# **COMPLIANCE REPORT**

# October 2019 – March 2020

Quarry project of Binu Cheriyan

Malappuram District, Kerala

Dt. 06-06-2020

From Binu Cherian,

Thakkirickal House, Chelad P O, Kothamangalam, Kerala. Pin: 686681

То

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:-FileNo. 839/SEIAA/EC1/2717/2015

Subj :- Environment Clearance – Quarry project at Village & Panchayat Edayur, Thirur Taluk, Malappuram District, Kerala – Compliance Report – secondhalf – Reg.

#### Respected Sir,

The Quarry (Building stone) project was accorded Environmental Clearance for **2.6872Ha**. by order No. **839/SEIAA/EC1/2717/2015**,dated 05/02/2016by State Environmental Impact Assessment Authority, Kerala.The compliance report of **second Half** (October 2019 – March 2020) to the specific and general conditions of the Environment Clearance order is enclosed.

Thanking you,

Yours respectfully,

**Binu Cherian** 

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: 839/SEIAA/EC1/2717/2015

**DATED: 05-02-2016** 

BY

# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA) FOR

BUILDING STONE QUARRY
(MINOR MINERAL MINING) PROJECT

AT

SURVEY NOS. 101/5, 101/6,
VILLAGE & PANCHAYAT EDAYUR, THIRUR TALUK,
MALAPPURAM DISTRICT, KERALA

BY

MR. BINU CHERIAN,
THAKKIRICKAL HOUSE, CHELAD P.O,
KOTHAMANGALAM, ERNAKULAM DISTRICT
KERALA

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#### INTRODUCTION

Quarry project of **Sri. Binu Cheriyan** Thakkirickal House, Chelad P. O Kothamangalam, Ernakulam District is a building metal stone quarry located at Survey No. 101/5, 101/6,, Edayur Village, Edayur Panchayat, Thirur Taluk, Malappuram 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 2019 – March 2020 is being submitted.

**COMPLIANCE REPORT** 

(GENERAL CONDITIONS)

#### **GENERAL CONDITIONS**

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

#### Compliance

To conserve rain water, the project proponent has constructed a trench with a width of 6-7 meter and length of 30 meter to collect storm water from the upper slope of the project. The storm water flow is leading to the trench through natural drainage. To utilize the rain water, this Rain Water Harvesting (RWH) structure is properly maintaining in the area.

2	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) was formed with Mr. Judy James as head of the monitoring cell. The EMC meetings of the cell convene periodically and evaluate the activities towards the stipulations of Environmental Clearance order. The details of the monitoring cell are given below:

TABLE No. 1 - ENVIRONMENTAL MONITORING CELL (EMC)

SI. No.	Post	Name
1.	Head of the monitoring cell	Judy James
2.	Member	Nithesh
3.	Member	Varghese

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.	

The project proponent has been planting various tree saplings and native species in the project site to enhance the eco – diversity in the industry. There is also natural vegetation including trees, shrubs and climbers are presents in the sides of road and parking area. This will help to reduce air and sound pollution.

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

SI. No.	Scientific Name	Common Name	Family	Habit
1.	Mucuna bracteata	Thottapayar	Fabaceae	Climber
2.	Swietenia mahagoni	Mahagony	Meliaceae	Tree
3.	Bambusa bambos	Mula	Poaceae	Herb
4.	Chromolaena odorata	Communist-pacha	Compositae	Shrub
5.	Coccos nucifera	Thengu / Coconut	Arecaceae	Tree
6.	Mangifera indica	Mavu	Anacardiaceae	Tree
7.	Tectona grandis	Thekku	Verbenaceae	Tree
8.	Ziziphus oenopolia	Thodalli	Rhamnaceae	Climber

0	4	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 has installed solar street lights in the project site to use maximum renewable energy to reduce electrical consumption from KSEB.

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

#### Compliance:

The emission of dust is a major adverse effect of a mining industry. Emission of dust is one of the main problems in mining area. To prevent dust emissions from the road while transportation of materials, the project proponent is splashing water on roads by deploying a vehicle at project site. Sprinklers are also installed in and around the project site.

