# COMPLIANCE REPORT

OCTOBER 2020 - MARCH 2021

# M/S BLUE MOUNTAIN GRANITES

# THRISSUR DISTRICT KERALA



# **Blue Mountain Granites**

Vellikulangara P.O., Trichur Dt. Kerala, Pin - 680 699 Tel: 0480 - 2743231, 2741432

Dt. 07-04-2021

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

Ref :- File No. 626/SEIAA/EC1/4809/2014

Sub :- Environment Clearance – Quarry project at Vellikulangara Village, Mattathur Panchayat, Chalakudy Taluk, Thrissur District, Kerala – Compliance Report – Second half – Reg.

#### Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 3.0352 Ha. by order No. 626/SEIAA/EC1/4809/2014, dated 05/02/2016 by State Environmental Impact Assessment Authority, Kerala. The compliance report of Second half (October 2020 – March 2021) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

FOR BLUE MOUNTAIN GRANITES

M/s Blue Mountain Granites

Encl: - As Above

Copy to: The Chairman & The Member Secretary
State Environment Impact Assessment Authority (SEIAA)
Thiruvananthapuram,
Kerala – 695 024.

#### **COMPLIANCE REPORT**

TO

THE CONDITIONS

**OF** 

#### **ENVIRONMENTAL CLEARANCE ORDER**

NO: 626/SEIAA/EC1/4809/2014

DATED: 05-02-2016

BY

# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA) FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NO. 1982, VELLIKULANGARA VILLAGE, MATTATHUR
PANCHAYAT, CHALAKUDY TALUK,
THRISSUR DISTRICT,
KERALA

BY

M/S BLUE MOUNTAIN GRANITES,
VELLIKULANGARA POST, CHALAKUDY
THRISSUR DISTRICT,
KERALA-680699

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#### **INTRODUCTION**

The quarry project of **M/s Blue Mountain Granites** is situated at Survey No. 1982, Vellikulangara Village, Mattathur Panchayat, Chalakudy Taluk, Thrissur District, Kerala.

The quarry project was accorded with the Environmental Clearance (EC) by State Environmental Impact Assessment Authority on 05–02–2016. 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 conditions and general conditions of the Environmental Clearance order for the period of October 2020 – March 2021 is being submitted.

COMPLIANCE REPORT
(SPECIFIC CONDITIONS)

PART A

#### PART - A- SPECIFIC CONDITIONS

1	Fencing should be provided all around the lease area. The	Complied	
	mandatory buffer distance must be left by the side of forest		
	teak plantation, road and H T line.		

#### Compliance

The project proponent has installed fencing around the area in order to demarcate the lease area. As per the stipulation, mandatory buffer distance has left from teak plantation, 100 meter distance to H T line and village road from the project site.

2	Overburden must be stored in the designated places and	Complied
	provided with protective support walls	

#### Compliance

To prevent sliding, the project proponent has constructed strong protective support walls. The overburden extract during the time of mining has staked in designated place in the project site. The overburden is used for making haulage road in the project site. No overburden will let out from the project site. The excess overburden is staked in a designated place.

3	The RWH	structure	and	water	clarification	mechanism	complied
	provided must be maintained throughout. Periodic de siltation						
	is mandatory						

#### Compliance

All runoff from the project site is collected in the de siltation pond so that all sediments can settle down at the bottom of the pond. The project proponent provided de siltation mechanism in the quarrying area. This mechanism is maintaining throughout for preventing quarry waste entering in to the main stream. Periodically the project proponent clears sediments from the pond.

During blasting optimum delay sequence is maintained and stem to column ratio to minimize the fly rock distance. The project proponent is using electric/ordinary delayed detonator for blasting. The blasting is carrying out under the supervision of qualified person. Therefore there is no issue with fly rock in the community and the project is also assuring the maximum PPV is under 10.

**COMPLIANCE REPORT** 

(GENERAL CONDITIONS)

**PART B** 

#### **PART - B - GENERAL CONDITIONS**

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

#### Compliance

Even though it is not specified in KMBER/KPBR to collect rain water in mining area, the proponent has developed rain water harvesting pond in the project site to collect rain water falling in the entire mining area. The storm water from all mining areas is properly channelized to this pond. It is situated in the lowest level of quarry area. The photograph showing the rain water collection pond in the project area is attached in **Plate No. 1.** 

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

#### Compliance

The Environmental Monitoring Cell (EMC) formed and made functional with Mr. Eldhose Kuriakose (Partner) as head of the monitoring cell. The EMC meeting arranges regularly for a sustainable environment. The details of the Environment Monitoring Cell are given below.

TABLE 1 ENVIRONMENTAL MONITORING CELL (EMC)

SI. No.	Post		Name
1.	Head of the monitoring cell	:	Eldhose Kuriakose
2.	2. Member		Basavaraj Swamy
3.	Member	:	Ajesh Sebastian

3	Suitable avenue trees should be planted along either side of	Being
	the tarred road and open parking areas, if any, inclusive of	complied
	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 suitabale avenue trees along either side of the road. There is also natural vegetation including trees, shrubs and climbers are presents in the project area. The details of vegetation along the road side are given below in **table No.2**.

TABLE No. 2 - Details of the natural vegetation existing along the road side

SI. No.	Scientific Name	Common Name	Family	Туре
1.		Rambuttan	Sapindaceae	
2	Psidium guajava	pera		
3	Mangifera indica	Mavu	Anacardiaceae	Tree
4	Hevea brasiliensis	Rubber	Euphorbiaceae	Tree
5	Swietenia mahagoni	Mahagony	Meliaceae	Tree
6	Bambusa bambos	Mula	Poaceae	Herb
7	Chromolaena odorata	Communist-pacha	Compositae	Shrub
8	Coccos nucifera	Thengu / Coconut	Arecaceae	Tree
9	Tectona grandis	Thekku	Verbenaceae	Tree

04	Maximum possible solar energy generation and utilization shall	Complied
	be ensures as an essential part of the project.	

#### Compliance:

The installation of solar can reduce the consumption from conventional sources therefore the project proponent is intending to use maximum renewable energy to reduce electrical consumption from KSEB. As part of this, the project proponent has installed solar street light in the project site.

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

The project proponent 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 installed in and around the crusher unit.

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

#### Compliance:

Eco restoration is 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. The planted and proposed sapling to be planted in the project site is given below in the **table No. 3**.

