## **Compliance Report**

October 2017 - March 2018

## Quarry project of Mr. Jovin George

**Kannur District** 

Kerala

Dt. 29-06-2018

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 :- Order No. 01/KNR/2017/DEIAA

:- Environmental Clearance No. 04/2017

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

#### Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for 3.7556 Ha. by order No. 01/KNR/2017/DEIAA, dated 22-05-2017 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,

Mr. Jovin George

Encl: - As Above

Copy to: 1. The Chairman & The Member Secretary

State Environment Impact Assessment Authority (SEIAA) 'Devi Kripa', Pallimukku, Pettah P.O., Thiruvananthapuram, Kerala – 695 024.

2. DEIAA, Kannur

# COMPLIANCE REPORT TO

THE CONDITIONS

OF

#### **ENVIRONMENTAL CLEARANCE ORDER**

NO: 01/KNR/2017/ DEIAA

Dated: 22-05-2017

BY

## DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (DEIAA) FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

**SURVEY NOS. 275/1A** 

MADATHINAMATTATHIL, PALISSERY, TRIPANGOTTUR VILLAGE, THALASERY TALUK, KANNUR DISTRICT, KERALA

BY

KANNUR DISTRICT, KERALA

Mr. JOVIN GEORGE

#### **INDEX**

SI. No.	Particulars	Page No.
1.	Introduction	7
2.	Compliance Report – Specific conditions – Part A	8
3.	Conditions of Health	15
4.	Compliance Report – General conditions – Part B	18
5.	Plates	42
5.	Annexure	48

## **LIST OF TABLES**

Table No.	Particulars	Page No.
1.	Environmental Monitoring Cell (EMC)	19
2.	Details of the Corporate Social responsibility(CSR)	21
3.	The details of statutory approvals	30

## **LIST OF PLATES**

Plate No.	Particulars	Page No.
1.	Photograph of Board showing blasting time	43
2.	Boundary Pillars	43
3.	Sanitary latrine and urinals	44
4.	Resting Rooms	44
5.	No Smoking Board	45
6.	Photograph of Emergency Contact Numbers	45
7.	Photograph of Avenue Trees	46
8.	Photograph of Magazine	46
9.	Photograph of sign Boards	47
10	Photograph of metallic board	47

## **LIST OF ANNEXURE**

Annexure No.	Particulars	Page No.
1.	Copy of Licensed Person & Form D	49
2.	Copy of Form D	50
3.	Copy of the "Consent to Operate" from Kerala State Pollution Control Board (Renewal)	52
4.	Copy of E C order	53
5.	Copy of Explosive License issued by the Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)	54
6.	Copy of License for quarry operations from <i>Gram</i> Panchayath	55
7.	Copy of permit from mining and Geology Dept.	56
8.	Copy of Acknowledgement	57
9.	Result of Air	58
10.	Result of Sound	59
11.	Result of water	60

#### INTRODUCTION

Quarry project of **Mr. Jovin George** Madathinamattathil, Palissery, Thalassery P.O. 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 22-05-2017. As part of general condition No.36 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, 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	

The project proponent has appointed a mines Engineers to control, direct, manage and supervise the quarrying operations as per the Mines Act 1952. The certificate of Mines engineer is attached as **Annexure No.1** and Form D is attached as **Annexure No 2** for the reference.

02   Health and welfare for the persons employed shall be implemented   complied
--

The project is keeping a First aid box in the project site. In association with Primary Health Centre of Local Self Government, the project proponent has conducted health check up for the labours. Other facility of housing, food, water and sanitation is provided by the project proponent.

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

To reduce the adverse effect of Quarrying activities the project proponent has practicing controlled blasting with ordinary/electric delayed detonator. The blasting time in the quarry is fixed at 9.00 am-10.30 am, 2.00 pm- 3.00 pm and 4.00 pm to 5.30 pm. There is no work in the quarry site at Night. The mitigate measures to arrest ground vibration and fly rock is detailed in General condition No. The photograph of the Time showing blasting board 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 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. The project has taken the suggestion of agricultural department to plant the native species.

The drains should be regularly de silted and maintained properly check dam and gully checks shall be constructed wherever to 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.

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

The project proponent has constructed barbed metal wire fencing around the lease area.

The CSR need redrafting with inclusion of felt needs of the locality 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.

08 Appropriates sign boards should be displayed. Complied

The appropriate sign boards are installed in the project site. **Plate No. 9** shows the photograph of appropriate Sign boards.

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

A board containing blasting time is displayed in the project site. 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.** 

## 10 Dust suppression mechanism must be in place. Complied

In order to reduce the emission of dust in the project site, the project Splashes water using the vehicle.

A separate small plot to be maintained in the premise to preserve	
rare and endemic species .lf any ,listed in the biodiversity	Complied
assessment 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 using electric/ordinary delayed detonators. Blasting is controlled by a qualified person. Therefore the project proponent can limit the PPV under 10 mm/sec.

1	5	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.

16	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 is 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	Being
	dressed down before engaging persons for work at the bottom of	Complied
	the bench.	

