

# QUARRY PROJECT OF

**Mr.P.J Jose,  
Pothanikkattu House,  
Nadukani P.O,  
Malayinkeezhu,  
Kothamangalam,  
Ernakulam District, Kerala.**

**SURVEY No:492/4/1,574/1A/9/9  
EXTENT : 0.9990 Ha,  
VILLAGE : PINDIMANA  
TALUK :KOTHAMANGALAM  
DISTRICT :ERNAKULAM,  
STATE : KERALA.**

## **II nd COMPLIANCE REPORT**

**(Ref :EC.No.02/2018/DEIAA-DATED:23/01/2018)  
FOR THE PERIOD UP TO**

**JAN 2019- JAN 2020**

To,  
The Member Secretary,  
DEIAA, Collectorate,  
Kerala.

Respected Sir,

Sub: Environmental Clearence – Quarry project in Survey No.492/4/1,574/1A/9/9  
at Pindimana Village, Kothamangalam Taluk, Ernakulam Dist, Kerala Compliance report-  
Reg.

Ref:-:EC.No.02/2018/DEIAA-DATED:23/01/2018

My Quarry project was accorded with environmental clearance vide Order  
No.02/2018/DEIAA-DATED:23/01/2018. The compliance report to the specific and general  
conditions of the Environmental Clearence is enclosed herewith.

Thanking You

Yours Faithfully,

P.J JOSE

(Owner & Authorized Signatory)

Encl: As above

## TABLE OF CONTENTS

Item No.	DESCRIPTION	PAGE NUMBER
<b>I</b>	<b>About The Proponent</b>	<b>4</b>
<b>II</b>	<b>About the Project</b>	<b>4</b>
	a. Project Category	
	b. Project Location	
	c. Project Extent And Activity	
	d. Project Description	
<b>III</b>	Report Of Compliance	<b>5-74</b>
	<b>A. Compliance of Specific Condition</b>	<b>5-14</b>
	Plate No.I-Certificate of Mines Manager	8-10
	Plate No.II-Photos of Plantation	11
	Plate No.III-Photos of Fencing	11
	Plate No.IV-Photo of Danger Sign Board	12
	Plate No.V-Photo of Blasting time Board	12
	Plate No.VI-Photo of Topsoil Dump	13
	Plate No.VII-Drainage System	13
	Plate No.VIII-Photo of Rain Water Harvest.	14
	<b>B. Compliance of General Condition of Health</b>	<b>15-19</b>
	Plate No.I-Photo of First Aid Box	16
	Plate No.II-Photos of Drinking water facilities	16
	Plate No.III-Photo of Site Toilet	17
	Plate No.IV-Photo of Rest Shelter	17
	Plate No.V-Photo of No Smoking Board	18
	Plate No.VI-Details of Nearest Hospital	18
	Plate No.VII-Photos of Quarry Road	19
	<b>C. General Conditions</b>	<b>20-74</b>
	Annexure No.I-CSR Receipt	29-32
	Annexure No.II-Explosive License	33-42
	Annexure No.III- Topsoil Dump	43
	Annexure No.IV- Drainage System	43
	Annexure No.V-Photo of Explosive Magazine	44
	Annexure No.VI-Pollution Certificate	45-50
	Annexure No.VII-Lab Report	51-56
	Annexure No.VIII-Newspaper Advertisement	57
	Annexure No.IX-Panchayat License	58-59
	Annexure No.X- EC Report	60-71
	Annexure No.XI- Environmental clearance prominently displayed in a metallic board	72
	Annexure No.XII-EC Affidavit	73-74
<b>IV</b>	(i)Detail of Environment Monitoring cell members	75
	(ii)List of Trees in the quarry site	76

## **I. ABOUT THE PROPONENT**

Mr. P.J Jose, residing at Pothanikkattu House, Nadukani P.O, Kothamangalam, Ernakulam Dist. Kerala Authorized signatory of Granite ( Building Stone Quarry).

District Environment Impact Assessment authority (DEIAA), Ernakulam accorded Environmental Clearance No.No.02/2018/DEIAA-DATED:23/01/2018 to the quarry project in Pindimana Village, Kothamangalam Taluk, Ernakulam Dist, Kerala State managed and owned by P.J Jose.