TABLE 3 - Details of the saplings planted within the project area

SI. No.	Scientific Name	Common Name	Family	Habitat
1	Mangifera indica	Mavu	Anacardiaceae	Tree
2	Capsicum frutescens	Kantharimulaku	Solanaceae	Herb
3	Carica papaya	Papaya	Caricaceae	Tree
4	Artocarpus heterophyllus	Plavu	Moraceae	Tree
5	Curcuma longa	Manjal	Zingiberaceae	Herb
6	Coccos nucifera	Thengu	Arecaceae	Tree
7	Musa paradisiaca	Vazha	Musaceae	Herb
8	Swietenia mahagoni	Mahagony	Meliaceae	Tree
9	Tectona grandis	Thekku	Verbenaceae	Tree
10	Hevea brasiliensis	Rubber	Euphorbiaceae	Tree

07	At least 10 percent out of the total excavated pit area should be	Noted
	retained as water storage areas and the remaining area should	
	be reclaimed with stacked dumping and overburden and	
	planted with indigenous plant species that are eco-friendly.	

The project proponent will retain 10 percent of total excavated pit as rain water storage area. 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	Being
	proponent should be implemented	complied

#### Compliance:

The activities under Corporate Social Responsibility (CSR)/ Corporate Environmental Responsibility (CER) activities are executed in the sector of Health, sports, education, marriage, death etc. The project proponent is intending to carry out more activities under CSR for inclusive growth in the community. Receipts/ vouchers of CSR/CER is attached as **Annexure No. 14.** The details are given below

TABLE 4 - Details of activities performed under CSR/CER

Date	Particulars	Amount Spent
		In Rs.
10-09-2020	ELECTRICAL WORK DONATED AYYANKUNNU	
10-09-2020	VILLAGE SHEDULED TRIBE HOME	10000
15-10-2020	AYYANKUNNU PANCHAYATH NEW HOSE	
13-10-2020	MAIKING	25000
19-10-2020	AYYANKUNNU PANCHAYATH NEW HOME	
19-10-2020	MAIKING	30000
20-11-2020	SIEMENS TV 2 NOS online Education	20000
15-12-2020	CHARITTY POOR MAN	2000
01-02-2021	20MM 150 FEET@25=3750 RASHEEDA 13TH	
01-02-2021	WARD AYYANKUNNU GRAMA PANCHAYATH	3750
01-02-2021	M SAND 150 FEET @45=6750 RASHEEDA 13TH	
01-02-2021	WARD AYYAKUNNU GRAMA PANCHAYATH	6750
01-11-2021	20 MM 150 FEET @25=3750VINOD MATHEW	
01-11-2021	AMBALAPARAMBIL DONATION	3750

01-11-2021       M SAND 200 FEET @ 45=9000VINOD MATHEW         AMBALAPARAMBIL DONATION       20 MM 150 FEET @25=3750 VINOD MATHEW         AMBALAPARAMBIL DONATION       20 MM 150 FEET @25=3750 VINOD MATHEW         AMBALAPARAMBIL DONATION       AMBALAPARAMBIL DONATION	9000 3750
01-12-2021 20 MM 150 FEET @25=3750 VINOD MATHEW AMBALAPARAMBIL DONATION 20 MM 150 FEET @25=3750 VINOD MATHEW 13-01-2021	3750
01-12-2021 AMBALAPARAMBIL DONATION 20 MM 150 FEET @25=3750 VINOD MATHEW	
AMBALAPARAMBIL DONATION  20 MM 150 FEET @25=3750 VINOD MATHEW	
13-01-2021	2750
	27E0
	3750
03-04-2021 MEDICAL CHARITTY	1000
AYYANKUNNU PANCHAYATH MEDICAL	
14-03-2021 CHARITTY 1	2500
21-03-2021 ARALAM GRAMA PANCHAYATH GSB 200 FEET	
@25=5000 ROAD WORK	5000
25-03-2021 MAROOTI KUDATHIL STEPHEN CHARITTY	
AKSHAYA CHARITABLE SOCIETY	2000
DONATION PHC KEEZHPPALLY DUST 200 FEET	
<b>27-03-2021</b> @25=5000 VELIMANAM KEEZHPPALLY SUB	
COLLECTOR ( AYYANKUNNU VILLAGE OFFICE)	5000
DONATION 200 FEET 20 MM @32.5 = 6500	
30-03-2021 VELIMANAM KEEZHPPALLY SUB COLLECTOR (	
AYYANKUNNU VILLAGE OFFICE)	6500
Total 14	9750

09	The lease are shall be fenced off with barbed wires to a	Complied
	minimum height of 4ft around, before starting of mine.	

To demarcate the lease area, the project proponent has installed fencing with a height of 4 ft. around major part of the project site where Environmental Clearance and lease obtained. The photograph of barbed metal wire fencing is provided in **Plate No.2.** Sign boards are attached as **Plate No.3.** 

10	Warning alarms indicating the time of blasting (to be done at	Complied
	specific timings) has to be arranged as per stipulations of	
	Explosive Department.	

To comply condition stipulated by Explosive department and Environmental clearance order, the project proponent has installed warning alarms in the quarry site. This alarm can intimate the general public that the blasting is going to happen. The blasting time of the quarry is in between 12.01pm to 12.30 pm. The photograph of warning alarm is attached as **Plate No. 4.** Board showing blasting time is attached as **Plate No. 5.** 

11	Control measures on noise and vibration prescribed by KSPCB	Complied
	should be implemented.	

#### Compliance:

To reduce noise level in the project site, the project proponent has implemented mitigate masseurs. The major noise generating sources from the mining activity is working machineries, drilling, blasting and plying of vehicles. The following control measures are undertaken to bringing down the noise levels:-

- 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., earmuffs, ear plugs etc. are provided to workers working in high noise areas.
- The mining activity held in day time only.

#### Blast vibrations and control measures

- Controlled blasting technique is adopted in this project in order to reduce blast vibrations.
- ❖ 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.
- The project proponent has appointed qualified persons to monitor the mining operations

1:	2	Quarrying	activities	should	be	limited	to	day	time	as	per	Complied
		KSPCB gui	idelines.									

To reduce the adverse impact of the quarry to the local community, quarrying activities are limited to day time only as per KSPCB guidelines. The quarry working time is 8.00 am to 5.00 pm. This will help to limit the sound pollution.

13	Blas	sting should b	e do	one in a cont	rolled manner	as	specif	ied by	Complied
	the	regulations	of	explosives	department	or	any	other	
	cond	cerned agenc	у.						

#### Compliance:

The blasting is done in controlled manner by using ordinary delayed detonators. All blasting activities are carrying out with the specified regulations of explosive department. All blasting are under careful supervision of qualified persons.

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

#### Compliance:

The project proponent has appointed Second Class Manager, foreman and mining mate to supervise/control the blasting operations for the exploitation of minor minerals in the project site. The copies of certificates of qualified persons are provided in Annexure **No. 6.** 

15	Access roads to the quarry shall be tarred to contain dust	Complied
	emissions that may arise during transportation of materials.	

