

# **COMPLIANCE REPORT**

Quarry project of Binu Cheriyan  
Malappuram District, Kerala

*April 2019 – September 2019*

Dt. 29-11-2019

**From**  
**Binu Cherian,**  
Thakkirickal House,  
Chelad P O, Kothamangalam,  
Kerala. Pin: 686681

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

**Ref :- File No. 839/SEIAA/EC1/2717/2015**

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

**Respected Sir,**

The Quarry (Building stone) project was accorded Environmental Clearance for **2.6872 Ha.** by order No. **839/SEIAA/EC1/2717/2015**, dated 05/02/2016 by State Environmental Impact Assessment Authority, Kerala. The compliance report of **First Half** (April 2019 – September 2019) 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)  
'Devi Kripa', Pallimukku, Pettah P.O.,  
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 First half to the specific conditions and general conditions of the Environmental Clearance order for the period of **April 2019 – September 2019** is being submitted.

# **COMPLIANCE REPORT**

## **(GENERAL CONDITIONS)**

**GENERAL CONDITIONS**

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

<b>2</b>	<b>Environment Monitoring Cell (EMC) as agreed under the affidavit filed by the proponent should be formed and made functional.</b>	<b>Complied</b>
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**Compliance**

To monitor the mining activities, The Environmental Monitoring Cell (EMC) formed and made functional with Mr. Judy James as head of the monitoring cell. The EMC meeting convenes regularly for a sustainable environment. The details of the monitoring cell are given below:

**TABLE No. 1 - ENVIRONMENTAL MONITORING CELL (EMC)**

<b>Sl. No.</b>	<b>Post</b>	<b>Name</b>
1.	Head of the monitoring cell	Judy James
2.	Member	Nithesh
3.	Member	Varghese

<b>3</b>	<b>Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, inclusive of</b>	<b>Being complied</b>
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	<b>approach road and internal roads.</b>	
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### **Compliance**

. To reduce air and noise pollution, the project proponent has planted suitable avenue trees along either side of the road. There is also natural vegetation including trees, shrubs and climbers are presents in the project area. The details of vegetation are given below.

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

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

<b>04</b>	<b>Maximum possible solar energy generation and utilization shall be ensures as an essential part of the project.</b>	<b>Noted</b>
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### **Compliance:**

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

<b>05</b>	<b>Sprinklers shall be installed and used in the project site to contain dust emissions.</b>	<b>Complied</b>
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**Compliance:**

The project proponent splashes the haulage road and critical areas with the help of vehicles in regular intervals to arrest dust emissions from the road while transportation of materials. The sprinklers installed in and around the crusher unit.

<b>06</b>	<b>Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.</b>	<b>NOted</b>
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**Compliance:**

The eco restoration and the mine closure plan will be done at the own cost of the project proponent as per the approved mining plan. The planted and proposed sapling to be planted in the project site is given below in the **table No. 3**.

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

<b>Sl. No.</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Family</b>	<b>Habitat</b>
<b>1</b>	<i>Mucuna bracteata</i>	Thottapayar	Fabaceae	Climber
<b>3</b>	<i>Artocarpus heterophyllus</i>	Plavu	Moraceae	Tree
<b>4</b>	<i>Capsicum frutescens</i>	Kantharimulaku	Solanaceae	Herb
<b>5</b>	<i>Carica papaya</i>	Papaya	Caricaceae	Tree
<b>6</b>	<i>Cocos nucifera</i>	Thengu	Arecaceae	Tree
<b>7</b>	<i>Curcuma longa</i>	Manjal	Zingiberaceae	Herb
<b>8</b>	<i>Mangifera indica</i>	Mavu	Anacardiaceae	Tree
<b>9</b>	<i>Musa paradisiaca</i>	Vazha	Musaceae	Herb
<b>10</b>	<i>Swietenia mahagoni</i>	Mahagony	Meliaceae	Tree
<b>11</b>	<i>Tectona grandis</i>	Thekku	Verbenaceae	Tree

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

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

08	<b>Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented</b>	<b>complied</b>
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**Compliance:**

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 1.5 lakh in this six months period.