## **II.ABOUT THE PROJCT**

### **a. Project Category**

The project comes under the category B, Activity 1(a),(i) of Schedule of EIA Notification 2006 and subsequent amendments.

### **b. Project Location**

Survey No.492/4/1,574/1A/9/9in Pindimana Village Kothamangalam Taluk, Ernakulam District, Kerala.

The Proposed project site falls within latitude and longitude value:

Latitude(N)	10°7'47.35"N to 10°7'45.97" N
Longitude(E)	76°38'40.01" E to 76°38'38.61"E

### **c. Project Extent And Activity:**

The Project is for quarrying of 18,277 TPA of building stone from an area of 0.9990 hectares of land located as specified above.

### **d. Project Description:**

The project activity involves about 100% of the pit area for exploring building stone. At the end of life of mine, excavated pit will be fully reclaimed and rehabilitated by plantation. The project does not involve any underground mining activities. The mining is done by open cast semi mechanized method. The expected life of mine is 2 years.

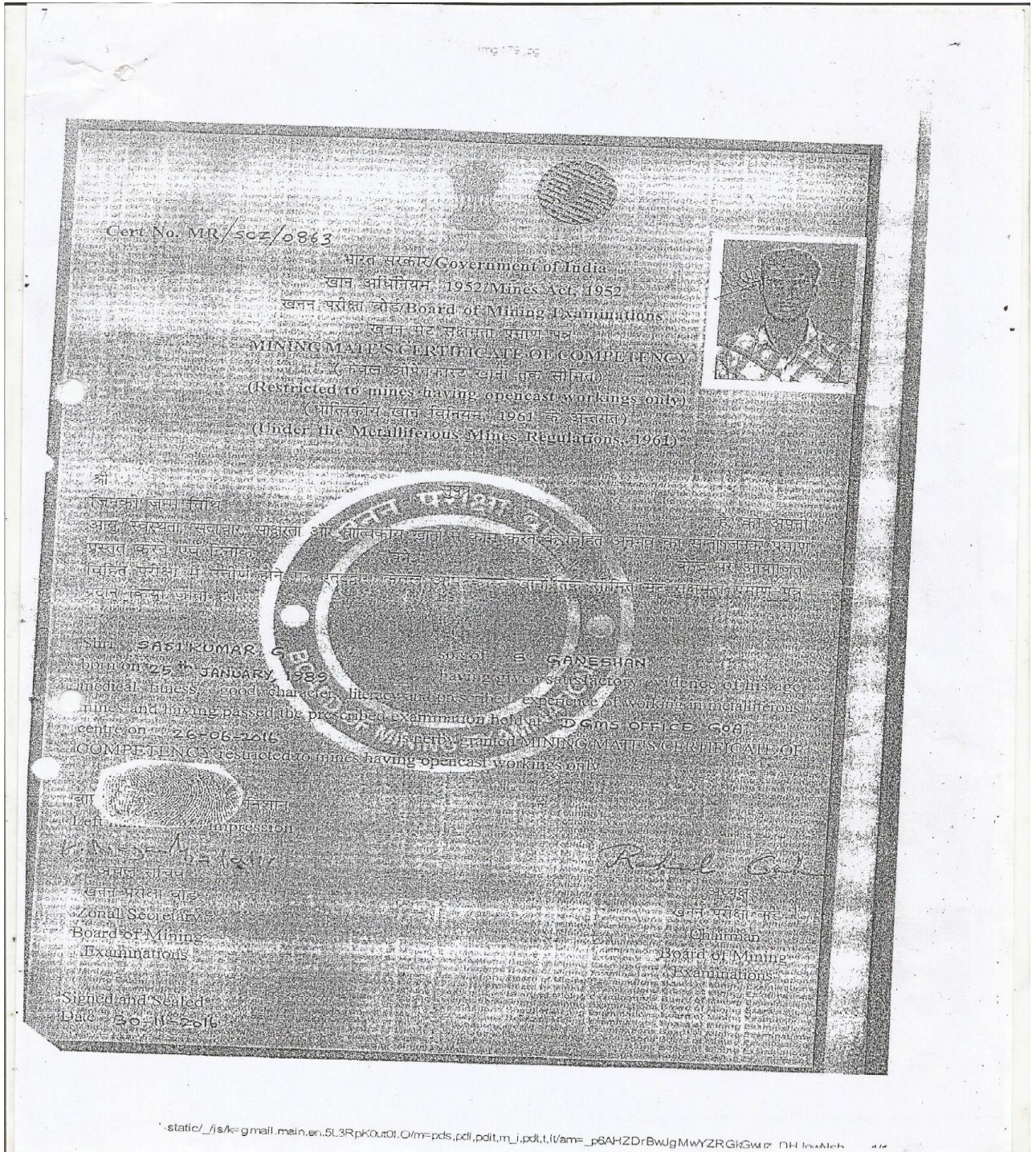
### III.REPORT OF COMPLIANCE

#### A. SPECIFIC CONDITIONS

<b>Item No.</b>	<b>Stipulations in EC</b>	<b>Status of Compliance</b>	<b>Remarks</b>
S-1	A Mines Manager shall be appointed to Control, Direct ,Manage and supervise the Quarrying operations as required under the Mines Act 1952.	Being Complied	Plate No.I
S-2	Health and welfare measures for the persons employed shall be implemented	Being Implemented	
S-3	Controlled blasting should be Practiced and blasting shall be done only during day time. The mitigation measures for control of ground vibrations to arrest the fly rocks and boulders should be implemented.	Complied .Follows the directions Contained.	
S-4	Plantation Shall be done which includes a green belt of adequate width around the Mining Lease area excluding the rocky area, along roads , overburden dumps and non mineralized area by planting suitable native specious in consultation with the local DFO/agriculture Department.	Green belt of Adequate width is provided all around the Lease Area with Plantation of Native species in consultation with the Local DFO/Agriculture Department.	
S-5	The drains should be regularly desilted and maintained properly. Check Dam and gully checks shall be constructed wherever required to arrest siltation. Desiltation shall be done every year before the onset of Monsoon.	Strictly being followed the Directions Contained.	