#### Compliance:

To contain dust emissions, the project has tarred the access road of 500 meters to the quarry site. The project is spraying water on the road to arrest the dust production during summer season. The project proponent is intending maintain access

road to the quarry in good condition for dust emission and easiness of transportation of vehicles. The photograph of road is attached as **Plate No. 6.** 

16	Overburden materials should be managed within the site and	Complied
	the old quarries, if any, should be restored.	

#### Compliance:

Overburden is an inevitable byproduct of building stone quarry. There is no old quarry in the site for restoration. The overburden materials are stored within the site at designated place. This will be used to restore the exploited area in future.

17	Height of the benches should not exceed 5m and width should	Being
	not be less than 5m.	complied

#### Compliance:

All mining activities are progressing under the supervision of qualified personals. To enhance safety and to make environment friendly quarrying, the excavation activity in the project is progressing by creating benches of 5m width x 5m height. **Plate No.7** showing the work progressing in the quarry area.

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

#### Compliance:

The project proponent is using mats during the time of blasting. The project proponent is using ordinary delayed detonator for blasting therefore there is no issue with fly rock in the community and the project is also assure the maximum PPV is under 10.

•	19	Maximum depth of mining from general ground level at site	Noted
		shall not exceed 10m.	

The project proponent will follow the approved mining plan for the exploration of building stone. Therefore mining depth will not exceed beyond 10 meter or not below the level of the nearest stream bed, whichever is less.

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

#### Compliance:

No mining operation will carry out with a slope greater than 45°.

21	Acoustic enclosures should be provided to reduce s	sound Complied
	amplifications in addition to the provisions of green belt and h	ollow
	brick envelop for crushers so that the noise level is kept v	within
	prescribed standards given by CPCB/KSPCB.	

#### Compliance:

To reduce sound amplification, the machines of crusher unit is housed with solid bricks. A green belt is also developed around the unit to reduce noise and air pollution. This helps the noise and sound level is kept within the prescribed standards. The labours in the unit are wearing ear plugs to reduce the impact of noise generating from the machines. The project proponent is maintained all machineries in a good manner.

22	The workers	on	the site	should	be	provided	with	the	required	Complied
	protective equ	uipme	ents such	ı as ear ı	muff	s, helmet,	etc			

#### Compliance:

The project proponent has provided adequate Personnel Protective Equipments (PPE) such as helmets, ear muffs, safety belts, glows, etc. to ensure the safety of workers in working site. The photograph of the workers with PPE is given in the **Plate No.8.** 

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

The project proponent ensured that all storm water from the mining area is flowing in to the drainages created at lower slopes of mining area. The project proponent has created 2 tanks in the lower slopes. The water is letting out only through the motor pumping from the collection point. The project proponent has initiated steps to create garland drains where it is necessary in the project area for storm water management. The Photograph of the drain is attached as **Plate No.9** 

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

#### Compliance:

The project assure that the loaded trucks are covered with appropriate sheets to avoid dust emission from the vehicle while transportation of materials.

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

#### Compliance:

The project proponent started to plant various saplings in the project area as a compensation of loss of trees while the project proponent is clearing the land for mining. The list of tree saplings planted in the project site as part of eco-restoration is provided in **Table No 3**.

26	Disposal	of	spent	oil	from	diesel	engines	should	be	as	Complied
	specified	unc	der rele	vant	Rules	/Regula	tions.				

The project proponent is using the used oil as lubricant for machineries and other equipments. Disposal of spent oil from diesel engines will be sold only to the approved recyclers as specified under relevant Rules/Regulations.

27	Explosives should be stored in magazines in isolated place	Complied
	specified and approved by the explosives department.	

#### Compliance:

As part of safety, Explosives are stored in magazine. The magazine situated in an isolated place specified and approved by the explosives department. The area surrounded to the magazine was fenced with barbed metal wire. The photograph of the magazine is provided as **Plate No.10**.

28	A minimum buffer distance of hundred meters from the C	omplied					
	boundary of the quarry to the nearest dwelling unit or other						
	structures, not being any facility for mining shall be provided.						

#### Compliance:

To keep a safe zone to the residents, community resource and public infrastructure, the norms of Kerala State Pollution Control Board regarding the distance criteria of houses, roads, rivers and worship places is adhered by the project. The distance of the nearest house was 170 meter form the quarry, the KSPCB condition is 50 meter.

29	9	200	m	buffer	distance	should	be	maintained	from	forest	Noted	
		boui	nda	ries.								

#### Compliance:

There is no forest area near to the project site. The project proponent has left adequate buffer distance from the quarry to the nearest teak plantation.

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

The Project proponent has obtained "Consent to Operate" (Renewal) from Kerala State Pollution Control Board. Copy of consent is provided in **Annexure No.1**.

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.	

#### Compliance:

The certificates obtained from other concerned statutory authorities are enclosed in **Annexure No.1, 2, 3, 4 & 5.** The details are given below

TABLE 5 – APPROVALS FROM COMPETENT AUTHORITIES

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

ſ	32	In the case of any change(s) in the scope of the project, the	Will be	
		project would require a fresh appraisal by this Authority	complied	

#### Compliance:

At present the project is running as per plan submitted in Environmental Impact Assessment Authority, Govt. of India and approved mining plan. 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.

The Authority reserves the right to add additional safe guard 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.

Noted

#### Compliance:

To enhance environmental sustainability and conserve natural resources, the project is willing to add all possible additional safe guard measures subsequently if the authority found necessary.

The stipulations by Statutory Authorities under different Acts Noted and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, The Environment (Protection) Act, 1986, the public liability (Insurance) Act, 1991 and EIA notification, 2006.

#### Compliance:

The stipulated orders and directions under different act and notification including EIA notification will be scrupulously followed. A brief list of various Acts and notifications which are followed by the proponent is given below

- 1. The Environment Protection Act,1986
- 2. Water (Prevention and Control of Pollution) Act, 1974
- 3. The Air (Prevention and Control of Pollution) Act, 1981
- 4. The Public Liability (Insurance) Act,1991
- 5. Municipal Solid Waste (Management and Handling) Act,2016
- 6. Hazardous and Other Wastes (Management and handling) Rules, 2016.
- 7. EIA notification, 2006

The project proponent should advertise in at least two local news 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 daily newspapers (English and Malayalam) 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.7.** The details are given below in the table.

Table No.6 - Details of news paper where advertisement published

News paper	Language	Date
Kerala Kaumudhi	Malayalam	10/03/2016
Indian Express	English	10/03/2016

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 Panchayat 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 proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hand 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 the Directorate of Environment and Climate Change, Govt. of Kerala.