09	<b>The lease are shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine.</b>	<b>Complied</b>
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**Compliance:**

To enhance safety and demarcate the lease area, the project proponent has installed fencing around major part of the project site where Environmental Clearance and lease obtained. This will help to prevent falling of animals/human being/dumping of garbage etc.

10	<b>Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.</b>	<b>Complied</b>
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**Compliance:**

To give warning to the labours and community people prior to the blasting in quarry, the project installed warning alarms as per the stipulation of Explosive department in the quarry site.

<b>11</b>	<b>Control measures on noise and vibration prescribed by KSPCB should be implemented.</b>	<b>complied</b>
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**Compliance:**

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

<b>12</b>	<b>Quarrying activities should be limited to day time as per KSPCB guidelines.</b>	<b>Complied</b>
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**Compliance:**

To reduce the adverse effect of Quarrying activities in the community, the mining activity will limit to day time as per KSPCB guidelines. The quarry working time is 7.30 am - 5 pm. This will help to limit the sound pollution.

13	<b>Blasting should be done in a controlled manner as specified by the regulations of explosives department or any other concerned agency.</b>	<b>Complied</b>
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**Compliance:**

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	<b>A licensed person should supervise/control the blasting operations.</b>	<b>complied</b>
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**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	<b>Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.</b>	<b>Being Complied</b>
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**Compliance:**

The access road from the entrance of project site to quarry has tarred 250 meter and maintaining in good manner. The project splashes water on the road to arrest the dust production during summer season. The project proponent is intending maintain access road to the quarry in good condition for dust emission and easiness of transportation of vehicles.

16	<b>Overburden materials should be managed within the site and the old quarries, if any, should be restored.</b>	<b>complied</b>
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**Compliance:**

There is no old quarry in the site for restoration. The overburden materials are stored within the site at designated place. This will be used for plantation, haulage roads and land filling in the mining area. No overburden will let out from the project site.

17	<b>Height of the benches should not exceed 5m and width should not be less than 5m.</b>	<b>Being complied</b>
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**Compliance:**

To enhance safety and conserve environment, the project extracts the minerals by creating benches. The benches are 5 meters of height and the width of the bench have minimum of 5 meters.

18	<b>Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.</b>	<b>Noted</b>
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**Compliance:**

The project proponent is using blasting mat. The project is using electric delayed detonator for blasting therefore there is no incident of fly rock is happened in the community. The project is also assuring the maximum PPV is under 10 during the time of blasting.

19	<b>Maximum depth of mining from general ground level at site shall not exceed 10m.</b>	<b>Will be complied</b>
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**Compliance:**

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

20	<b>No mining operations should be carried out at places having a slope greater than 45°.</b>	<b>Noted</b>
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**Compliance:**

In the project site, there is no area with a slope greater than 45°. Therefore it is not necessary to explore from the slopes greater than 45°.

21	<b>Acoustic enclosures should be provided to reduce sound 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.</b>	<b>Complied</b>
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**Compliance:**

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

22	<b>The workers on the site should be provided with the required protective equipments such as ear muffs, helmet, etc</b>	<b>Complied</b>
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**Compliance:**

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

23	<b>Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.</b>	<b>Noted</b>
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**Compliance:**

The project has constructed storm water drains and clarifiers in the lower slopes of the project area for effective management of storm water. This helps to

channelize the storm water to the rain water collection pond and the most of the debris will be settled down in the bottom of the pond. The clarifiers will be installed soon.

24	<b>The transportation of minerals should be done in covered trucks to contain dust emissions.</b>	<b>Complied</b>
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**Compliance:**

To avoid dust emission while transportation of materials, the project assures the trucks are covered before it leaving the project sites.