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

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 area. The project proponent started to plant various saplings in and around the project site. 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	Mucuna bracteata	Thottapayar	Fabaceae	Climber
3	Artocarpus heterophyllus	Plavu	Moraceae	Tree
4	Capsicum frutescens	Kantharimulaku	Solanaceae	Herb
5	Carica papaya	Papaya	Caricaceae	Tree
6	Coccos nucifera	Thengu	Arecaceae	Tree
7	Curcuma longa	Manjal	Zingiberaceae	Herb
8	Mangifera indica	Mavu	Anacardiaceae	Tree
9	Musa paradisiaca	Vazha	Musaceae	Herb
10	Swietenia mahagoni	Mahagony	Meliaceae	Tree
11	Tectona grandis	Thekku	Verbenaceae	Tree

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

#### Compliance:

After closure of the mine, the project proponent is intending to 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	complied	
		proponent	should	be implemented	t						

As part of inclusive growth of the community, the project proponent has executed various activities under Corporate Social Responsibility / Corporate Environment Responsibility of the firm with the consultation of Panchayath. The main activities were under the sectors of education, housing, health. The project proponent could spend about 18500 in this six months period. The CSR/CER receipts/vouchers is attached as Annexure No. 9.

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

#### Compliance:

To demarcate the lease area, the project proponent has installed fencing around the area where lease obtained. The complete installation of barbed metal wire fencing around the mining area is with height of 4 ft.

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.	

#### Compliance:

The alarm can intimate the general public and labours that the blasting is going to happen. As per the stipulation of Explosive department and State Environment Impact Assessment Authority the project proponent has installed warning alarms in the quarry site.

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

The project proponent has implemented mitigate masseurs to reduce noise level in the project site. 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

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

#### Compliance:

Quarrying activities are limited to day time only as per KSPCB guidelines. This will help to limit the sound pollution.. The quarry working time is 7.30 am - 5 pm. This will help to limit the sound pollution.

13	Blas	sting should b	e de	one in a cont	rolled manner	as	specif	fied by	Complied
	the	regulations	of	explosives	department	or	any	other	
	con	cerned agenc	y.						

To reduce possible accidents, the blasting is carrying out in controlled manner by using ordinary delayed detonators. All blasting activities are carrying out with the stipulated guidelines of explosive department and other concerned agency.

14	4	Α	licensed	person	should	supervise/control	the	blasting	complied
		ор	erations.						

#### Compliance:

To monitor all mining activities, the project has appointed a licensed person having certificate of short fire to supervise/control the blasting operations for the extraction of granite building stones.

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

#### Compliance:

To contain dust emissions and for the trouble free transportation of materials, the project proponent has tarred 250 meter of the access road to the quarry site. The project proponent splashes water on the road to arrest the dust production during summer season. The project proponent is regularly maintaining the access road in a good manner.

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

#### Compliance:

In a building stone quarry project, the overburden and topsoil need to extract during the time of mining, these natural resources are 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. To prevent soil erosion grass is planted on the overburden and topsoil. This will be used for plantation, haulage roads and land filling in the mining area.

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

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

1	8	Mats to reduce fly rock blast to a maximum of 10 PPV should	Noted
		be provided.	

#### Compliance:

The project proponent is using blasting mat to reduce fly rocks during 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 proponent also assure the maximum PPV is under 10.

19	Maximum depth of mining from general ground level at site	Will be	
	shall not 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. The instruction regarding to this has given to the mines manager.

2	20	No mining operations should be carried out at places having a	Noted
		slope greater than 45°.	

#### Compliance:

There is no area seen with slope greater than 45° high in the E C obtained area. The project proponent is extracting building stone in the area where Environment Clearance and Lease is obtained.

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

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.

2	2	The workers on the site should be provided with the required	Complied
		protective equipments such as ear muffs, helmet, etc	

#### Compliance:

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

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

#### Compliance:

The project proponent has constructed de siltation traps at project site for clarification of storm water and ensures that all storm water from the mining area is flowing in to the pond created 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.