The project proponent deploys vehicles like JCB to remove the loose or hanging mineral boulders on the side wall. 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	

The project has fixed permanent boundary pillars to demarcate the mining area before commencing Quarrying. The photograph showing the permanent boundary pillars are attached as **Plate No. 2** 

19	No quarry blasting to be undertaken and sustained till warning time	Noted
	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.	

The project proponent will be complied the condition when such situation arises.

20	All waste dumps and topsoil dumps shall be properly stabilized by						
	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 will be stabilised by using coir mats or bio regeneration. The drainages are constructed in the project site. This will help to manage the storm water during monsoon season.

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.

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.

The water from the garlands drainage shall directed to the silt will be 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 be directed to the silt settling ponds. The RWH pond is under construction. The clarified overflow from silt settling ponds will be directed

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

2	4 A retaining wall	A retaining wall of stone rubbles with wire mesh, of sufficient width						
	and strength (n	ot 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	g 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 property .some labourers shall be trained on First Aid.

The project proponent is keeping first aid box in the project site. The training on first aid are provided to selected labours.

02 Whole some drinking water should be provided. Complied

Drinking water will be available at all time in the project area.

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

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

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

The project proponent has given sanitary type of latrine and urinals to every labours in the project site. The photograph showing Sanitary type of latrines and urinals are attached as plate No. 3

05 Resting place should be provided for workers. Complied

To get proper rest to the labours, the project has arranged adequate rest rooms in the project area. **Plate No. 4** shows the resting place of 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 No Smoking board is attached as **Plate No. 5** 

07	Work should not be done in night.	Complied

There is no working of quarry during night. The working time of quarry is at the 7 am to 6 pm.

(	O8 Details of nearest hospitals, shortest route to hospitals and contact Complice no etc. Should be available.			
		no etc. Should be available.		

Details of nearest hospital, Fire station, Police station, etc are available in the project site.

Plate No. 6 Shows the board fixed with Emergency contact numbers

09	Approach roads should be maintained properly.	Being
		complied

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

## **COMPLIANCE REPORT**

(GENERAL CONDITIONS)

**PART B** 

#### **PART - B - GENERAL CONDITION**

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

#### Compliance:

Even though it is not specified in KMBER/KPBR to collect rain water in mining area, the proponent will develop rain water harvesting pond in the project site to collect rain water falling in the entire mining area.

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

#### Compliance:

The Environmental Monitoring Cell (EMC) was formed with Mr. Jovin George as head of the monitoring cell. The EMC meeting convenes regularly to evaluate and monitor quarrying work in connection with 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** 

**Table 1 - Environmental Monitoring Cell (EMC)** 

SI. No.	Post	Post Name				
1	1 Head of monitoring cell		Mr. Jovin George			
2	Member	C G George				
3	3 Member		Kadappa Khadar Vali			

03	Suitable avenue trees should be planted along either side of the tarred	Complied
	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 sides of road and parking area. The project could plant more suitable avenue trees along either side of the tarred road and open parking areas, where there is less vegetation. **Plate No. 7** shows the Avenue trees in the project site.

04	Maximum	possible	solar	energy	generation	and	utilization	shall	be	Will	be
	ensured as	s an essei	ntial pa	art of the	project.					Comp	olied

#### Compliance:

As part of energy conservation, the project proponent will generate and utilize energy by installing solar panels in the project site.

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

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

07	At least 10 percent out of the total excavated pit area should be retained	Will be	
	as water storage areas and the remaining area should be reclaimed with	complied	
	stacked dumping and overburden and planted with indigenous plant		
	species that are eco-friendly, if no other specific condition on		
	reclamation of pit is stipulated in the EC.		

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.

80	Corporate Social Responsibility (CSR) agreed upon by the proponent	Complied
	should be 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** 

Table No.2 – Detail of performed activities under CSR

Sectors	Activities	Partners	Beneficiaries	Amount spent in Rs.
Education				
	Donation	Sree Narayana vilasam LP School	Students	10,000
	Donation	Mananthri	Students	2,000

		kaavinmoola LP school		
Arts, Sports & Festival	Donation For Festival	Mooryad sree mankulathu bhagavathi kaavu	Public	3,500
	Donation For Sports	cheguvera arts & sports club	Public	3,000
	Donation For Sports	yuvadhara arts & sports club	Public	2,000
	Donation For Sports	Devine arts & sports club	Public	22,500
	Donation For Festival	Pattar valiyath shetram	Public	2,500
	Donation For Festival	Adumkudi sree muthappan madappura	Public	20,000
	Donation For Festival	Mananthery sree palayankodu bhagavahykavu thira	Public	10,000
	Donation For Festival	Thira maholsavam	Public	10,000

	Donation For Festival  Donation For Festival	Naravoor sree chathadi manaykkal thira maholsavam  Parambukavu sree muthukutty madappura thira maholsavam	Public Public	3,000
Infrastructure Development	Donation For Temple Construction	Vilakkottur Aarumkara- Sree Muthappam Vikasanam	Public	2,500
	Donation For Temple Construction	Narikkodu mala palliyara mothappura devasthanam	Public	1,00,000
	Donation For Temple Construction	Sree athyakkavu bhagavathi shetram	Public	8,000
	Donation For Temple Construction	Cheruvanchery poovathur sree narayana madam	Public	10,000
Social	Donation for Environment	Green Belt	Public	22,500
	Donation	Janasradha Samskarika Vedhi	Public	2,000