25	<b>The proponent should plant trees at least 5 times of the loss that has occurred while clearing the land for the project.</b>	<b>Being complied</b>
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**Compliance:**

The project proponent has been planting various saplings in the project area as a compensation of loss of trees while the project is clearing the land for mining as part of concurrent eco restoration. The project proponent is planning to plant more tree saplings in the project site.

26	<b>Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.</b>	<b>Complied</b>
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**Compliance:**

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

27	<b>Explosives should be stored in magazines in isolated place specified and approved by the explosives department.</b>	<b>complied</b>
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**Compliance:**

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	<b>A minimum buffer distance of hundred meters from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.</b>	<b>Complied</b>
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**Compliance:**

To reduce the adverse impact on community life, the norms of Kerala State Pollution Control Board regarding the distance criteria of residences, roads, rivers and worship places is adhered by the project. The distance of the nearest house was 1329 meters from the quarry, the KSPCB condition is 50 meter.

29	<b>100 m buffer distance should be maintained from forest boundaries.</b>	<b>Complied</b>
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**Compliance:**

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

30	<b>Consent from Kerala Pollution Control Board under water and Air act(s) should have been obtained before initiating activity.</b>	<b>Complied</b>
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**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.1**.

31	<b>All other statutory clearances should have been obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.</b>	<b>Complied</b>
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**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 approval	Name of the Statutory authority	Approval Number & Date
Environmental Clearance order	State Environmental Impact Assessment Authority, Kerala	839/SEIAA/EC1/2717/2015 Dated 05-02-2016
“Consent to Operate”	Kerala State Pollution Control Board	PCB/CO/R1/EXP/1142/17 01-04-2017
Explosive License	Ministry of Commerce & Industry – Petroleum & Explosives Safety Organization (PESO)	E/SC/KL/30/358(E64051) Dated 08-09-2016
License for quarry operations	Gram Panchayath	A4-941/17 dated 24-03-2017
Permit order	Directorate of Mining and Geology	05/2017-18/GR/DOM/M-2320/2017 Dated 25-08-2017

<b>32</b>	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority	<b>Noted</b>
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**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.

<b>33</b>	<b>The Authority reserves the right to add additional safe guard measures subsequently, if found necessary, and to take action</b>	<b>Noted</b>
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	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.	
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**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 Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, The Environment (Protection) Act, 1986, the public liability (Insurance) Act, 1991 and EIA notification, 2006.	Being complied
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**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 news papers widely circulated in the region, one which (both advertisement and the newspaper) shall be in the vernacular	Complied
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	<p>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 <a href="http://www.seiaakerala.org">www.seiaakerala.org</a>. <u>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.</u></p>	
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**Compliance:**

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

36	<p>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.</p>	Complied
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**Compliance:**

To comply the conditions and as part of procedure to obtain D & O license, 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 does not give the copy of clearance latter to anyone. The project does not have a website and it will create a company website soon.

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

The details of the Environmental Clearance will prominently displayed with the specific conditions as per specifications mentioned in the condition.

39	<b>The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.</b>	<b>Complied</b>
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**Compliance:**

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

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

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

# ANNEXURE

Annexure No.1

FILE NO : 4987794  
Date of issue : 01/04/2017



**KERALA STATE POLLUTION CONTROL BOARD**

**CONSENT TO**

**OPERATE/AUTHORISATION/REGISTRATION**

**ISSUED UNDER**

The Water (Prevention & Control of Pollution) Act, 1974  
The Air (Prevention & Control of Pollution) Act, 1981

and


The Environment (Protection) Act, 1986

As per Application No. :4987794  
Dated:18-03-2017

**TO**

**M/s QUARRY OWNED BY BINU CHERIYAN**  
**EDAYUR, KAREKAD P.O, VALANCHERY, MALAPURAM 676552**

Consent No. :PCB/CO/R1/EXP/1142/17  
Valid Upto :31/03/2020



Page1



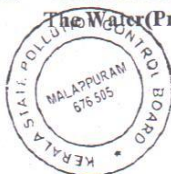
1. GENERAL

1.1. This integrated consent is granted subject to the power of the Board to withdraw consent, review and make variation in or revoke all or any of the conditions as the Board deems fit.