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

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

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:

As part of concurrent eco restoration, the project proponent has planted various saplings in the project area as a compensation of loss of trees while clearing the land for mining.

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

#### Compliance:

The volume of used oil is low in the industry, a major portion of used oil is using as lubricant in the project site. The execs have been giving to agencies approved by Pollution Control board.

2	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.

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

The norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project. The project has left 129 meter distance to the nearest house from the boundary of mining area, the KSPCB condition is 50 meter.

29	100 m bu	uffer distance	should be	maintained	from	forest	Complied
	boundaries	S.					

#### Compliance:

There is no forest area in 100 meter vicinity to the project site.

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

#### Compliance:

The project proponent 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.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 concerned statutory authorities are enclosed in **Annexure No.1, 2, 3, 4 & 5.** The details are given below

TABLE 4 – APPROVALS FROM COMPETENT AUTHORITIES

Name of the Statutory	Name of the Statutory	Approval Number & Date	
approval	authority		
Environmental	State Environmental Impact	839/SEIAA/EC1/2717/2015	
Clearance order	Assessment Authority, Kerala	Dated 05-02-2016	

"Consent to Operate"	Kerala State Pollution Control	PCB/CO/R1/EXP/1142/17
	Board	01-04-2017
Explosive License	Ministry of Commerce &	E/SC/KL/30/358(E64051)
	Industry – Petroleum &	Dated 08-09-2016
	Explosives Safety Organization	
	(PESO)	
License for quarry	Gram Panchayath	A4-941/17
operations		dated 24-03-2017
		05/2017-18/GR/DOM/M-
Permit order	Directorate of Mining and	2320/2017
	Geology	Dated 25-08-2017

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

The project is running as per plan submitted in Environmental Impact Assessment Authority, Kerala. At present there is no change in the scope of the project. The project proponent will seek for a new Environmental clearance in the case of any change(s) in the scope of the project.

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

#### Compliance:

If the Authority insists to add additional safeguards and measures in the mining industry for safety and environmental sustainability, the project proponent will be complied with.

The stipulations by Statutory Authorities under different Acts Being and Notifications should be complied with, including the complied 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. KMMCR 2015
- 2. The Environment Protection Act, 1986
- 3. Water (Prevention and Control of Pollution) Act, 1974
- 4. The Air (Prevention and Control of Pollution) Act, 1981
- 5. The Public Liability (Insurance) Act,1991
- 6. Municipal Solid Waste (Management and Handling) Act,2016
- 7. Hazardous and Other Wastes (Management and handling) Rules, 2016.
- 8. EIA notification, 2006

35	The project proponent should advertise in at least two local	Complied
33	The project proponent should advertise in at least two local	Complied
	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. <u>The advertisement</u>	
	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.	

An advertisement in two local newspapers regarding Environmental Clearance accorded to the quarry project was given within the stipulated period and the copy of the same was submitted at SEIAA Kerala.

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 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 of the stipulated specific and general conditions of Environmental Clearance is being submitted to the State Environment Impact Assessment Authority Govt. of Kerala, and also to the Regional Office of MoEF&CC, Govt. of India. The results of monitored data are attached as **Annexure No. 6, 7 & 8.** 

38	The details of Environmental Clearance should be prominently	complied	
	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.		
		i I	

The details of the Environmental Clearance are displayed on metallic board in the project site. The metallic board as specified in the conditions of Environmental Clearance order of 3 ft x 3 ft with green background and yellow letters of Times New Roman font.

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.			