Complied

#### Compliance:

The compliance report is being submitted to the State Environmental Impact assessment Authority, Kerala and the Regional Office of MoEF&CC, Bangalore as mail. The monitored data of Air, Water and Noise is attached as **Annexure No. 8, 9 & 10.** The project proponent has uploaded compliance report along with monitoring data and E C order in the website. <a href="https://esskayind.com/certificate/index/4">https://esskayind.com/certificate/index/4</a> is the link.

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

#### Compliance:

The detail of the Environmental Clearance is prominently displayed in a metallic board with the specific conditions as per specifications mentioned in the condition. Same is attached as **Plate No. 15.** 

39	The proponent should provide notarized affidavit (indicating	Complied				
	the 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 SEIAA Kerala.

40	The above conditions shall prevail notwithstanding anything to	Noted
	the contrary; in consistent, or simplified, contained any other	
	permit, license on consent given by any other authority for the	
	same project.	

#### Compliance:

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

Plate No.1



Rain water Harvesting Pond in the project site

Plate No.2



Fencing around the EC area

#### Plate No.3



Sign boards

Plate No.4



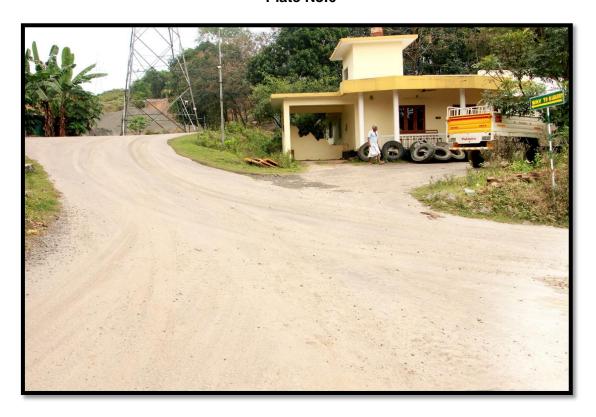
**Warning Alarm** 

Plate No.5



Blasting time

Plate No.6



**Access Road** 

Plate No.7



Mining Area

Plate No.8



Drainage

Plate No.9



PPE
Plate No.10

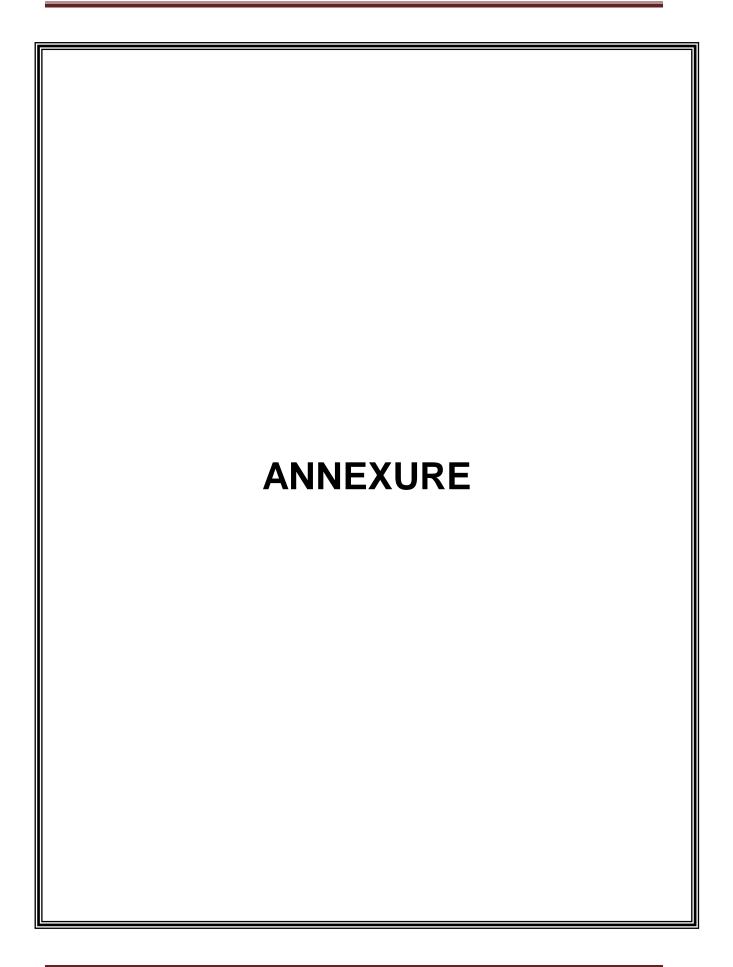


Magazine

Plate No.11



**EC Board** 



#### **Annexure No.1**



#### KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :PCB/TSR/IC/5069/2008

Date of issue :12/03/2020

#### INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No: PCB/DO/TSR/R3/ICO/2758/2020

Ref: 1) Your Online application no: 12621860 dated 24-01-2020

- 2) Consent No:PCB/DO/TSR/R2/ICO/2758/2017 dated 11/04/2017 with validity up to 30/04/2020.
- 3) Variation No:PCB/DO/TSR/R2/ICO/2758/2018 dated 12/01/2018 with validity up to 30/04/2020.
- 4) Variation No:PCB/DO/TSR/R2/ICO/2758/2019 dated 19/10/2019 with validity up to 30/04/2020.

The 'Integrated Consent to Operate' issued as per reference above to M/s Blue Mountain Granites (Quarry), Vellikulangara P.O., Thrissur is hereby renewed up to 04/02/2021 and issued to M/s Blue Mountain Granites (Quarry), Vellikulangara P.O., Thrissur. The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

#### I. GENERAL

S.No.	Items	Description
1	Annual fee	Rs.22000/-
2	Fee remitted	Rs.1,10,000/-

#### **II. Stack Details**

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

#### III. CONDITIONS

3.1 The application for renewal of consent shall be submitted online (krocmms.nic.in ) two months in advance of the date of expiry of validity of the consent. Late application will be accepted only with fine as applicable.

Page1

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

SUSEELA NAIR V A

Digitally signed by SUSEELA NAIR V A Date: 2020.03.12 23:58:26 +05'30'

DATE:12/03/2020

SIGNATURE & SEAL OF ISSUING AUTHORITY ENVIRONMENTAL ENGINEER



#### To

Sri.Benny Pathrose, Madappilly House, Malayidamthuruth P.O., Kizhakkambalam, Ernakulam.

- ${\bf 1. \ This \ digitally \ signed \ document \ is \ legally \ valid \ as \ per \ the \ Information \ Technology \ Act \ 2000}$
- 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.