1	VALIDITY	31/03/2020
2	Name and Address of the establishment	QUARRY OWNED BY BINU CHERIYAN EDAYUR, KAREKAD P.O, VALANCHERY, MALAPURAM 676552 676552
3	Communication	Telephone :91-9447139682 Fax :- E-mail:binuthakkiri@gmail.com
4	Occupier Details	BINU CHERIYAN THAKKIRIKKAL HOUSE CHELAD P.O KOTHAMANGALAM-686681 ERNAKULAM
5	Local Body	EDAYUR
6	Survey Number	101/5,101/6
7	Village	EDAYUR
8	Taluk	THIRUR
9	District	MALAPPURAM
10	Capital Investment(Rs in Lakhs)	150/-
11	Scale	Small
12	Category	RED
13	Annual fee(Rs)	20,000/-
	Total Fee remitted(Rs)	70,000/-
14	RAW MATERIAL	PRODUCTS
	NITRATE MIXTURE @ Kilogram/Day SAFETY FUSE, ORDINARY DETONATORS @ Numbers/Day RUBBLES @ Metric Tonnes/Day	BLASTED RUBBLES @350 Metric Tonnes/Day
15	Total Power Required (HP)	NIL


2. CONDITIONS AS PER

The Water (Prevention and Control of Pollution) Act, 1974



Copy of Consent from PCB

## Annexure No. 2



सत्यमेव जयते

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.*

Sub: 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 Cheriyan, Thakkirickal House, Chelad P.O., Kothamangalam, Ernakulam District-686681-Granted- Orders issued.

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**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY**

No. 839/SEIAA/EC1/2717/2015 dated, Thiruvananthapuram 05-02-2016


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Read: - 1. Application dated 07-07-2015 submitted by Sri. Binu Cheriyan, Thakkirickal House, Chelad P.O., Kothamangalam, Ernakulam District-686681  
2. Minutes of the 48<sup>th</sup> meeting of SEAC held on 06/07-11-2015.  
3. Minutes of the 47<sup>th</sup> meeting of SEIAA held on 07-01-2016.

**Environmental Clearance No. 11/2016.**

Sri.Binu Cheriyan, 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 land 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 45° 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

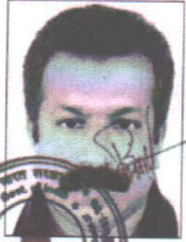


Copy of EC order

Annexure No.3

अनुमति प्ररूप एल.ई -10 | Form L.E-10  
 शॉट फायरिंग कर्ता प्रमाण-पत्र | Shot Firing Certificate  
 (अनुसूची IV के भाग I का अनुच्छेद 10 देखें | See article 10 of Part I of Schedule IV)  
 [विस्फोटक नियम, 2008 का नियम 107(5) देखें | see rule 107(5) of Explosives Rules, 2008]

(खान अधिनियम, 1952 के अधीन न आने वाले क्षेत्र में विस्फोट करने के लिए सक्षमता प्रमाण  
 Certificate of competency to carry out blasting of explosives in area not coming under the Min)



संख्या | No.: E/SE/KL/30/358(E64051)

प्रमाणित किया जाता है कि **श्री Shri Binu Cheriyan**,  
 जिनका जन्म 26/03/1973 को हुआ था, जो Thakkirikkal House Chelad P.O., Kothamangalam, Ernakulam, ERNAKULAM, Kerala के निवासी हैं, कोश्टी द्वारा  
 तारीख को आयोजित शॉट फायरिंग की परीक्षा तारीख को उत्तीर्ण कर ली है और वह विस्फोटक अधिनियम, 1884 और उसके अधीन विहित नियमों के अधीन  
 रहते हुए खान अधिनियम, 1952 की परिधि के अधीन आनेवाले खानों से अन्यथा क्षेत्र में नीचे यथा उल्लिखित विस्फोटकों का उपयोग करके विस्फोट प्रचालन करने  
 के लिए प्राधिकृत है।  
 This is to certify that **Shri Binu Cheriyan**,  
 born on 26/03/1973, resident of Thakkirikkal House Chelad P.O., Kothamangalam, Ernakulam, ERNAKULAM, Kerala passed the shotfirer's examination held  
 on conducted by Ernakulam and is authorised to conduct blasting operations as mentioned below using explosives in areas other than mines coming under the purview  
 of the Mines Act 1952, subject to the provisions of the Explosives Act, 1884 and the rules framed thereunder.

