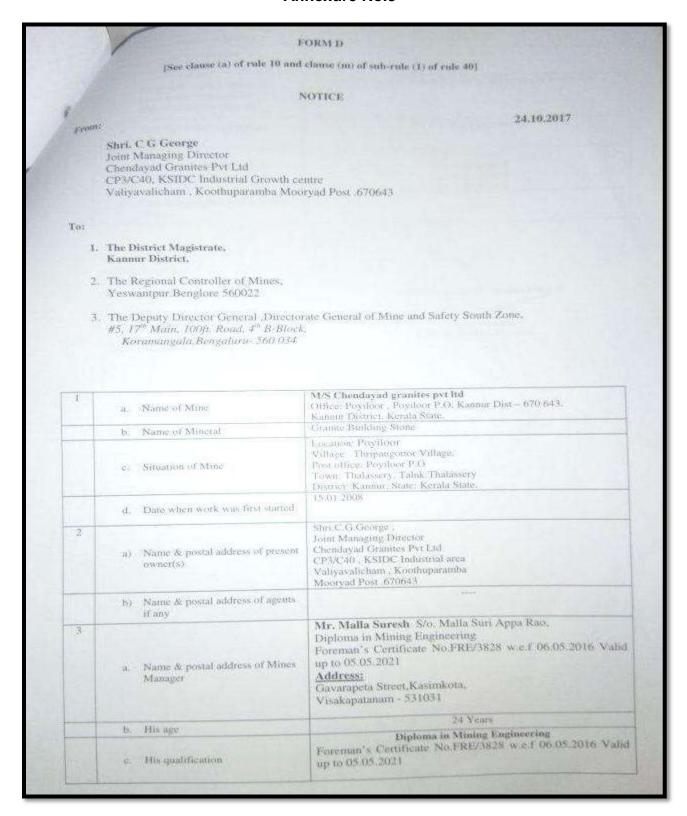


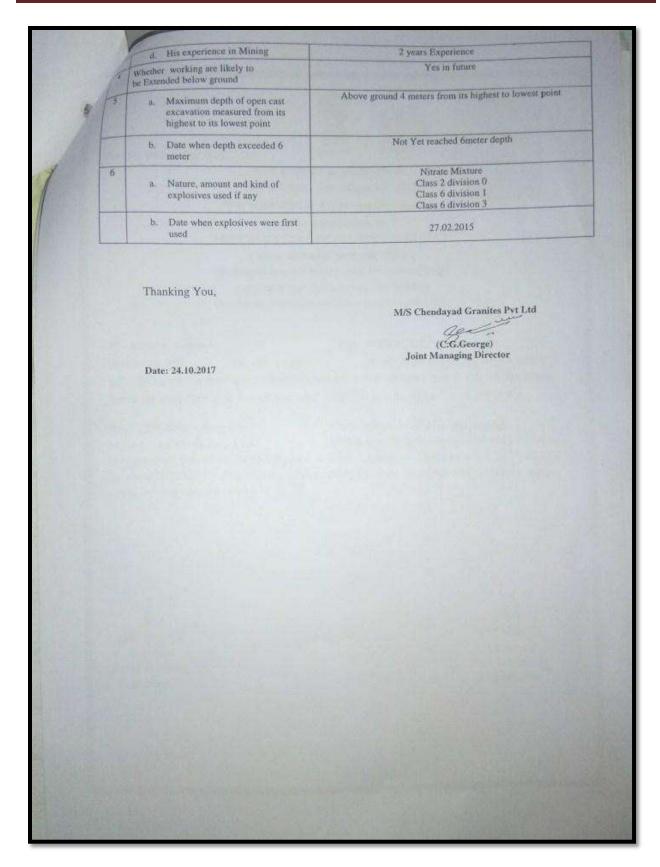
FORM CB-1 Refer Chapter II (A) Para 1 Chapter II (B) Para 2 AX No 0944787 KERALA WATER	AUTHORIT	Original to Consumer Duplicate Office Copy
RECEIT (For Water/Sewer/Mainter Received with thanks from M/s. Sri./ Smt./ M Consumer No. Rs. 46.00 (ir One 10/0 (ir Demand Draft No. 26.33.48 dtd. Zo bank br charges against Bill No(s). U.W.S	nance charges only Miss .cn	y) Date: A. J.