Donation	VK chanthuvatn charamavarshika dinacharanam	Public	5,000
Donation	Jeevajothi Charitable trust india	Public	15,000
Donation	A P sajina chikalasa sahaya fund	Students	25,000
	Total		2,85,500

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 with a height of 4 ft. around major part of the project site where Environmental Clearance and lease obtained. All the boundary indicators (boards, stores, markings etc) will be protected at all times and shall be conspicuous.

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

#### Compliance:

As per the stipulation of Explosive department, the project has installed warning alarm in the quarry site. This alarm can intimate the general public that the blasting is going to happen.

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

To reduce noise and vibration, the following measures are adopting 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.

12	Quarrying	activities	should	be	limited	to	day	time	as	per	KSPCB	Complied
	guidelines/	specific co	onditions	<b>5.</b>								

#### Compliance:

To reduce the adverse effect of Quarrying activities in the community, the mining activity has 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	A licensed person should supervise/control the blasting operations.	Complied	
----	---	----------	--

The project proponent has appointed mines manager in the site to supervise/control exploitation of minor minerals including blasting at the project site. The certificate of licensed person is attached as **Annexure No. 1** and Form D is attached as **Annexure No. 2** 

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

#### Compliance:

To contain dust emissions and for the trouble free transportation of materials, the project will tar the access road in the quarry site. The project splashes water on the road to arrest the dust production during summer season.

1	6	Overburden materials should be managed within the site and used for	Complied
		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 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. The overburden materials are stacking in the designated place in the project site.

1	7	Heigl	ht of t	he be	encl	hes sh	oul	d no	t exceed	5m	, and	width	should not l	ре	Being
		less	than	5m,	if	there	is	no	mention	is	the	mining	plan/speci	fic	Complied
		cond	itions.												

#### **Compliance:**

The quarrying is carrying out as per mining plan. To enhance safety and conserve environment, 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	а	maximum	of	10	PPV	should	be	Noted	
	provid	ed.	•													

The project proponent is using 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. There is no accident due to fly rock reported in this mine, therefore mats are yet to use. The project assures PPV will fewer than 10 in all blasting.

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

#### Compliance:

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 o	carried	out a	t places	having	a slope	Noted
	greater	than 45 <sup>0</sup> .								

#### Compliance:

No mining operation is carried out with a slope greater than 45°.

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

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 is trying to enhance the vegetative cover by planting more tree saplings.

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

#### Compliance:

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

2	23	Garland drains with clarifiers to be provided in the lower slopes around	Noted
		the core area to channelize storm water.	

#### Compliance:

The project proponent ensured that all storm water from the mining area is flowing in to the pond creating at mining area. The project proponent has initiated steps to create garland drains where it is necessary in the lower slopes of the project area for storm water management.

2	24	The transportation of minerals should be done in covered trucks to	Complied
		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 that has	Being
	occurred while clearing the land for the project.	complied

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. The project proponent is planning to plant more tree saplings in the project site.

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

#### Compliance:

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 specified	complied
	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. **Plate No 8** shows the photograph of the Magazine.

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 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. There is 143 meter distance to the nearest house from the boundary of mining area.

29	100 m buffer distance should be maintained from forest boundaries.	Complied

The project has left more than 100 meters as buffer distance from the project site.

3	0	Consent from Kerala Pollution Control Board under Water and Air Act(s)	Complied
		should have been obtained before initiating activity.	

#### Compliance:

The project has obtained consent from KSPCB under Water and Air Act(s). The copy of certificate of "Consent to Operate" (Renewal) from Kerala State Pollution Control Board is provided in **Annexure No.3.** 

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

#### Compliance:

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

#### TABLE 3 – 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

In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environemental parameters/impacts as assessed, based on which only the EC is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.

Will be complied

#### 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 measures	Noted
	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.	

#### Compliance:

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 Wate
	(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.

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

- ➤ Kerala Minor Mineral Concession Rules, 2015.
- ➤ Mines Act, 1952
- > Explosive Rules, 2008
- > Kerala Panchayat Raj Act, 1994
- > Water Pollution (Prevention & Control) Act, 1974
- > Air Pollution (Prevention & Control) Act, 1981
- > Environment Protection Act, 1986
- > EIA Notification, 2006 / 2009
- ➤ The Kerala Promotion of Tree Growth in Non-Forest Areas (Amendment) Act, 2007.

35	The project proponent should advertise in at least two local news papers	Complied
	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.

A copy of the clearance letter shall be sent by the proponent to 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.

#### Complied

#### Compliance:

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 latter to anyone. At present the project does not have a website this will be created soon. The Acknowledgement of the clearance letter sent to the panchayth is attached as **Annexure No. 8** 

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

#### Complied

#### Compliance:

The compliance report is being submitted along with the results of monitored data 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 monitoring result are attached as Annexure No. 9, 10 & 11.