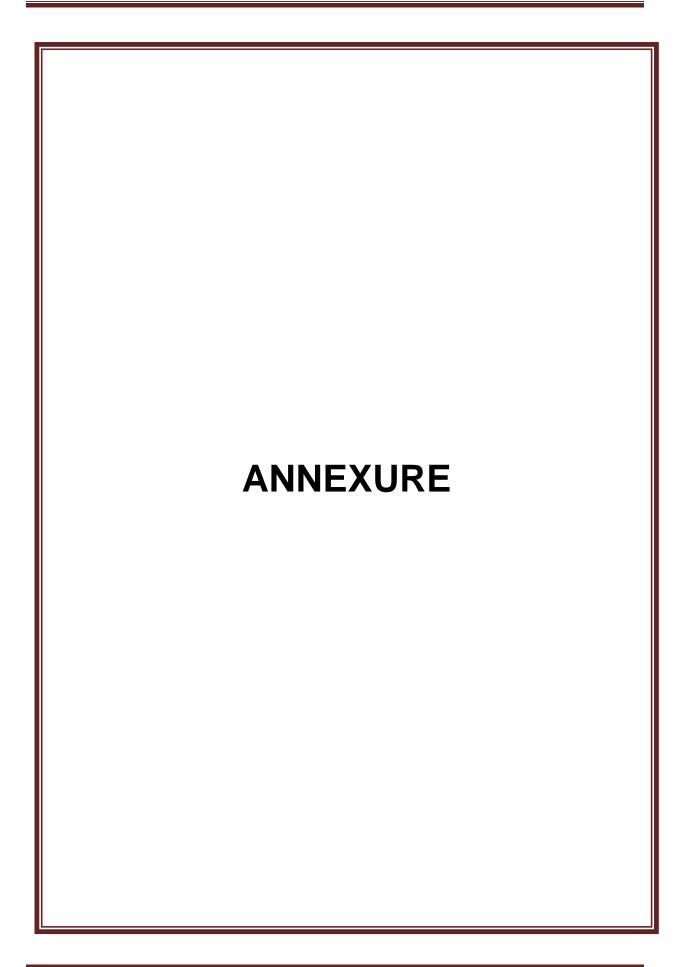
#### Compliance:

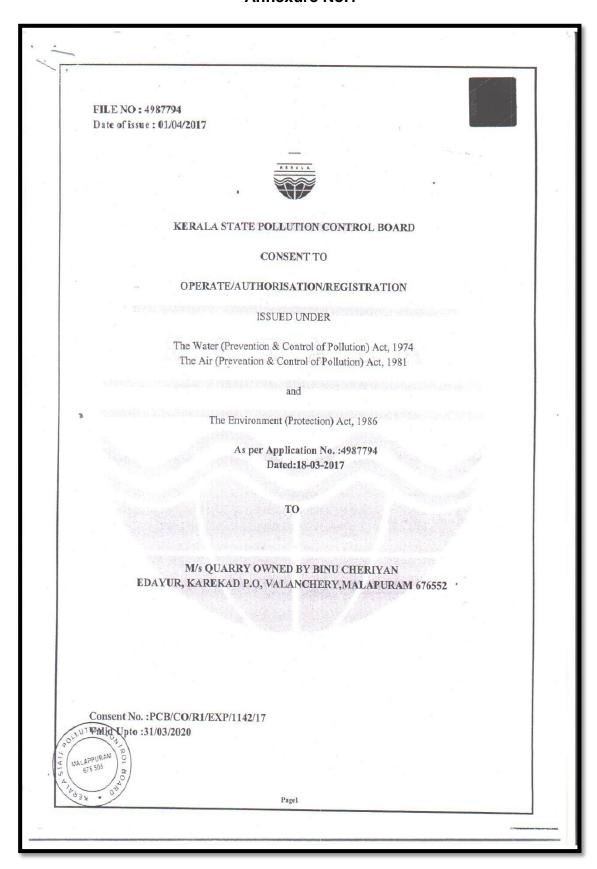
An assurance in the form of affidavit was already submitted to SEIAA Kerala by the project proponent.