Page2

# **Consent to operate**







# Proceedings of the State Environment Impact Assessment Authority Kerala

Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member and Sri. P. Mara Pandiyan, I.A.S., Member Secretary.

Sub: SEIAA- Environmental Clearance for the proposed building stone quarry project in Survey No. 1982 at Vellikulangara Village, Mattathur Panchayath, Chalakkudy Taluk, Thrissur District by Sri. Mathew P Pathrose, Managing Partner, M/s Blue Mountain Granites -Granted- Orders issued.

#### STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 626/SEIAA/EC1/4809/2014

dated, Thiruvananthapuram 05-02-2016

- Read:- 1. Application dated 30-09-2014 submitted by Sri. Mathew P Pathrose, Managing Partner, M/s Blue Mountain Granites, Vellikulangara P.O., Chalakkudy, Thrissur – 680699
  - 2. Minutes of the 45<sup>th</sup> meeting of SEIAA held on 04- 12- 2015.
  - 3. Minutes of the 46<sup>th</sup> meeting of SEAC held on 29/30-09-2015.
  - 4. Minutes of the 48th meeting of SEAC held on 06/07-11-2015.
  - 5. Minutes of the 47<sup>th</sup> meeting of SEIAA held on 07-01-2016.

#### Environmental Clearance No. 12 /2016.

Sri. Mathew P Pathrose, Managing Partner, M/s Blue Mountain Granites, Vellikulangara P.O., Chalakkudy, Thrissur – 680699 vide his application received on 09/10/2014 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 1982 at Vellikulangara Village, Mattathur Panchayath, Chalakkudy Taluk, Thrissur Districtfor an area of 3.0352 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) 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.

2. The proposed project site falls in 10°21'57.69" N to 10°21'49.02" N Latitude and 76°25'09.87"E to 76°25'04.05"E Longitude. The land use classification as per revenue records is private own land with rocky area consists of 3.0352 hectares. Main rock type in the area is charnockite visible at some places and covered with soil of 0.15 m to 0.20 m. The area is undulated and slope towards southern side with highest elevation of the area is at 90m MSL and lowest is at 45 m MSL. The present land use is some native trees, shrubs, herbs etc. The proposed project is for quarrying of 120,000 MTA of building stone from an area of 3.0352 hectares of land. Domestic effluent will be discharged in septic tank and soak pit system. The quarry operation is

#### EC order

Page 1 of 2

Transfered from Mathew.M.Pathrose

#### अनुज्ञप्ति प्ररुप एल. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।) (See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुजप्ति

Licence to possess: (c) for use, explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुजप्ति सं. (Licence No.) : E/SC/KL/22/862(E40290) वार्षिक फीस रुपए (Annual Fee Rs): 2400/-

1. Licence is hereby granted to

Shri Benny Pathrose (अधिभोगी / Occupier : Shri Benny Pathrose), Blue Mountain Granite, Velikulangara Post, Thrissur District, Town/Village - Vellikulangara, District-THRISSUR, State-Kerala, Pincode - 680699

को अन्ज्ञप्ति अन्दत्त की जाती है।

2. अन्जप्तिधारी की प्रास्थिति | Status of licensee : Partnership Firm

3. अन्जिप्त निम्नितिखित प्रयोजनों के लिए विधिमान्य है। pas

अनुजीप्त निम्नालाखत प्रयोजनी के लिए विधिमान्य है। possess for use of Nitrate Mixture, Safety Fuse, Electric and/or Ordinary Detonators, - के उपयोग के लिए

4. अनुज्ञिप्त विस्फोटकों के निम्निलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है। Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

क्र Sr. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division		and them are delicated
1.	Nitrate Mixture	2,0	0	200 Kg.
2.	Safety Fuse	6,1	0	2000 Mtrs
3.	Electric and/or Ordinary Detonators	6.3	0	2000 Nos.

(ख) किसी एक कर्लेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुजन्ति के लिए] (b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and

(c)]:

दूरभाष (Phone)

अन्जिप्त परिसर निम्निलिखित पते पर स्थित हैं। The licensed premises are situated at following address:

Survey No(s). 1982 , ग्राम (Town/Village) : Vellikulangara जिला (District) THRISSUR राज्य (State

राज्य (State) ई. मेल (E-Mail) पुलिस थाना (Police Station) : Vellikulangara Kerala पिनकोड (Pincode) फैक्स (Fax)

 त्रज्जिल परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
 The licensed premises consist of following facilities. Portable Explosives Magazine of H type fabricated by M/S.: Industrial Explosives P Ltd, Nagpur and T type fabricated by M/S.Nobel Ehgg & Fabrication Unit.

- 8. अनुजप्ति समय समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबध्दों के अधीन रहते हुए अनुदत्त की जाती है। The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.
  - उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सिन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।
     Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
  - 2. अनुज्ञप्ति प्राधिकारी व्दाररा हस्ता.क्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्ति शर्तें। Conditions and Additional Conditions of this licence signed by the licensing authority.
  - 3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख 31 मार्च 2009 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2009.

http://10.0.1.11/IntExp/ExplosivesLicenceLE3Hindi.asp?LetterGeneratedYN=Y

11-07-2019

20 times

Page 2 of 2

South Circle, Chennai

यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिक्रमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहत की जा सकती है, जहां वह लागू हो। This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 01/03/2007

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 05/09/2011
  Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 10/09/2013
  Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 30/11/2017
  Amendment of Quantity of Explosives/Monthly Purchase Limit dated: 31/01/2018

Change in Licensee Name/Address/Status dated: 11/07/2019

नवीनीकरण के पृष्ठांकन के लिए स्थान Space for Endorsement of Renewal

समाप्ति की तारीख अन्ज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प नवीकरण की तारीख Date of Renewal Date of Expiry Signature of licensing authority and stamp 13/02/2019 31/03/2024 Dy. Chief Controller of Explosives, Ernakulam