38	The details of Environmental Clearance should be prominently displayed	complied	
	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		
	extent of lease area and boundaries shall be depicted at the entrance of		
	the quarry, visible to the public.		
	38	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 extent of lease area and boundaries shall be depicted at the entrance of	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 extent of lease area and boundaries shall be depicted at the entrance of

#### 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 was installed. The photograph of the metallic board is attaché as **Plate No. 10** 

39	9	The proponent should provide notarized affidavit (indicating the number							Complied		
		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

40	No change in mining technology and scope of working should be 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:

At present, 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. The mining is progressing as per submitted plan.

41	The project proponent shall ensure that no natural water course and/or	Noted
	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:

The project proponent will take all necessary safeguards to prevent contamination of stream as well as ground water. The project proponent will install additional clarifiers in the project site to prevent sediments and wastes from quarry site to enter in to the main stream. There is no stream originating from the mining area.

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.

Noted

#### Compliance:

The project proponent has monitored the ambient air quality as per National Ambient Air Quality Standard (NAAQS), during the time of appraisal of the project. The project proponent is intending to increase splashing of water and installation of sprinklers at loading, unloading and transfer points.

The top soil, if any, shall be temporarily 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

To prevent the soil erosion, the top soil and overburden are stacked in 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 as per the direction of District Environment Impact Assessment Authority (DEIAA), Kannur. The Environment Monitoring Cell will monitor the execution of eco restoration.

Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc., The drains shall be regularly de silted particularly after monsoon and maintained properly.

## complied

#### 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 are settling at the bottom of the pond and only cleared water is letting out. The water from the pond can be used for splashing of water on roads to arrest the dust.

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 PM<sub>10</sub> and PM<sub>2.5</sub>, 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.

The project proponent is regularly checking the pollution of all vehicles in the site and spraying water in critical areas prone to air pollution with the help of vehicle. The project proponent will fix sprinklers in critical area to reduce the dust emission such as loading and unloading points, haul roads and transfer points. The ambient air quality is monitoring with the help of an approved laboratory.

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

# 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.

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.

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

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

49	The funds earmarked for environmental protection and CSR	Being
	activities should be kept in separate account and should not be	complied
	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.

50	The Reg	gional	Office	of	MoE	F &C	C lo	cated	at	Bar	ngalo	re shall	Will	be
	monitor	comp	liance	of	the	stipul	ated	cond	ditio	ns.	The	project	comp	olied
	authorities should extend full cooperation to the officer(s) of the													
	regional	(	Office	k	οу	fui	nishi	ing	t	he	r	equisite		
	data/info	rmatio	on/moni	torin	ng re	eports.								

# Compliance:

The project proponent scrupulously follows the condition stipulated in the EC order and keeping all records with a good documentation system. The project 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 the same.

51	Any appeal against this environmental clearance shall lie with the	Noted
	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.
- The SEIAA may revoke or suspend the order, for non Noted implementation of any of the specific or this implementation of any of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

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.

54	The above conditions shall prevail not withstanding anything to the							
	contrary, in consistent, or simplified, contained in any other permit,							
	license on consent given by any other authority for the same							
	project.							

## Compliance:

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

55	This order is valid for a period of 5 years or the expiry date of mine	Noted
	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.	

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

The project proponent is following approved mining plan for the extraction of building stones. The project 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.						

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

Regular monitoring of flow rates and water quality upstream and 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 entering in to the public drainage system.

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

## Compliance:

The project proponent has started occupational health surveillance programme in association with Primary Health Center (PHC) of Kerala government for the labours working in mining area and crusher.