Receipts of CSR Activities



Certificate of licensed Person





Form D





KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/KNR/ICO/814/2008

Date of issue :2017-09-08

CONSENT VARIATION ORDER

Consent No: O14KANCTOA250074

Ref: 1. Consent No:O14KANCTOA250074 dated 11/11/2014.

2. Consent Variation Order dated 27/04/2015.

3.Consent Variation Order No:O14KANCTOA250074 dated 24/02/2016.

The Integrated Consent to Operate issued as per reference above to M/s Quarry Owned By Sri.C G George Joint Managing Director Chendayad Granites pvt ltd, Poiloor P.O.Via Panoor, Thalassery is hereby modified & issued to M/s Quarry Owned By Sri.C G George Joint Managing Director Chendayad Granites pvt ltd, Poiloor P.O.Via Panoor, Thalassery 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.

L GENERAL

S.No.	Items	Description
1	1,1 VALIDITY	30/04/2020
2	1.13 CAPITAL INVESTMENT	25 LAKHS
3	1.12 ANNUAL FEE	4420/-
4	1.12 FEE REMITTED	13260/-
5	1.16 ACTIVITY	granite quarrying of 1.5176 Ha in RS NO.275/1A of Thrippangottoor Village of Thalassery Thaluk

II. CONDITIONS

- 2.2 This integrated consent, unless withdrawn earlier and subject to condition No.2.1 Shall be valid up to 30/04/2020. In case the operation of the Industrial plant is to be continued thereafter, application for renewal of the consent is to be made before 30/01/2020.
- 2.6 Deleted.
- 3.2 Deleted.
- 3.3 Deleted.

Page1



Copy of Consent form PCB



Validity expires on 01.09.2022

Proceedings of the District Environment Impact Assessment Authority Kannur

Present: Sri.Mir Mohammed Ali I.A.S., Chairman; Sri.S. Chandrasekar I.A.S., Member Secretary & Sub Collector Thalassery; Sri.Suneel Pamidi.I.F.S., Member and Sri. O Jayarajan I.F.S (Rtd) Member

Sub: DEIAA- Environmental clearance for the Proposed Granite (Building Stone) Quarry project for an area of 1.5176 Ha in Sy. No.275/1A, Trippangottur village, Thalassery Thaluk, Kannur District of Mr. C. G. George, Joint Managing Director M/S Chendayad Granites Pvt Ltd, CP3/C40, KSIDC Industrial Centre, Valiyavalicham, Koothuparamba, Kannur, Kerala-670643

DISTRICT ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KANNUR

No. 45/KNR/2017/DEIAA

Dated 02/09/2017, Kannur

- Ref: 1.Online Application dated 12 May 2017 from Mr. C. G. George, Joint Managing Director M/S Chendayad Granites Pvt Ltd, CP3/C40, KSIDC Industrial Centre, Valiyavalicham, Koothuparamba, Kannur, Kerala-670643
 - 2. Minutes of the 6^{th} meeting of DEAC held on 15/06/2017.
 - 3. Minutes of the 7th meeting of DEAC held on 22/08/2017.
 - 4. Minutes of the 8th meeting of DEIAA held on 29/08/2017.