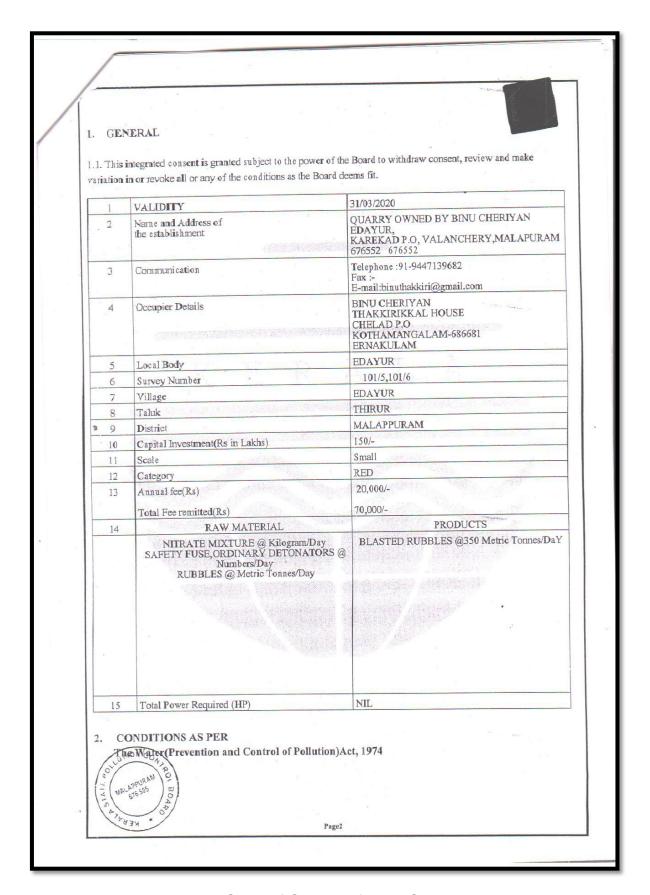
40	The above conditions shall prevail notwithstanding anything to	Noted
	the contrary; in consistent, or simplified, contained any other	
	permit, license on consent given by any other authority for the	
	same project.	

#### Compliance:

The project is giving priority to the conditions stipulated in the Environment clearance Order for its execution.







**Copy of Consent from PCB** 



Validity expires on 04-02-2021

#### 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.

SEIAA- Environmental Clearance for the proposed building stone quarry project in Survey Nos. 101/5 and 101/6 at Edayur Village, Edayur Panchayath, Thirur Taluk, Malappuram District by Sri. Binu Cherian, Thakkirickal House, Chelad P.O., Kothamangalam, Ernakulam District-686681-Granted- Orders issued.

#### STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 839/SEIAA/EC1/2717/2015

dated, Thiruvananthapuram 05-02-2016

- Read: 1. Application dated 07-07-2015 submitted by Sri. Binu Cherian, Thakkirickal House, Chelad P.O., Kothamangalam, Ernakulam District-686681

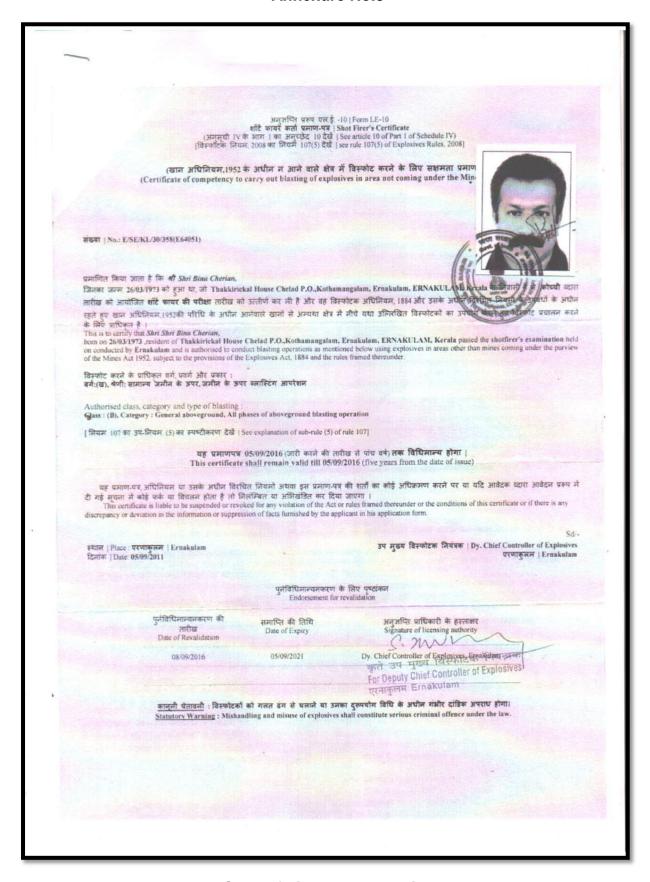
  - 2. Minutes of the  $48^{th}$  meeting of SEAC held on 06/07-11-2015. 3. Minutes of the  $47^{th}$  meeting of SEIAA held on 07-01-2016.