S-6	Fencing must be maintained properly all around the lease area.	Complied.Lease Area is adequately fenced all around.	Photograph attached. Plate No.II
S-7	The CSR need redrafting with inclusion of felt needs of the locality with special emphasize for implementing ground water recharging techniques in and at the vicinity of the proposed site.	Yes, It is Provided.	
S-8	Appropriate sign boards should be displayed.	Complied. Sign Boards are Provided	Plate No.III

S-9	The blasting time must be displayed and strictly adhered to	Blasting Timings are displayed on the site and on the boundaries.	Plate No.IV
S-10	Dust suppression mechanism must be in place	Complied and being Followed.	
S-11	A separate small plot to be maintained in the premise to preserve rare and endemic species, if any, listed in the biodiversity assessment etc	Would be Implemented	
S-12	The PPV values must be less than 10mm/sec.	It shall be ensured	
S-13	The green belt shall be provided around the periphery	Being Complied	
S-14	Where the height of the bench formed during earlier workings exceeds the maximum reach of the excavator engaged for work, such bench height shall be reduced from top to bottom	It shall be ensured that the directions contained are strictly followed when required.	
S-15	Loose or hanging rock or mineral boulder on the side wall shall be dressed down before engaging persons for work at the bottom of the bench	Strictly Being Done and ensured.	
S-16	Permanent boundary pillars should be fixed by the proponent before commencing quarrying	Complied. Permanent boundary pillars are Provided.	
S-17	No Quarry blasting to be undertaken and sustained till warning time limit expires and/or When Continuous 48 hours cumulative rainfall exceeds 8 cm and blasting shall be resumed, until 24 hrs of rain free situation arises in the quarry locality based on the evaluation by the revenue officials-	It shall be ensured that the directions contained are strictly followed.	
S-18	All Waste dumps and topsoil dumps shall be properly stabilized by using coir mats or bio-regeneration proper drainage system shall be provided so that water is properly diverted away from the the dumps slopes with no disturbance to the stability of the slopes	Strictly Follows the directions contained.	Plate No.V
S-19	All dump slopes shall be sufficiently stabilized by using appropriate species mix of grass, creepers, shrubs & trees. This shall	It shall be ensured that the directions contained are scrupulously	