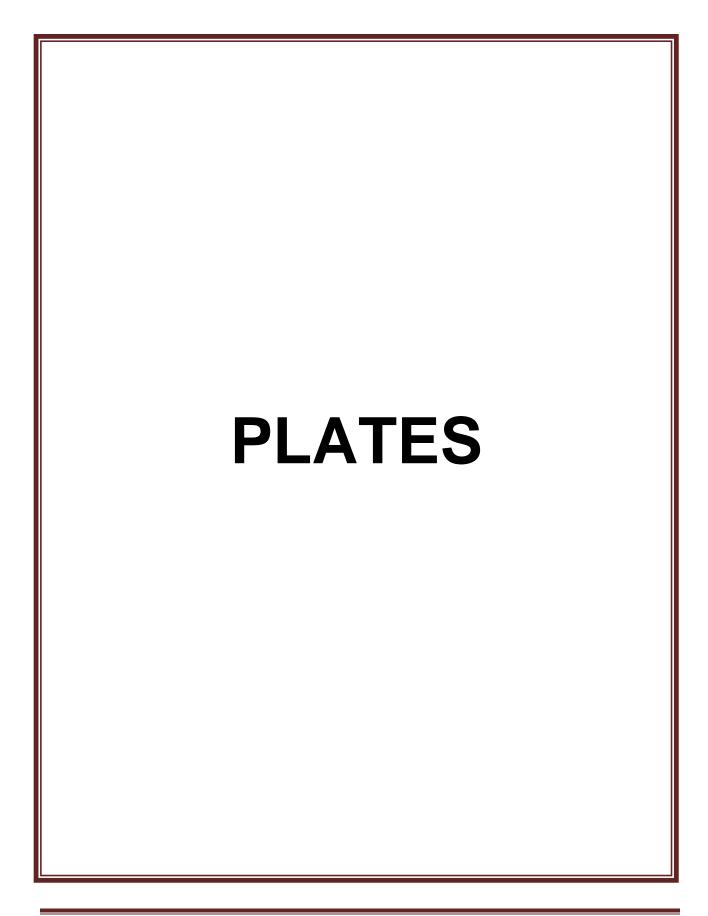


Plate No. 1



Board showing blasting time

Plate No. 2



**Boundary Pillars** 

Plate No. 3





Sanitary Latrine and Urinals

Plate No. 4





Resting Room

Plate No. 5



No Smoking Board

Plate No. 6



**Emergency Contact Numbers** 

Plate No. 7



Avenue Trees

Plate No. 8



Magazine

Plate No. 9



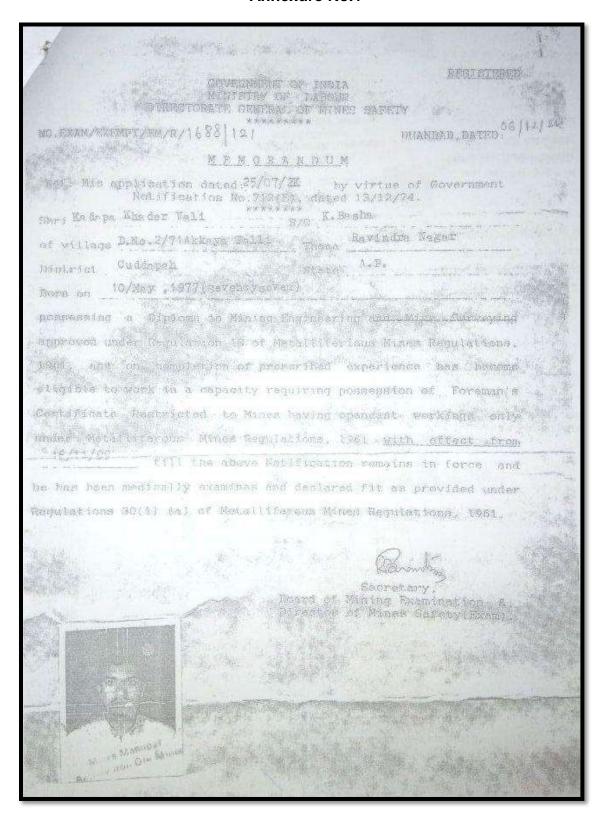
Sign Boards

Plate No. 10

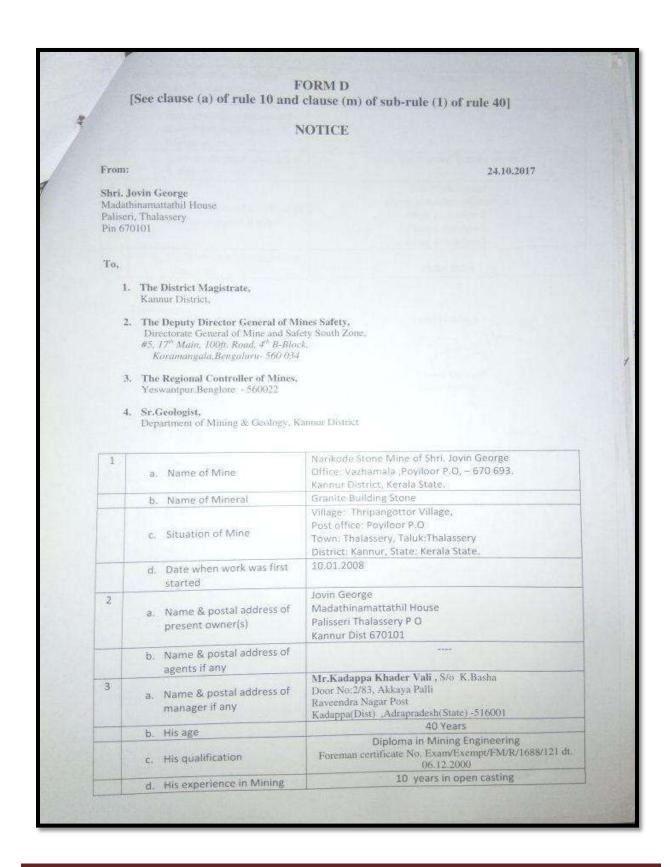


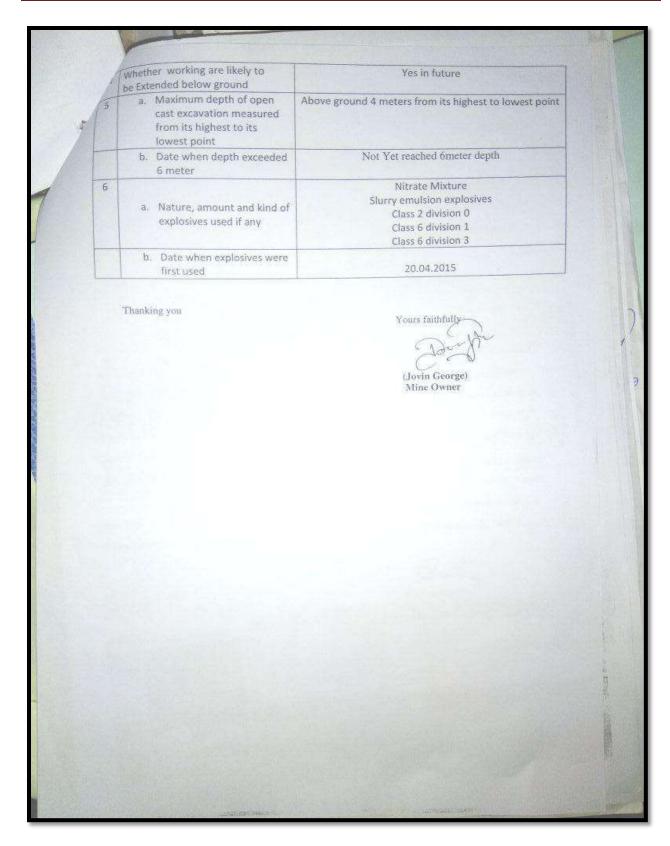
Metallic Board



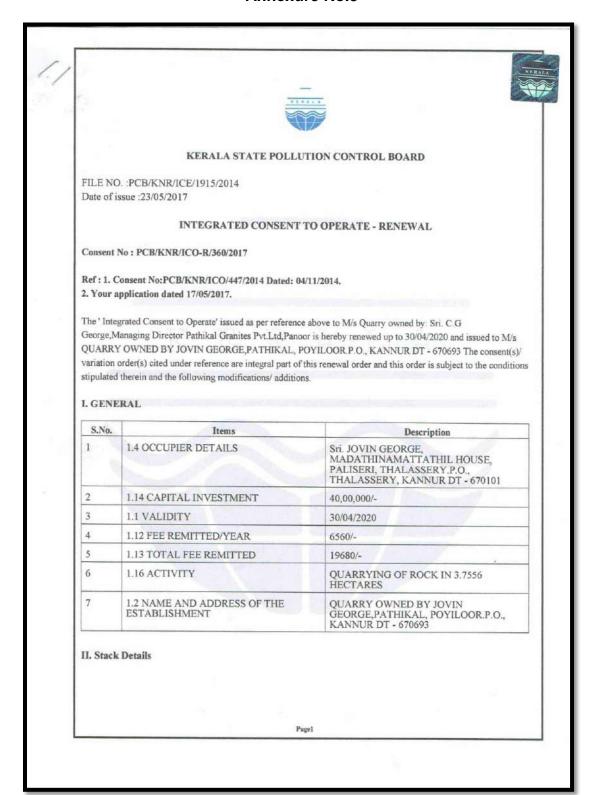


Certificate of licensed Person





Form D



Copy of Consent form PCB



Validity expires on 21.05.2022

#### Proceedings of the District Environment Impact Assessment Authority Kannur

Present: Sri. Mir Mohammed Ali I.A.S, Chairman; Sri. O Jayarajan I.F.S (Rtd), Member ;Sri.Suneel Pamidi.I.F.S ,Member and Sri. P.. Gangadaran, Member Secretary.

Sub: DEIAA- Environmental clearance for the proposed Quarry project of Sri.Jovin George, Madathinamattathil, Palissery, Thalassery.P.O. for an area of 3.7556Hectares in Survey No. 275/1A of Tripangottur Village, Thalassery Taluk, Kannur District

#### DISTRICT ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY, KANNUR

No. 01/KNR/2017/DEIAA

Dated, ,22/05/2017, Kannur

I. Online Application dated 17/01/2017 from Sri.Jovin George, Madathinamattathil, Palissery, Thalassery.P.O.

- 2. Minutes of the  $3^{\rm rd}$  meeting of DEAC held on 17/03/2017, 3. Minutes of the  $5^{\rm th}$  meeting of DEAC held on 04/05/2017.
- Minutes of the 6<sup>th</sup> meeting of DEIAA held on 19/05/2017.