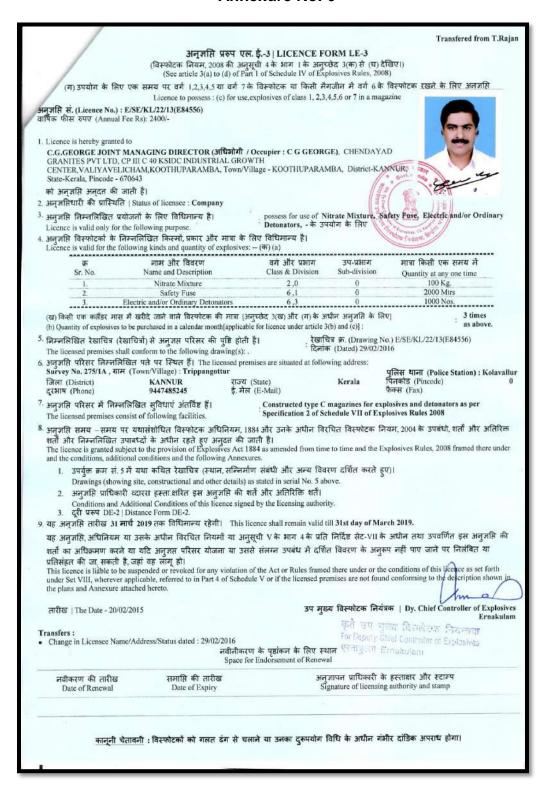
ENVIRONMENTAL CLEARANCE NO. 19/2017

Mr. C. G. George, Joint Managing Director M/S Chendayad Granites Pvt Ltd, CP3/C40, KSIDC Industrial Centre, Valiyavalicham, Koothuparamba, Kannur, Kerala-670643 vide his application received on 12 May 2017, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project of an area of 1.5176 Ha in Sy. No.275/1A,Trippangottur village, Thalassery Thaluk, Kannur District. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. As per gazette notification no SO 190(E)dtd 20/01/2016, Government of India and GO(Ms)no.05/2016/Envt Dtd 04/04/2016,Govt:of Kerala DEIAA and DEAC constituted for considering the applications for environmental clearance less than 5 hectares in individual cases and 25 hectares in cluster



Page 1 of 8

Copy of Environmental Clearance



Copy of Explosive



Copy of license from Gram Panchayat

PROCEEDINGS OF THE DIRECTOR OF MINING & GEOLOGY

- Mining & Geology Mines & Minerals Minor Minerals Granite Building Stone Quarrying Lease to M/s. Chendayad Granites Pvt. Ltd., CP3/C40, KSIDC Industrial Growth Centre, Mooryad. P.O, Valiyavalicham, Koothuparamba, Kannur District – 670 643 (Represented by one of its Joint Managing Director, Shri. C. G. George) -sanctioned -Orders - issued
- Ref. 1. Application dtd. 21/02/2017 from M/s. Chendayad Granites Pvt. Ltd., CP3/C40, KSIDC Industrial Growth Centre, Mooryad. P.O, Valiyavalicham, Koothuparamba, Kannur District - 670 643 (Represented by one of its Joint Managing Director, Shri. C. G. George)
 - 2. Letter No. DOC/M-938/2017 dtd. 28/04/2017 from the Geologist, District Office, Kannur
 - 3. Pro.order. No. 45/KNR/2017/DEIAA dtd. 02/09/2017 of the District Environment Impact Assessment Auhority, Kannur, Kerala 4. Kerala Minor Mineral Concession Rules, 2015.

No. 408/2017-18/4138/M3/2017/DMG

Dated, Thiruvananthapuram 04/10/2017

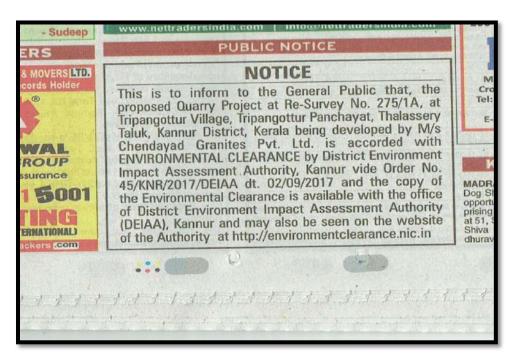
ORDER

A quarrying lease is granted to M/s. Chendayad Granites Pvt. Ltd., CP3/C40, KSIDC Industrial Growth Centre, Mooryad. P.O, Valiyavalicham, Koothuparamba, Kannur District -670 643 (Represented by one of its Joint Managing Director, Shri. C. G. George) to quarry Granite (Building Stone) over an area of 1.5176 Hectares of land comprised in Re - Sy. No. 275/1A of Tripangottur Village, Thalassery Taluk, Kannur District for 6 (Six) years from the date of execution of the quarrying lease deed under the Kerala Minor Mineral Concession Rules, 2015 and as per the survey map issued by the Tahsildar, Thalassery and the approved Mining Plan and environmental clearance submitted by the applicant subject to the under mentioned conditions.