विस्फोट करने के प्राधिकृत वर्ग, प्रवर्ग और प्रकार :  
 वर्ग: (ख), श्रेणी: सामान्य जमीन के ऊपर, जमीन के ऊपर ब्लास्टिंग ऑपरेशन

Authorised class, category and type of blasting :  
 Class : (B), Category : General aboveground, All phases of aboveground blasting operation

[ नियम 107 का उप-नियम (5) का स्पष्टीकरण देखें | See explanation of sub-rule (5) of rule 107]

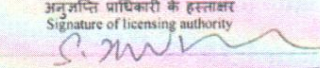
यह प्रमाणपत्र 05/09/2016 (जारी करने की तारीख से पांच वर्षों तक विधिमान्य होगा।  
 This certificate shall remain valid till 05/09/2016 (five years from the date of issue)

यह प्रमाण-पत्र अधिनियम या उसके अधीन विहित नियमों अथवा इस प्रमाण-पत्र की शर्तों का कोई अधिग्रहण करने पर या यदि आवेदक द्वारा आवेदन प्ररूप में  
 दी गई सूचना में कोई त्रुटि या विचलन होता है तो निलम्बित या अभिखण्डित कर दिया जाएगा।  
 This certificate is liable to be suspended or revoked for any violation of the Act or rules framed thereunder or the conditions of this certificate or if there is any  
 discrepancy or deviation in the information or suppression of facts furnished by the applicant in his application form.

स्थान | Place : एरणाकुलम | Ernakulam  
 दिनांक | Date : 05/09/2011

Sd-  
 उप मुख्य विस्फोटक नियंत्रक | Dy. Chief Controller of Explosives  
 एरणाकुलम | Ernakulam

पुनर्विधिमान्यकरण के लिए पृष्ठानक  
 Endorsement for revalidation

पुनर्विधिमान्यकरण की तारीख Date of Revalidation	समाप्ति की तिथि Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर Signature of licensing authority
08/09/2016	05/09/2021	 Dy. Chief Controller of Explosives, Ernakulam कृते उप मुख्य विस्फोटक नियंत्रक For Deputy Chief Controller of Explosives एरणाकुलम Ernakulam