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरूपयोग विधि के अधीन गंभीर दांडिक अपराध होगा। Statutory Warning: Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

http://10.0.1.11/IntExp/ExplosivesLicenceLE3Hindi.asp?LetterGeneratedYN=Y

11-07-2019

## License - explosive



**License Gram Panchayat** 

#### PROCEEDINGS OF THE DIRECTOR OF MINING & GEOLOGY

- Sub: Mining & Geology Mines & Minerals Minor Minerals Granite Building Stone Quarrying Lease to M/s Blue Mountain Granites, Vellikulangara P. O, Thrissur District 680 699 (Represented by its Managing Partner, Shri. Mathew. M. Pathrose, S/o Pathrose, Residing at Madappillil House, Malayidomthuruth, Edathala, Kunnathunad, Ernakulam District—683561)- sanctioned-orders -issued.
- Ref. 1. Application dtd. 17/08/2017 from M/s Blue Mountain Granites, Vellikulangara P. O, Thrissur District – 680 699 (Represented by its Managing Partner, Shri. Mathew. M. Pathrose, S/o Pathrose, residing at Madappillil House, Malayidomthuruth, Edathala, Kunnathunad, Ernakulam District—683561)
  - 2. Letter No.2112/C2/TDO/2017 dtd 27/11/2017 & 21/12/2017 from the Senior Geologist, District Office, Thrissur.
  - 3. Letter of Intent No. 10799/M3/2017 dtd 27/12/2017
  - Procorder No. 626/SEIAA/EC1/4809/2014 dated 05/02/2016 (E.C.No. 12/2016) & Erratum Order No. 626/EC1/4809/2014/SEIAA dated 24/01/2017 of the State Environment Impact Assessment Authority, Kerala
  - 5. Mines and Minerals (Development & Regulation) Act, 1957.
  - 6. Kerala Minor Mineral Concession Rules, 2015.
  - 7. Kerala Minerals (Prevention of Illegal Mining, Storage & Transportation) Rules 2015.

No.770/2017-18/10799/M3/2017/DMG

Dated, Thiruvananthapuram 21/02/2018

#### ORDER

A quarrying lease is granted to M/s Blue Mountain Granites, Vellikulangara P. O, Thrissur District – 680 699 (Represented by its Managing Partner, Shri. Mathew. M. Pathrose, S/o Pathrose, residing at Madappillil House, Malayidomthuruth, Edathala, Kunnathunad, Ernakulam District—683561) to quarry Granite (Building Stone) over an area of 3.0352 Hectares of land comprised in Survey No. 1982 of Vellikulangara Village, Chalakkudy Taluk, Thrissur District for Ten (10) 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 (LR), Chalakkudy 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.
- 2. Dead rent is realizable under 40(1)(d) of the said rules subject to revision from time to time 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
  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
  of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015.
- 5. The lessee shall also deposit an amount of Rs 10,000/- (Rupees Ten Thousand only) per 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 before execution of the quarrying lease deed.
- 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.
- 8. The production of Granite (Building Stone) from the area covered under this grant shall be subject to the quantity specified in the Mining Plan submitted by the lessee and the same is restricted to 79, 195 Metric Tonnes per year

- (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, quantity of extraction permitted (if applicable). Area of extraction permitted, explosives used (if any), etc.
  - (ii) The lessee shall erect a warning board with danger sign regarding operation of the quarry, -100 metres away by the side of the road leading to it.
- The lessee shall fence the lease area before the commencement of the quarrying operation for preventing accidents by failing of human beings, animals, vehicles or any materials into the quarry. The tessee should take effective preventive measures for the safety of labourers as well as the general public.
- 11. The lessee shall leave a distance of 7.5m from the boundaries of adjacent properties including government puramboke land while carrying out quarrying operations.
- 12. The lessee shall not assign, sublet or transfer his lease or any right or interest therein to any person without previous permission of the Director of Mining & Geology.
- The lessee shall pay tax related to Revenue Department, if any, as directed by them and the 13. details should be furnished to the Geologist periodically.
- The lessee shall operate the quarry in accordance with the condition stipulated in the 14. environmental clearance and mining plan submitted by them.
- 15. The lessee shall obtain all other statutory licences/clearances/No Objection Certificates from other authorities concerned including Explosive licence, consent from Pollution Control Board and D & O licence from the Local Self Government Department concerned.
- The lessee shall produce scheme of mining before completion of five years of operation of 16. the quarry.
- 17. The lessee shall produce a financial guarantee for Rs. 1, 00, 000/- (Rupees one lakh only) as stipulated in rule 62 of KMMC Rules 2015, before execution of lease deed.
- The lessee shall pay 10% of the amount of royalty/consolidated royalty as the case may be 18. paid by them, being the quarry safety fund in addition to the royalty/consolidated royalty, as per rule 63 of KMMC rules, 2015.
- The lessee shall carryout mining operations as per the approved mining plan.
- The lessee shall renew Environmental Clearance on or before 04/02/2021 for the operation of 20. the quarry for the remaining period.
- The quarrying permit granted from the district office, if any, in the area of this quarrying 21. lease is hereby stands cancelled from the date of this order.
- The lessee shall comply all the conditions maintained in the statutory licenses. 22. The terms and conditions stated in this order will be subject to such further modifications as may be made by the State Government from time to time.

Sd/-C. K. BAIJU DIRECTOR OF MINING & GEOLOGY (I/C)

BY ORDER

To

M/s Blue Mountain Granites, Vellikulangara P. O, Thrissur District – 680 699 (Represented by its Managing Partner, Shri. Mathew. M. Pathrose, S/o Pathrose, Residing at Madappillil House, Malayidomthuruth, Edathala, Kunnathunad, Ernakulam District-683561

## Copy to:

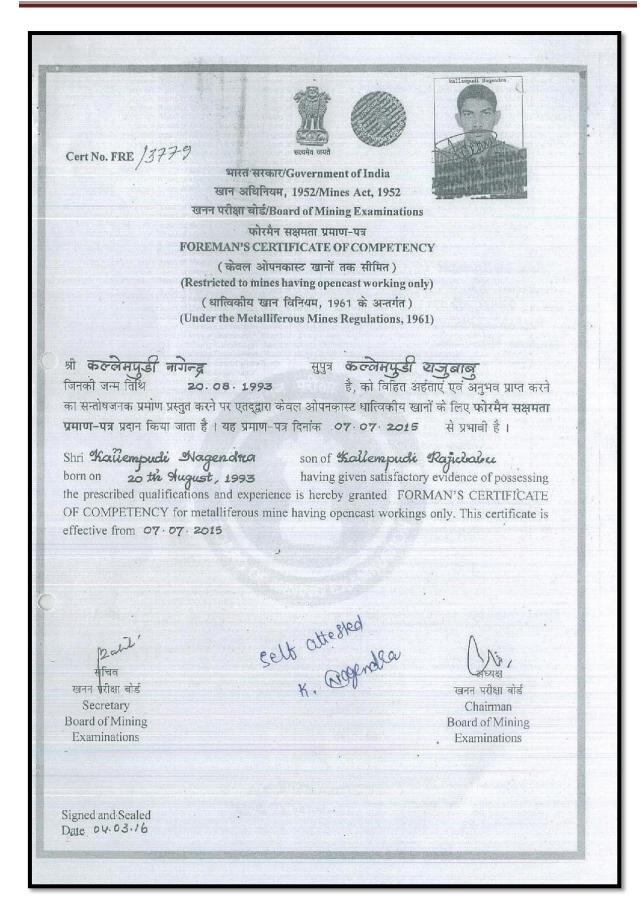
- 1. The Director of Mines Safety, No.5, 100FT, Road, 17th Main, Koramangala 4th Block Bengaluru, Karnataka - 560034
- The District Collector, Thrissur
- The Sr. Geologist, District Office, Thrissur
- The Tahsildar, Chalakkudy