- Royalty is payable to Government as per Rule 32 of the Kerala Minor Mineral Concession Rules, 2015 in respect of minor mineral quarried and moved out of the quarry subject to revision from time to time on the basis of amendments to the schedule I of the said Rules.
- Dead rent is realizable under 40(1)(d) of the said rules subject to revision from time to time 2 on the basis of amendments to the schedule II of the said rules.
- Surface rent realizable under 40(1)(e) of the said rules will be equal to the land revenue 3. assessed by the Revenue Department subject to revision from time to time on the basis of the land revenue.
- The lessee shall execute a quarrying lease deed within a period of six months from the date 4. of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015.
- The lessee shall also deposit an amount of Rs 10,000/- (Rupees Ten Thousand only) per 5. hectare as security deposit for the observance of the terms and conditions of the lease before the deed is executed as per rule 42 of the said rules. The lessee shall commence quarrying operation only after the deed is executed and registered.
- The quarrying area shall be demarcated and boundary stones fixed at the lessee's expenses 6. before execution of the quarrying lease deed.
- 7. The lessee shall not win and dispose of any type of dimension and decorative stones from the area over which the quarrying lease has been sanctioned on the strength of this order
- The production of Granite (Building Stone) from the area covered under this grant shall be 8 subject to the quantity specified in the Mining Plan submitted by the lessee and the same is restricted to 26,000 Metric Tonnes per year.
- 9. (i) The lessee shall erect a notice board in Malayalam at a prominent place with a minimum size of 1 metre X 1.5 metres in a metallic board near to the entrance of the quarry to the effect that it shall contain the name and address of the permit holder, mineral concession number and date, the mineral to extracted, permit number and date and its date of expiry,



Copy of Lease





Advertisement in News papers



The Secretary, Tripangottoor Panchayat, Thalassery Taluk, Kannur District, Kerala. Dt. 08/09/2017

Sub:- Environmental Clearance (E.C.) - Proposed Quarry Project at Re-Survey No. 275/1A, Tripangottur Village, Tripangottur Panchayat, Thalassery Taluk, Kannur District, Kerala - Submission of the E.C. Order - Compliance to the condition of Environment Clearance - Reg.

Respected Sir,

- This refers to the Environmental Clearance obtained to the proposed Quarry Project at Re-Survey No. 275/1A, Tripangottur Village, Tripangottur Panchayat, Thalassery Taluk, Kannur District, Kerala vide Order No. 45/KNR/2017/DEIAA dt. 02/09/2017.
- We hereby submit a self attested copy of the Environment Clearance Order No. 45/KNR/2017/DEIAA dt. 02/09/2017. This is in compliance to the condition of the E.C. Order.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours respectfully,

for Chendayad Granites Pvt. Ltd.,

C.G George,

(Joint Managing Director)