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

Copy of License - explosive

Annexure No. 4

<p align="center"></p> <p>സംസ്ഥാന നമ്പർ: <u>04-849/19</u> തീയതി: <u>27/03/2019</u></p> <p align="center"><u>ആട്</u> ഗ്രാമ പഞ്ചായത്തിൽ നിന്നും</p> <p>1994 ലെ രകനളം പഞ്ചായത്ത് രാജ് ആക്ട് ( 1994 ലെ 13 ) 232, 233, 234, 254 എന്നീ വകുപ്പുകളും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു നൽകുന്ന</p> <p align="center"><b>ലൈസൻസ്</b></p>	
സംസ്ഥാനപ്പെടുത്തിയ പേരും വിലാസവും	<p>ബിനു ചെറിയാൻ          രാജാർത്തൻ (പി.ടി)          ചേലാട്. പി.ഒ., ഭരണമേഖല</p>
പണയത്തിന്റെ പേരും, ലക്ഷ്യവും	<p>കൊണ്ടി</p>
സംസ്ഥാന നൽകിയിട്ടുള്ള പരിമിതങ്ങൾ	<p>പി. സ. 101/6-ൽ 99.58 ആർ.സ. സ്തംഭം 50 HP കോമ്പസർ ഉപയോഗിച്ച് ജൂറി സ്വന്തമാക്കിയിട്ടുള്ളത്, വിദ്യാലയത്തിനുള്ളിൽ</p>
ലൈസൻസിന്റെ നമ്പരും തീയതിയും	<p>പി. സ. 101/6 <span style="float:right">31/03/2020</span></p>
ലൈസൻസ് - കാലയളവ്	<p><u>01/04/2019</u> മുതൽ <u>29/08/2020</u> വരെ</p>
ലൈസൻസ് നമ്പർ	<p>LF-5000          MRF-500          PT - 2500</p>
ലൈസൻസ് നമ്പർ	<p>11813010 2717 (E36254) 27/03          11813010 7717 (E36254) 27/03          11813010 7718 (E36254) 27/03</p>
ലൈസൻസ് അനുവദിക്കുന്നതായി ഹാജരാക്കിയ ചുമ്പ പത്രങ്ങളുടെ പേരും ( നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ സ്ഥലം) )	<p>1. <u>ആട് ചി.ആ.സി.പി.സി. നിന്നും 27/03/2019</u> തീയതി 001/19 നമ്പർ ഉച്ചിത്യാലപ്പത്തം.</p> <p>2. <u>ഭരണസംസ്ഥാന പരിമിതങ്ങൾ നിലവിലുള്ള സെക്ഷൻ 22/03/19</u> തീയതിയിലെ PCB/EVO/RI/EXP/1142/19 നമ്പർ നൽകിയത്. കാലയളവ് (2.2.2019)</p> <p>3. <u>തൊഴിലിൻ്റെ ലഭിക്കാൻ്റെ ഡിപിടി 30/08/2018</u> തീയതിയിൽ 07/2018-19/42/100M/M-3129/2018 നമ്പർ നൽകിയത്. കാലയളവ് 29/08/2019</p> <p>ഉപരോധിതം &amp; ആട് ചെറിയാൻ ഭരണമേഖലയിൽ          E36/44/22/779 (E36254) നമ്പർ നൽകിയത്.</p>

Copy of license from Gram Panchayat

## Annexure No. 5

**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 : 30,000 MT  
(Not applicable in the case of CRP System) :


Whether the permit holder opted CRP System : No  
Number of mineral transit passes to be issued : 6000 Nos.  
Name and address of the owner of the land : Sri. Ulleerithodi Unneenkutty & Shanavas,  
Karayakkad Post, Malappuram

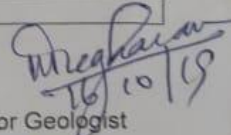
Under mineral concession/particulars of consent } : Consent letter attached  
NOC received from the occupier of the  
land (if applicable )  
Date of expiry of permit : 15.10.2020 (Subject to the validity of  
other statutory licences)

**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	-	-	-

To  
Sri. Unneen Kutty & Shanavas,  
Ulleerithodi House,  
Karayakkad Post, Malappuram



  
Senior Geologist  
**GEOLOGIST**  
DIST. Office Of Mining & Geology  
Mini Civil Station, Manjeri  
Malappuram District.

Copy to : (1) The District Collector, Malappuram (with C/L)  
(2) Secretary, Edayur Grama 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. 07/2018-19/GR/DOM/M- 3129/2018 Dated. 30/8/2018**

**Shri.Binu Cherian, Thakkirikkal House,**  
**P.O.Chelad, Kothamangalam** is hereby permitted to extract and remove  
**Granite Building Stone** (Name of mineral) from an area of **0. 9958 Hectares** in  
Re 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.(The extraction of mineral is subject to the Proceeding Order No. D.M 1-  
5734/2018 dtd.24.8.2018(2) of the Chairman District Disaster Management Authority and  
District Collector, Malappuram)

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


Whether the permit holder opted CRP System : No  
Number of mineral transit passes to be issued : 6000 Nos.  
Name and address of the owner of the land : Sri.Ulleerithodi Unneenkutty & Shanavas,  
Vadakkumbram.