#### Environmental Clearance No. 11/2016.

Sri.Binu Cherian, Thakkirickal House, Chelad P.O., Kothamangalam, Ernakulam District-686681, vide his application received on 14-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. Nos. 101/5 and 101/6 at Edayur Village, Edayur Panchayath, Thirur Taluk, Malappuram District, Kerala for an area of 2.6872 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50hectares) 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) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

2. This is an existing Quarry. The quarry was in operation with a short term quarrying permit issued by Mining& Geology Department, Government of Kerala for an area of 0. 4046 hectares. The land use as per revenue records is private own land of 3.6460 hectares. Main rock type in the area is granite and the area is mineral specific and hence no alternate site was examined. The present and use is some native trees, shrubs, herbs etc. The proposed project is for quarrying of 100,000 MTA of building stone from an area of 2.6872 hectares of land. Domestic effluent will be discharged in septic tank and soak pit system. The quarry operation is proposed to carry out with conventional open cast semi-mechanized mining by maintaining the bench height and width to 5.0 meter. Considering the stability of rocks the final slope or ultimate pit slope is proposed 450 from vertical. Mining will be carried out from the top to bottom by slicing of 2.5 m thick. The mineral exploitation is being done from 150 m MSL to 85 m MSL for the expected life of ten years. At the end of life of mine, excavated area will be converted into water pond and plantation. A storm water collection pond is proposed for

#### Copy of EC order



Copy of License - explosive

man man 84-81	19/19 070001 27/03/2019
4444444	മുട്ടുക് ധാമ പഞ്ചായത്തിൽ നിന്നും
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Copy of license from Gram Panchayat

#### FORM M

(See sub - rule(2) of rule 9) (For all type of quarrying permits)

### GOVERNMENT OF KERALA

DEPARTMENT OF MINING & GEOLOGY DISTRICT OFFICE MALAPPURAM QUARRYING PERMIT FOR EXTRACTION OF GRANITE BUILDING UNDER RULES 3(1),9 AND 10 OF THE KERALA MINOR MINERAL CONCESSION RULES, 2015 and KMMC(2<sup>nd</sup> Amendment) Rules 2015

No. 21/2019-20/GR/DOM/M- 2794/2019

Dated, 16/10/2019

Shri. Binu Cherian, Thakkirikkal House, Chelad Post, Kothamagalam, Ernakulam is hereby permitted to extract and remove Granite Building Stone (Name of mineral) from an area of 99.58 Ares in Sy.No. 101/6 of Edayur village of Tirur Taluk of Malappuram District, Kerala State under rule 3(1) and 9 of the Kerala Mineral Concession Rules, 2015 subject to the conditions mentioned in rule 10.

Quantity of extraction of mineral permitted (Not applicable in the case of CRP System): : 30,000 MT

Whether the permit holder opted CRP System Number of mineral transit passes to be issued

: No 6000 Nos.