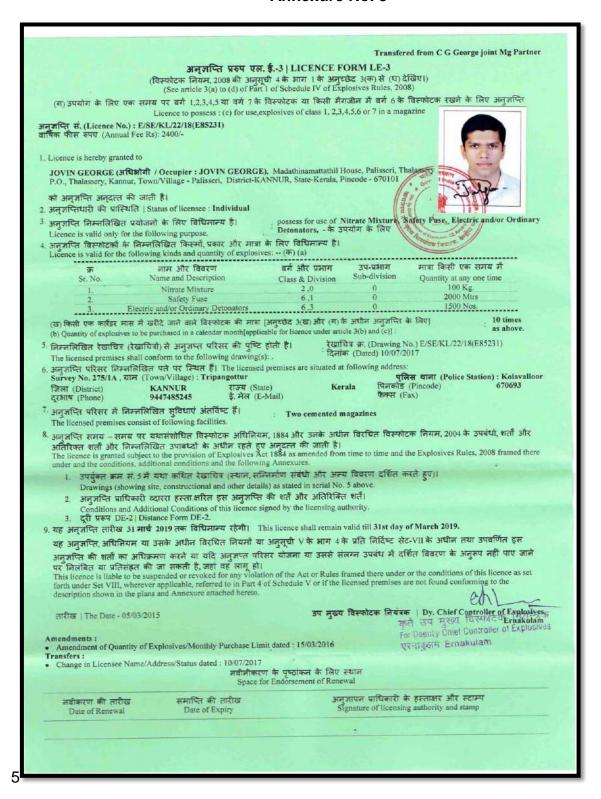
## ENVIRONMENTAL CLEARANCE NO. 04/2017

Sri.Jovin George, Madathinamattathil, Palissery, Thalassery.P.O. Kannur District ,Kerala vide his application received on 17/01/2017, has sought Environmental Clearance under EIA Notification, 2006 for the quarry project of an for an area of 3.7556Hectares in Survey No. 275/1A of Tripangottur Village, Thalassery Taluk, 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 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

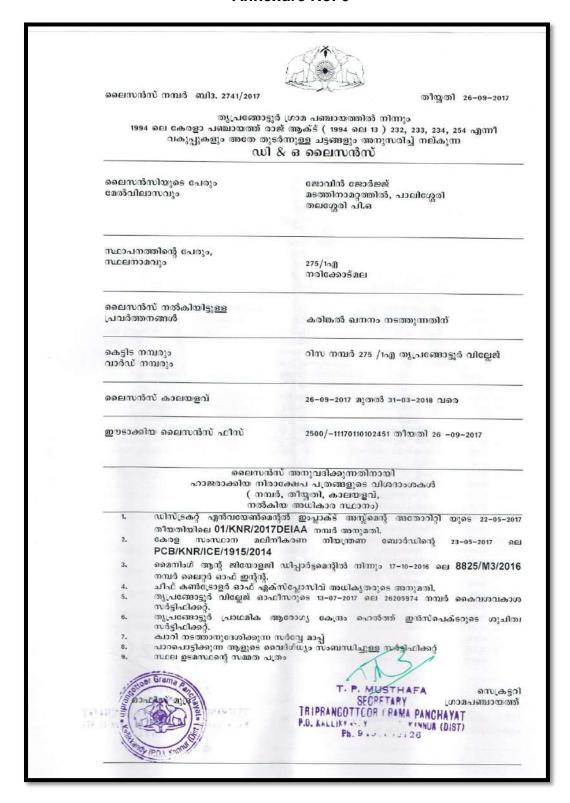
The proposed project site falls within Latitude: 11°47'50.59"N to 11°47'59.02"N and longitude 75°40'41.61"E to 75°40'51.60"E". The land area consists of 3.7556hectares, which is private land. The land use classification as per revenue records is

Page 1 of 5

# Copy of Environmental Clearance



Copy of Explosive



Copy of license from Gram Panchayat

# PROCEEDINGS OF THE DIRECTOR OF MINING & GEOLOGY

- Sub: Mining & Geology Mines & Minerals Minor Minerals Granite Building Stone Quarrying Lease to Shri. Jovin George, Madathinamattathil House, Palisseri, Thalassery. P. O, Kannur District - 670 101 - sanctioned - orders - issued.
- Ref. 1. Application dtd. 21/02/2017 from Shri. Jovin George, Madathinamattathil House, Palisseri, Thalassery. P. O, Kannur District 670 101
  - Letter No. DOC/M-5353/2016 dtd. 30/08/2016 from the Geologist, District Office, Kannur
     Pro.order. No. 01/KNR/2017/DEIAA dtd. 22/05/2017 of the District Environment Impact Assessment Auhority, Kannur, Kerala
  - 4. Kerala Minor Mineral Concession Rules, 2015.

No. 409/2017-18/8825/M3/2016/DMG

Dated, Thiruvananthapuram 04/10/2017

#### ORDER

A quarrying lease is granted to Shri. Jovin George, Madathinamattathil House, Palisseri, Thalassery. P. O, Kannur District – 670 101 to quarry Granite (Building Stone) over an area of 3.7556 Hectares of land comprised in Re - Sy. No. 275/1A of Tripangottur Village, Thalassery Taluk, Kannur District for 12 (Twelve) 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 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.
- 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
- 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, (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



Copy of Lease

The Secretary,

Dt. 29/05/2017

Tripangottoor Panchayat, Thalassery Taluk, Kannur District, Kerala.

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. 1/KNR/2017/DEIAA dt. 22/05/2017.
- We hereby submit a self attested copy of the Environment Clearance Order No. 1/KNR/2017/DEIAA dt. 22/05/2017. This is in compliance to the condition of the E.C. Order.

Kindly acknowledge the receipt of the same.