*Under mineral concession/particulars of consent*  
*NOC received from the occupier of the*  
*land (if applicable )* } Consent letter attached

Date of expiry of permit : **29/08/2019**

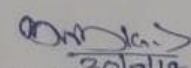
**Details of fee remitted**

Item	Chalan No.&Date	Amount	Name of Treasury
Application fee	KL004390676201819 M dtd.25.7.2018	1000	S.T.Manjeri
Royalty	KL005419485201819 M dtd.30.8.2018	7,20,000	do
Surface Rent	do	400	do
Addl.Royalty remitted,if any	-	-	-




To  
Sri.Ulleerithodi Unneenkutty & Shanavas  
Vadakkumbram.

Copy to :  
The District Collector, Malappuram (with C/L)

  
20/8/18  
GEOLOGIST  
GEOLOGIST  
DIST. Office Of Mining & Geology  
Mini Civil Station, Manjeri  
Malappuram District.

**Copy of lease/Permit order**

## Annexure No. 6



**Standard<sup>S</sup>**  
Environmental Monitoring

**TEST REPORT**


Test Report No: 20190823/R047	Date: 26.08.2020	Page 1 of 1
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CUSTOMER DETAILS			
Customer Details	Name & Address	Mr.Binu Cherian Thakkirickal (H), Chelad, Kothamangalam, Ernakulam District.	
Location of Site	Monitoring Site	Quarry of Mr. Binu Cherian Karakkad, Edayoor, Malappuram District.	
	Survey No	101/5, 101/6	
	Village	Edayoor	
	Panchayath	Edayoor	
	Taluk	Thirur	
	District	Malappuram	
	State	Kerala	
Customer Reference	Test Request Form dated 23.08.2019		

SAMPLE DETAILS			
Source of Sample	Ambient Air	Sample Code	20190823/S047
Location of Monitoring	East Side Boundary	Sampled By	Laboratory
Date of Monitoring	23.08.2019	Test Started On	24.08.2019
Sample Received On	24.08.2019	Test Completed On	26.08.2019
Humidity	80 %	Sampling Procedure	IS 5182 Part V & XIV

SL NO	TEST PARAMETER	TEST METHOD	UNIT	RESULT	NAAQ STANDARD
01	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23: 2006 RA 2017	µg/m <sup>3</sup>	49.6	100
02	Particulate Matter (PM <sub>2.5</sub> )	EPA 40 CFR Part 50 Appendix – L	µg/m <sup>3</sup>	18.4	60.0
03	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 Part 2: 2001 RA 2017	µg/m <sup>3</sup>	< 2.00	80.0
04	Oxides of Nitrogen (NO <sub>2</sub> )	IS 5182 Part 6: 2006 RA 2017	µg/m <sup>3</sup>	< 2.00	80.0

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



For and on behalf of  
Standard<sup>S</sup> Environmental & Analytical Laboratories

*Rija*  
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

Annexure No. 7



**TEST REPORT**

Test Report No: 20190823/R048	Date: 26.08.2019	Page 1 of 1
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CUSTOMER DETAILS		
Customer Details	Name & Address	Mr.Binu Cherian Thakkirickal (H), Chelad, Kothamangalam, Ernakulam District.
Location of Site	Monitoring Site	Quarry of Mr. Binu Cherian Karakkad, Edayoor, Malappuram District.
	Survey No	101/5, 101/6
	Village	Edayoor
	Panchayath	Edayoor
	Taluk	Thirur
	District	Malappuram
	State	Kerala
Customer Reference	Test Request Form dated 23.08.2019	
SAMPLE DETAILS		
Source of Sample	Ambient Sound Level	
Sample Code	20190823/S048	
Location of Monitoring	East side Boundary	
Date of Monitoring	23.08.2019	
Method	IS 9989:1981 RA:2008	