Name and address of the owner of the land

Sri. Ulleerithodi Unneenkutty & Shanavas, Karayakkad Post, Malappuram

Under mineral concession/particulars of consent NOC received from the occupier of the land (if applicable )

: Consent letter attached

Date of expiry of permit

15.10.2020 (Subject to the validity of other statutory licences)

#### Details of fee remitted

Item	Chalan No.&Date	Amount	Name of Treasury
Application fee	KL006743020201920 M dtd.02.9.2019	1000/-	S.T.Manjeri
Royalty	KL008671847201920 M dtd.16.10.2019	7,20,000/-	do
Surface Rent	do	500/-	do
Addl.Royalty remitted, if any		-	0

To

Sri. Unneen Kutty & Shanavas, Ulleerithodi House, Karayakkad Post, Malappuram Senior Geolo GEOLOGIST

DIST. Office Of Mining & Geology Mini Civil Station, Manjeri Malapourem District.

Copy to :(1) The District Collector, Malappuram (with C/L) (2) Secretary, Edayur Grama Panchayat

Copy of lease/Permit order



#### TEST REPORT

Test Report No: 20200213/R094	Date: 18.02.2020	Page 1 of 1
Tool Report No. 20200210/1005		

CUSTOMER DETAILS					
Customer Details	Name & Address	Mr.Binu Cherian Thakkirickal (H), Chelad, Kothamangalam, Ernakulam District.	Thakkirickal (H), Chelad, Kothamangalam,		
	Monitoring Site		Quarry of Mr. Binu Cherian Karakkad, Edayoor, Malappuram District.		
	Survey No	101/5, 101/6	101/5, 101/6		
Location of Site	Village	Edayoor	Edayoor		
Location of Site	Panchayath	Edayoor	Edayoor		
	Taluk	Thirur			
	District	Malappuram	Malappuram		
	State	Kerala	Kerala		
Customer Reference					
	SAM	IPLE DETAILS			
Source of Sample	Ambient Air	Sample Code	20200213/S094		
Location of Monitoring	East Side Boundary	Sampled By	Laboratory		
Date of Monitoring	13.02.2020	Test Started On	15.02.2020		
Sample Received On	14.02.2020	Test Completed On	18.02.2020		
Humidity	76 %	Sampling Procedure IS 5182 Part V & XIV			

SL NO	TEST PARAMETER	EST PARAMETER TEST METHOD		RESULT	NAAQ STANDARD
01	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23: 2006 RA 2017	μg/m³	52.9	100
02	Particulate Matter (PM <sub>2.5</sub> )	EPA 40 CFR Part 50 Appendix - L	μg/m³	22.1	60.0
03	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part 2: 2001 RA 2017	μg/m³	< 2.00	80.0
04	Oxides of Nitrogen (NO <sub>2</sub> )	IS 5182 Part 6: 2006 RA 2017	μg/m³	< 2.00	80.0

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

For and on behalf of Standards Environmental & Analytical Laboratories



Authorized Signatory
Rija Joseph
Technical Manager

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 air



#### TEST REPORT

Test Report No: 20200213/R095	Date: 18.02.2020	Page 1 of 1

	CU	STOMER DETAILS		
		Mr.Binu Cherian		
Customer Details	Name & Address	Thakkirickal (H),		
		Chelad, Kothamangalam, Ernakulam District.		
	2000 NO NO 2000	Quarry of Mr. Binu Cherian		
	Monitoring Site	Karakkad, Edayoor, Malappuram District.		
	Survey No	101/5, 101/6		
Location of Site	Village	Edayoor		
	Panchayath	Edayoor		
	Taluk	Thirur		
	District	Malappuram		
	State	Kerala		
Customer Reference				
SAMP		AMPLE DETAILS		
Source of Sample		Ambient Sound Level		
Sample Code		20200213/S095		
Location of Monitoring		East side Boundary		
Date of Monitoring		13.02.2020		
Method		IS 9989:1981 RA:2008		