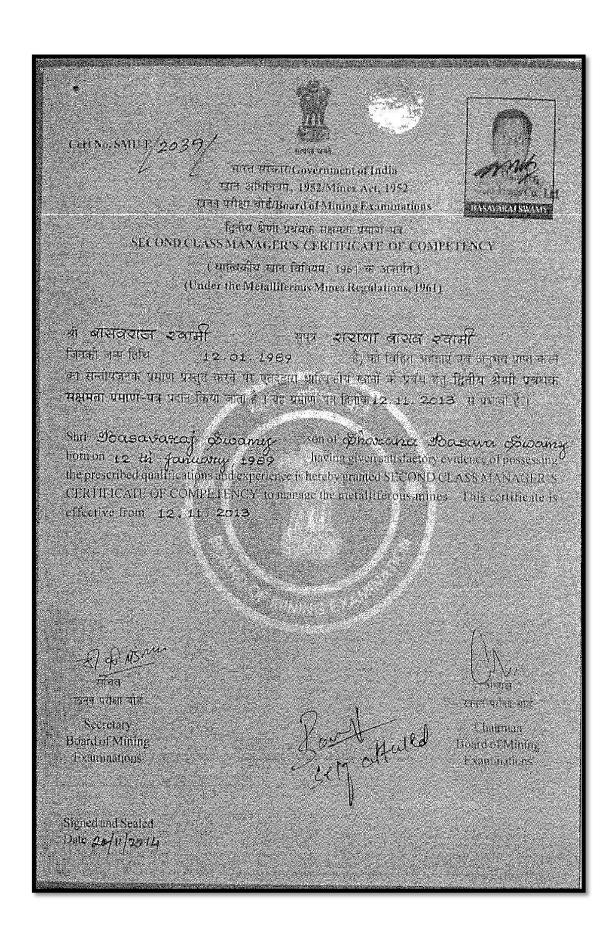
5. Stock File (2), File copy

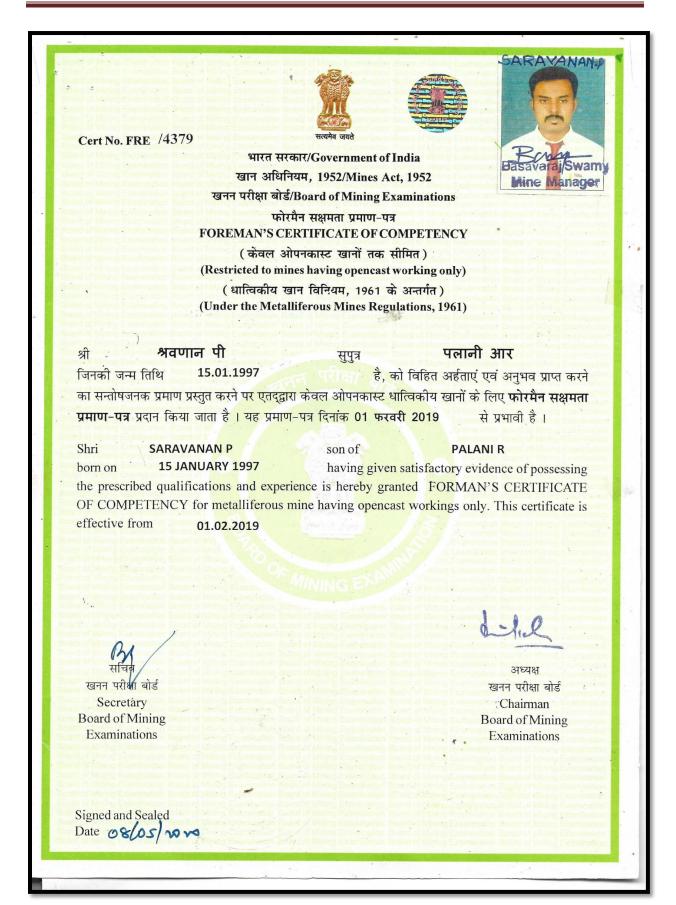


Lease order

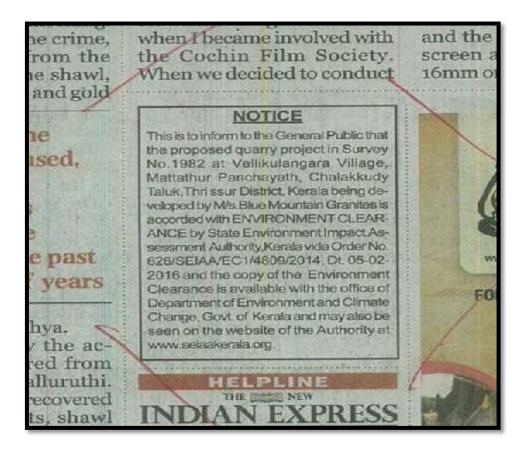








## **Certificate of Qualified Persons**





Advertisement in two news papers



#### TEST REPORT

Test Report No: 20201111/R024	Date: 18.011.2020	Page 1 of 1	
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	CUSTOMER DETAILS
Customer Name &	M/s Blue Mountain Granites
Address	Vellikulangara, Chalakudy
	Thrissur District
Customer Reference	Test Request dt: 11.11.2020

	SAMPLE D	ETAILS	
Product Category	Atmospheric Pollution	Sample Code	20201111/S024
Sample Name	Ambient Air	Sample Received on	12.11.2020
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	13.11.2020
Sampled by	Lab Authorized Sampler	Test Completed on	17.11.2020
	DETAILS OF	SAMPLING	
Sampling Location	East side boundary	Date of Sampling	11.11.2020
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	70%
	SAMPLING SIT	TE DETAILS	
Survey No.	1982		
Village	Vellikulangara	Taluk	Chalakudy
District	Thrissur	State	Kerala

TEST RESULTS- CHEMICAL PARAMETERS							
S1. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards		
1	Particulate Matter, PM <sub>10</sub>	IS 5182 (Part 23):2006	μg/m³	69.4	Max 100		
2	Particulate Matter, PM <sub>2.5</sub>	EPA 40 CFR (Part 50) Appendix – L	μg/m³	33.6	Max 60		
3	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part 2): 2001 RA 2017	μg/m³	< 2.00	Max 80		
4	Oxides of Nitrogen as NO <sub>2</sub>	IS 5182 (Part 6): 2006 RA 2017	μg/m³	< 2.00	Max 80		