DAYTIME	RESULT	NIGHTTIME	RESULT
06.00 Hrs	36.8 dB (A)	23.00 Hrs	33.9 dB (A)
07.00 Hrs	39.4 dB (A)	00.00 Hrs	36.3 dB (A)
08.00 Hrs	43.6 dB (A)	01.00 Hrs	37.0 dB (A)
09.00 Hrs	47.0 dB (A)	02.00 Hrs	36.6 dB (A)
10.00 Hrs	49.3 dB (A)	03.00 Hrs	37.3 dB (A)
11.00 Hrs	52.3 dB (A)	04.00 Hrs	36.3 dB (A)
12.00 Hrs	49.6 dB (A)	05.00 Hrs	38.0 dB (A)
13.00 Hrs	48.9 dB (A)	RESULTS	
14.00 Hrs	49.3 dB (A)		
15.00 Hrs	49.6 dB (A)	Ambient Sound Level (Leq) Daytime	47.7 dB (A)
16.00 Hrs	50.8 dB (A)		
17.00 Hrs	51.2 dB (A)		
18.00 Hrs	45.9 dB (A)		
19.00 Hrs	42.4 dB (A)	Ambient Sound Level (Leq) Nighttime	36.6 dB (A)
20.00 Hrs	38.7 dB (A)		
21.00 Hrs	38.2 dB (A)		
22.00 Hrs	35.6 dB (A)		

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

For and on behalf of  
Standard's Environmental & Analytical Laboratories



*Rija*  
Authorized Signatory  
**Rija Joseph**  
Technical Manager

**Standard's 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: seelab@gmail.com

Result of ambient sound level



## Annexure No. 8



## TEST REPORT

Test Report No: 20190823/R049	Date: 26.08.2019	Page 1 of 1
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## CUSTOMER DETAILS

Customer Details	Name & Address	Mr.Binu Cherian Thakkirickal (H), Chelad, Kothamangalam,Ernakulam District.
Location of Site	Monitoring Site	Quarry of Mr. Binu Cherian Karakkad, Edayoor, Malappuram District.
	Survey No	101/5, 101/6
	Village	Edayoor
	Panchayath	Edayoor
	Taluk	Thirur
	District	Malappuram
	State	Kerala
Customer Reference	Test Request Form dated 23.08.2019	

## SAMPLE DETAILS

Sample Code	20190823/S049	Sample Received On	23.08.2019
Sample Name	Water	Sampling Procedure	---
Sample Description	Open Well	Sampling Location	Adjoint plot on West direction
Identification By Customer	---	Sample Condition	Good
Sampled On	---	Test Started On	24.08.2019
Sampled By	Customer	Test Completed On	26.08.2019

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	0.40	1.0 (Max)
04	pH	IS 3025 Part 11:1983 RA 2017	---	6.92	6.5 - 8.5
05	Conductivity	IS 3025 Part 14:1984 RA 2013	µS/cm	302	---
06	Total Dissolved Solids	IS 3025 Part 16:1984 RA 2017	mg/L	195	500 (Max)
07	Total Hardness (as CaCO <sub>3</sub> )	IS 3025 Part 21:2009 RA 2014	mg/L	100	200 (Max)
08	Calcium (as Ca)	IS 3025 Part 40:1991 RA 2014	mg/L	19.2	75.0 (Max)
09	Magnesium (as Mg)	IS 3025 Part 46:1994 RA 2014	mg/L	12.7	30.0 (Max)
10	Chloride (as Cl)	IS 3025 Part 32:1988 RA 2014	mg/L	8.99	250 (Max)
11	Total Alkalinity (as CaCO <sub>3</sub> )	IS 3025 Part 23:1986 RA 2014	mg/L	91.1	200 (Max)
12	Iron (as Fe)	IS 3025 Part 53:2003 RA 2014	mg/L	0.21	1.00 (Max)
13	Sulphate (SO <sub>4</sub> )	IS 3025 Part 24:1986 RA 2014	mg/L	6.20	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  
Standard<sup>s</sup> Environmental & Analytical Laboratories

Rija Joseph  
Technical Manager Authorized Signatory

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

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