DAYTIME .	RESULT	NIGHTTIME	RESULT	
06.00 Hrs	37.1 dB (A)	23.00 Hrs	34.0 dB (A)	
07.00 Hrs	39.7 dB (A)	00.00 Hrs	36.5 dB (A)	
08.00 Hrs	43.9 dB (A)	01.00 Hrs	37.2 dB (A)	
09.00 Hrs	47.4 dB (A)	02.00 Hrs	36.9 dB (A)	
10.00 Hrs	49.7 dB (A)	03.00 Hrs	37.6 dB (A)	
11.00 Hrs	52.7 dB (A)	04.00 Hrs	36.5 dB (A)	
12.00 Hrs	50.0 dB (A)	05.00 Hrs	38.3 dB (A)	
13.00 Hrs	49.3 dB (A)	RESULTS		
14.00 Hrs	49.7 dB (A)			
15.00 Hrs	50.0 dB (A)	Ambient Sound Level (Leq) Daytime 48.1 d		
16.00 Hrs	51.2 dB (A)			
17.00 Hrs	51.6 dB (A)			
18.00 Hrs	46.2 dB (A)			
19.00 Hrs	42.8 dB (A)	Ambient Sound Level (Leq) Nighttime 36.8 dB (#		
20.00 Hrs	39.0 dB (A)			
21.00 Hrs	38.5 dB (A)			
22.00 Hrs	35.9 dB (A)			

End of Report\*\*\*

For and on behalf of Standards Environmental & Analytical Laboratories

**Technical Manager** 

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

Result of ambient sound level

Test Report No: 20200213/R096

Page 1 of 1

#### **Annexure No. 8**



#### TEST REPORT

Date: 18.02.2020

	CUST	OMER DETAILS
Customer Details  Name & Address  Mr.Binu Cherian  Thakkirickal (H),  Chelad, Kothamangalan		
	Monitoring Site	Quarry of Mr. Binu Cherian Karakkad, Edayoor, Malappuram District.
	Survey No	101/5, 101/6
Location of Site	Village	Edayoor
Location of Site	Panchayath	Edayoor
	Taluk	Thirur
	District	Malappuram
	State	Kerala
Customer Reference		
	SAI	MPLE DETAILS
		The state of the s

20200213/S096	Sample Received On	15.02.2020
Water	Sampling Procedure	
Open Well	Sampling Location	Adjoint plot on West direction
	Sample Condition	Good
	Test Started On	15.02.2020
Customer	Test Completed On	18.02.2020
	Water Open Well	Water Sampling Procedure Open Well Sampling Location Sample Condition Test Started On

SL NO	TEST PARAMETER	TEST METHOD	UNITS	RESULT	ACCEPTABLE LIMIT (IS 10500-2012)
01	Colour	IS 3025 Part 4:1983 RA 2017	Hazen	1.00	5.0 (Max)
02	Odour	IS 3025 Part 5:1983 RA 2017		Unobjectionable	Unobjectionable
03	Turbidity	IS 3025 Part 10:1984 RA 2017	NTU	0.20	1.0 (Max)
04	рН	IS 3025 Part 11:1983 RA 2017		6.88	6.5-8.5
05	Conductivity	IS 3025 Part 14:1984 RA 2013	μS/cm	157	
06	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	101	500 (Max)
07	Total Hardness (as CaCO <sub>3</sub> )	IS 3025 Part 21:2009 RA 2014	mg/L	54.5	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40:1991 RA 2014	mg/L	12.1	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46:1994 RA 2014	mg/L	5.90	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2014	mg/L	10.9	250 (Max)
11	Total Alkalinity (as CaCO <sub>3</sub> )	IS 3025 Part 23:1986 RA 2014	mg/L	41.8	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53:2003 RA 2014	mg/L	0.15	1.00 (Max)
13	Sulphate (SO <sub>4</sub> )	IS 3025 Part 24:1986 RA 2014	mg/L	1.00	200 (Max)
14	Total Coliform Bacteria	IS 15185 : 2016		Absent/100 ml	Absent
15	E coli	IS 15185 : 2016		Absent/100 ml	Absent

End of Report\*\*\*

For and on behalf of Standards Environmental & Analytical Laboratories

Rija Joseph Technical Manager

Authorized Signatory

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

#### Result of water