Thanking you,

Jovin George

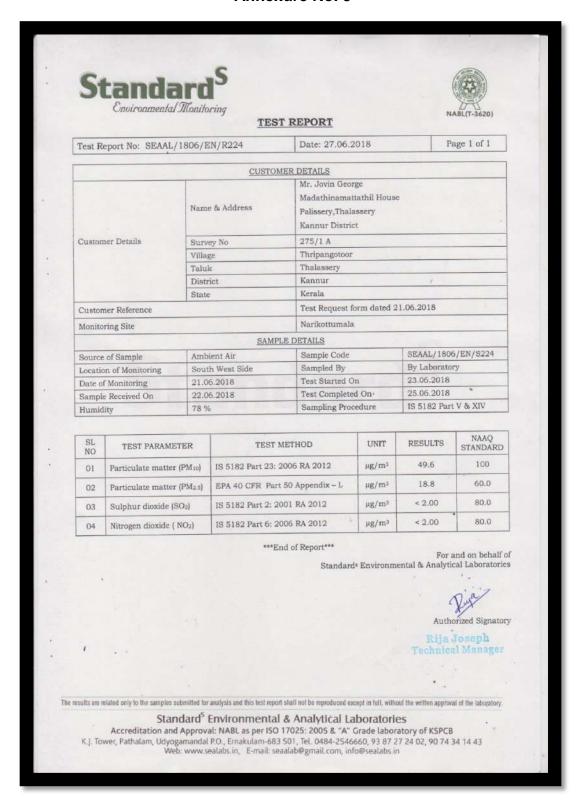
Yours respectfully,

7,

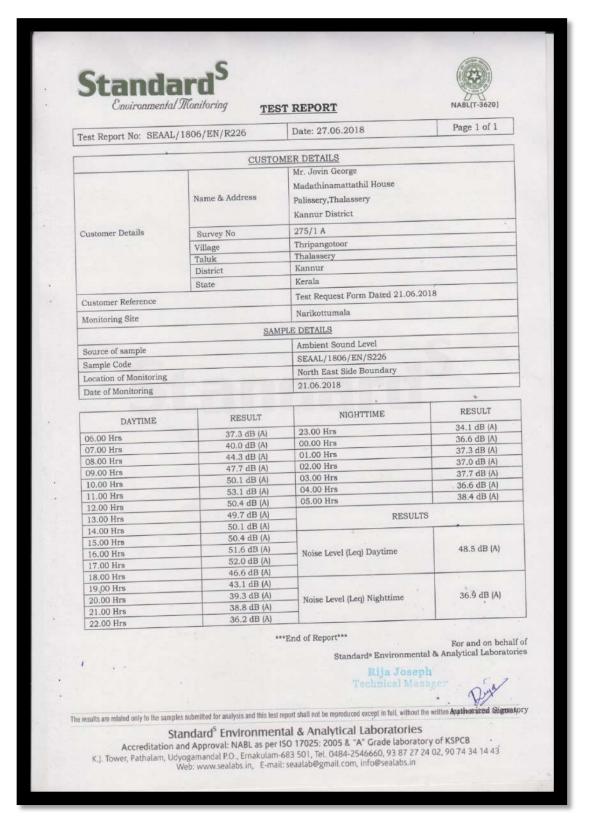
Encl: As above

For Secretary Iriprangottoor Grama Panchaya P. O. Kallikkandi-670 693

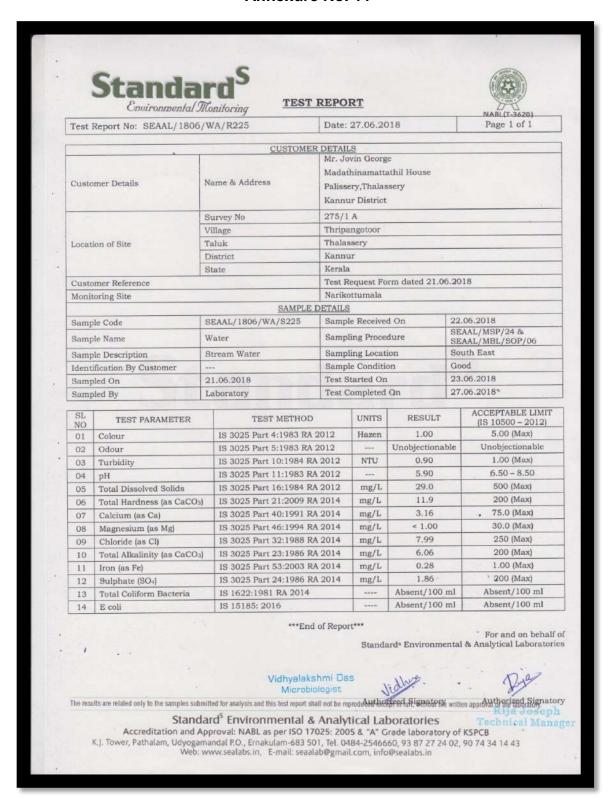
Copy of Acknowledgement



Result of ambient air



**Result of Sound** 



**Result of Water**