	be done in consultation with the forest department and local research institutes and experts in stabilization of mine dumps	followed.Presently the dumps are in active stage.	
S-20	Garland drains of atleast 2 m width shall be provided all along 7.5m buffer zone to divert the water from entering the quarry slopes.These drains shall be cleaned every year before the monsoon season	Shall Strictly follow the directions contained.	
S-21	The water from the garland drainage shall directed to the site settling ponds. The clarified overflow from silt settling ponds, shall be directed to a Rain Water Harvesting (RWH) Pond before releasing the clarified water to the natural watercourse	Complied .Provided as per the Conditions.	Plate No.VI
S-22	A retaining Wall of stone rubble with wiremesh, of sufficient width and strength (not less than 2m) shall be constructed at the bottom of the slope of the quarry lease area to arrest any likely roll of boulders during heavy rainfall	Shall be Implemented as when required.	





**MR**

To **Shri SASIKUMAR G.**

**Home Address**

Village **METTUR DAM**  
PO **METTUR DAM**  
Police Station **METTUR DAM**  
District **SALEM**  
State **TAMILNADU**

Statement filed by the candidate in support of his candidature for the post of ...  
It is certified that he has been examined by a qualified medical officer and declared fit for employment in this office.

- |   |    |    |    |
|---|----|----|----|
| 1 | On | 2  | On |
| 3 | On | 4  | On |
| 5 | On | 6  | On |
| 7 | On | 8  | On |
| 9 | On | 10 | On |

Prepared by  
Checked by

PLATE NO:II

# FENCING



**DANGER**



PLATE NO : IV

**BLASTING TIME BOARD**



**PLATE NO: V**

**TOP SOIL DUMP**



**PLATE NO: VI**

**RAIN WATER HARVEST**



## B.GENERAL CONDITIONS FOR HEALTH

<b>Item No.</b>	<b>Stipulations in EC</b>	<b>Status of Compliance</b>	<b>Remarks</b>
1	First Aid Kit provided in the work site.it shall be periodically maintained properly. Some labourers Shall be trained on first Aid	Complied and strictly follows the directions contained.	Plate No.I
2	Whole some drinking water should be provided	Complied .Drinking water is provided.	Plate No.II
3	Premises should be maintained as wet to suppress the dust.	Complied .Follows the directions Contained.	
4	Sanitary type of latrines and urinals should be provided.	Latrines and Urinals are provided near site.	Plate No.III
5	Resting place should be provided for workers.-	Complied .Resting Place is provided at a suitable place at site.	Plate No.IV
6	'No Smoking' board should be exhibited according to COTPA Act	Complied.	Photograph attached. Plate No.V
7	Work should not be done in night	Complied.Work is carried out strictly in day time only.	
8	Details of nearest hospital, Shortest route to hospital and contact no. etc.Should be available.	Complied. Details are maintained in site office.	Plate No.VI
9	Approach roads should be maintained properly	Approach roads are regularly maintained and kept in good hauling condition.	Plate No.VII

PLATE NO : I

## FIRST AID BOX



PLATE NO : II

## DRINKING WATER





PLATE NO : III

## SITE TOILET



PLATE NO : IV

## **REST SHELTER**



PLATE NO : V

## **MAGAZINE AREA-NO SMOKING BOARD**



PLATE NO :VI

NEAREST HOSPITAL CONTACT NUMBERS:

1. St. Joseph's **Hospital, Dharmagiri, Kothamangalam** – 686 691, Kerala, **Phone :**  
0485 – 2862391, 2862392, 2862007
2. Taluk Headquarters Hospital in Kothamangalam , Ernakulam  
Ph-0485-2822603