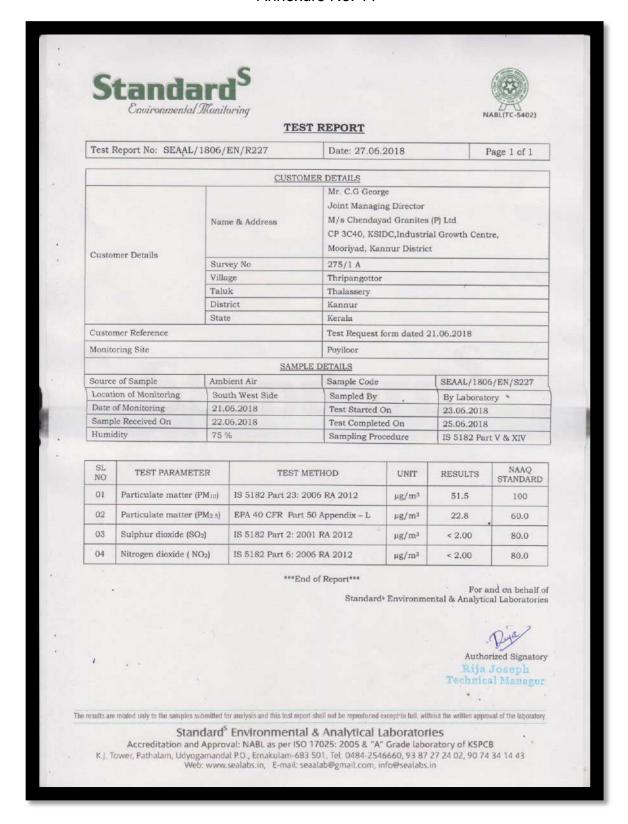
Encl: As above

F⊷ Segretary Imprangottoor Grama Panehava

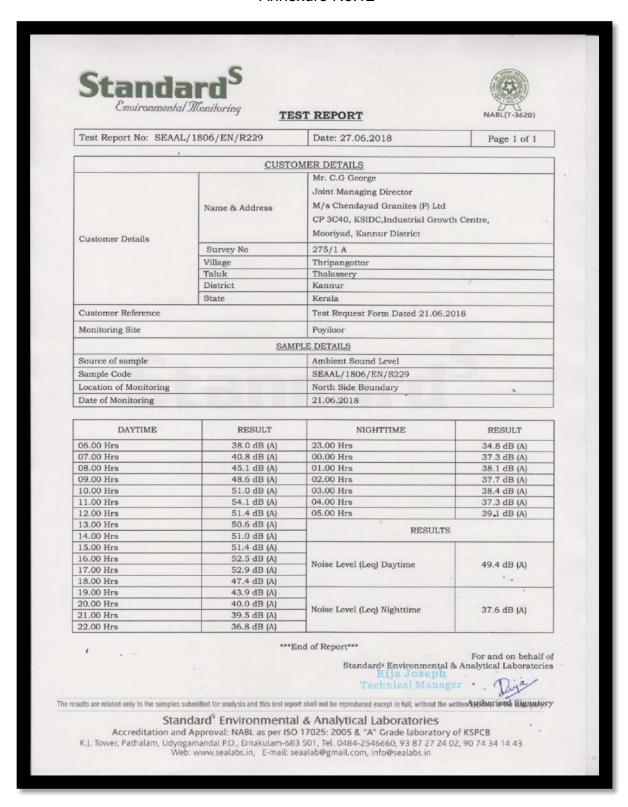
Chendayad Granites (P) Limbdo. Kallikkandi-670 55 Building No.: CPIIIC40, KSIDC Industrial Growth Centre, Vallyavelicham, Koothuparamba, Pin: 670643 Kannur Dt., Kerala. Ph : 0490 2364300. Mob: 8113 041 112, 8113 041 113, 8113 041 114, 8113 041 119

e-mail: geosandin@gmail.com. www.geosand.in

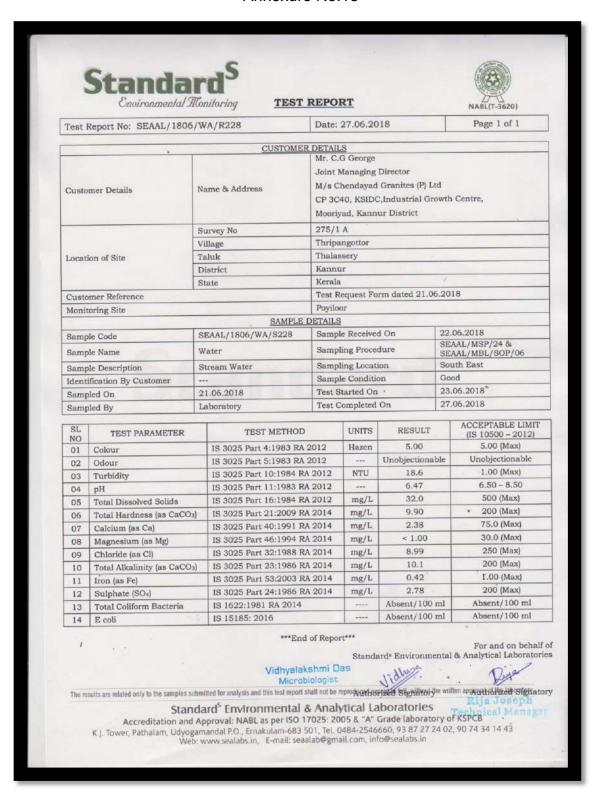
Copy of acknowledgement



Result of Air



Result of Noise



Result of Water