Remarks:

\*\*\*End of Report\*\*\*

Shency Joy
Dy. TM Chemical
Checked by:



Laiju P. N.
Laboratory Head
Authorized Signatory

# Standard<sup>S</sup> Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB
K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43
Web: www.sealabs.in, E-mail: seaalab@gmail.com

# **Ambient Air**



#### TEST REPORT

Test Report No: 20201111/R025		Date: 18.11.2020	Page 1 of 1
	cus	TOMER DETAILS	
Customer Name &	M/s Blue Mountain G	ranites	
Address	Vellikulangara, Chalak	rudy	
	Thrissur District		
Customer Reference	Test Request dt: 11	11 2020	

	DETAILS O	F MONITORING		
Product Category	Atmospheric Pollution	Sample Code	20201111/S025	
Sample Name	Ambient Noise	Monitoring Commenced on	11.11.2020 / 06:00	
Monitoring Location	North side Boundary	Monitoring Completed on	12.11.2020 / 06:00	
Test Method	IS 9989:1981 RA:2008	Monitored by	Lab Authorized Sampler	
	MONITORIN	G SITE DETAILS		
Survey No.	1982			
Village	Vellikulangara	Taluk	Chalakkudy	
District	Thrissur	State	Kerala	

MONITORING RESULTS - Leq						
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	
06:00	38.4	14:00	51.5	22:00	37.2	
07:00	41.2	15:00	51.9	23:00	37.4	
08:00	45.5	16:00	53.1	24:00	37.0	
09:00	49.1	17:00	53.5	01:00	37.7	
10:00	51.5	18:00	47.9	02:00	37.4	
11:00	54.6	19:00	44.4	03:00	38.1	
12:00	51.9	20:00	40.4	04:00	37.0	
13:00	51.1	21:00	39.9	υ5:00	38.8	

TEST RESULTS					
Sl. No.	PARAMETERS	UNIT	RESULT		
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	50.0		
2	Ambient Sound Level (Leq) Night Time (22:00 to 06:00)	dB(A)	37.3		

Remarks:

\*\*\*End of Report\*\*\*

Shency Joy Dy. TM Chemical Checked by:



Laboratory Head Authorized Signatory

Standard<sup>s</sup> Environmental & Analytical Laboratories

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

Web: www.sealabs.in, E-mail: seaalab@gmail.com

# Result of ambient sound



## TEST REPORT

Test Report No: 20201111/R026		Date: 18.11.2020	Page 1 of 2
	cu	STOMER DETAILS	
Customer Name & Address	M/s Blue Mounta Vellikulangara, C		
	Thrissur District		
Customer Reference Test Request dt: 11.11.2020			

	SAMPLE DE	TAILS		
Product Category	Water	Sample Code	20201111/S026	
Sample Name	Bore Well	Sample Received on	12.011.2020	
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	28 °C	
Sample Quantity& Packing	1L & 100ml Plastic Bottle	Test Commenced on	12.11.2020	
Sampled by	Not Drawn by Laboratory Test Completed o		17.11.2020	
	SAMPLING SITI	E DETAILS		
Survey No.	1982			
Village	Vellikulangara	Taluk	Chalakkudy	
District	Thrissur	State	Kerala	

TEST RESULTS- CHEMICAL PARAMETERS						
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 :2012	
1	Colour	IS 3025 (Part 4):1983 RA 2017	Hazen	1.00	Max 5	
2	Odour	IS 3025 (Part 5):2018		Agreeable	Agreeable	
3	Turbidity	IS 3025 (Part 10):1984 RA 2017	NTU	0.60	Max 1	
4	рН	IS 3025 (Part 11):1983 RA 2017		6.92	6.50 - 8.50	
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	μS/cm	136		
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	88.0	Max 500	
7	Total Hardness as CaCO <sub>3</sub>	IS 3025 (Part 21):2009 RA 2019	mg/L	34.0	Max 200	
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	8.00	Max 75	
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	3.41	Max 30	
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	21.1	Max 250	
11	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23):1986 RA 2019	mg/L	27.9	Max 200	
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.29	Max 1	
13	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24):1986 RA 2019	mg/L	5.80	Max 200	

Microbiologist Authorized Signatory

Laiju P. N. Laboratory Head **Authorized Signatory** 

Standard<sup>S</sup> Environmental & Analytical Laboratories
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#### TEST REPORT

Page 2 of 2 Date: 18.11.2020 Test Report No: 20201111/R026

TEST RESULTS - BIOLOGICAL PARAMETERS							
Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500: 2012		
1	Total Coliform Bacteria	IS 15185 : 2016		Absent/100 ml	Absent/100 ml		
2	E coli	IS 15185 : 2016		Absent/100 ml	Absent/100 ml		

Remarks:

\*\*\*End of Report\*\*\*

Dy. TM Chemical Checked by:

Microbiologist Authorized Signatory

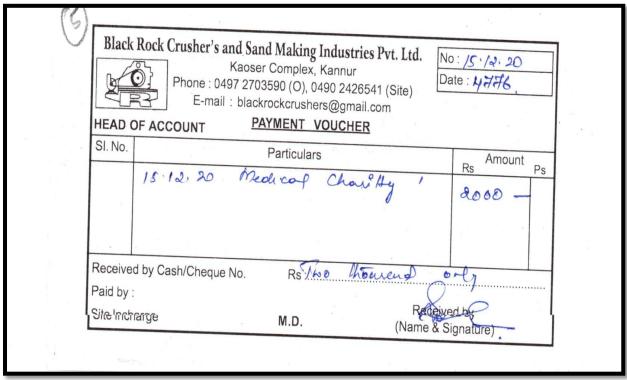
Laboratory Head

**Authorized Signatory** 

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Web: www.sealabs.in, E-mail: seaalab@gmail.com

Result of drinking water





		Vanna Camalau Vannu	: 2957 e: 9.10.20	
	SI. No.	Particulars  SHADULE TRIBE HOME. GLECTAN - CIN CHARGE GO. PONCHAYAY  PRESEDENT	Rs Amount Ps	_ :
Ţ	Receive Paid by Site Inch	Receive	,	100

14	AKSHAYA CHARITABLE SOCIETY  S. No 177/2009 IT Act - 12 AA NYKC 230/2009
,	(Registered Under Ministry of Social Justice-Government of India) Padiyoor P.O., Padiyoor  **RECEIPT**  **No. 453**  **Date 35.1.3.2**  **Date 35.
	Received with thanks from Black Rack Coulde
	President/Secretary

**CSR/CER Receipts/Vouchers**