PLATE NO:VII

# QUARRYROAD



## C.GENERAL CONDITION

Item No.	Stipulations in EC	Status of Compliance	Remarks
G-1	Rain Water Harvesting Facility should be installed as per the prevailing provisions of KMBR/KPBR,unless otherwise specified.	Strictly follows the directions contained.	
G-2	Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed	An Environment Monitoring cell is constituted and made Functional	
G-3	Suitable avenue trees should be planted along either side of tarred road and open parking areas if any inclusive of approach road and internal roads.	Avenue trees by way of natural vegetation are present along either side of the tarred road both approach road and internal road.	
G-4	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Would be provided	
G-5	Sprinklers shall be installed and used in the project site to contain dust emissions.	Shall be installed.	
G-6	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.	It is assured that eco-restoration including the mine closure plan will be done at the own cost of the project proponent.	
G-7	At least 10 percent 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.if no other specific condition on reclamation of pit is stipulated in the E.C	At the time of Closure of the mine , it shall be ensured that the directions contained are scrupulously followed..	

G-8	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.	Activities towards Corporate Social responsibility are being implemented.	Annexure -1
G-9	The lease area shall be fenced off with barbed wire to a minimum 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.	Scrupulously follows the directions contained .	
G-10	Warning Alarms indicating the time of blasting ( to be done at specific timings)has to be arranged as per the stipulations of explosive Department.	Warning Alarms shall be installed in the project site.	
G-11	Controlled measures on noise and vibration prescribed by KSPCB should be implemented.	Controlled measures on noise and vibration is as per KSPCB.	
G-12	Quarrying activities should be limited to day time as per KSPCB	Quarrying activities is limited as per KSPCB	
G-13	Blasting should be done in a controlled manner as specified by the regulation of Explosives Department or any other concerned agency.	Scrupulously follows the directions contained	Annexure -2
G-14	A licensed Person should supervise/control the blasting operations.	Complied and strictly follows the directions contained.	
G-15	Access roads to quarry shall be tarred to contain dust emissions that may arise during transportation of materials.	Complied.Approach Road to the Quarry is tarred and frequently Water Sprayed.	
G-16	Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan/specific conditions.	Complied.Overburden is stacked in predetermined site specified for the purpose.	Annexure 3
G-17	Height of the benches should not exceed 5m and width should not be less than 5m if there is no mention in the mining plan/specific conditions.	It shall be ensured that the directions contained are strictly followed.	
G-18	Mats to reduce fly rock blast to a maximum of 10PPV should be provided.	Would be provided.	

G-19	Maximum depth of mining from general ground level at site shall not exceed 10m	It shall be ensured that the directions contained are scrupulously followed.	
G-20	Non Mining operations should be carried out at places having a slope greater than 45 degrees.	Strictly follows the directions contained.	
G-21	Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow bricks envelop for crushers so that the noise level is kept within prescribed standards given by CPCB?KSPCB.	No Crusher at Site.	
G-22	The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.	Being Implemented.	
G-23	Garland drains with clarifiers to be provided in the lower slopes around the core area to Channelize storm water.	Drainage facility is provided in the site.	
G-24	The transportation of minerals should be done in covered trucks to contain dust emissions	It shall be ensured that the directions contained are scrupulously followed.	
G-25	The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.	Would be Complied	
G-26	Disposal of spent oil from Diesel engines should be as specified under relevant rules/regulations.	Complied.	
G-27	Explosives should be stored in magazines in isolated place specified and approved by the explosives department.	Complied	Annexure4
G-28	A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures ,not being any facility for mining shall be provided .	Complied .	
G-29	100m buffer distance should be maintained from forest boundaries.	There is no forest boundary in 100m buffer zone.	

G-30	Consent from Kerala state pollution control Board under water and Air (Acts) should have been obtained before initiating mining activity.	Scrupulously follows the directions contained.	Certificate copy is attached .Annexure 5
G-31	All other statutory clearances should be obtained as applicable by project proponents from the respective competent authorities including that for blasting and storage of explosives.	Scrupulously follows the directions contained.	
G-32	In case of any changes in the scope of project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the EC is issued. The projects would require a fresh appraisal by this authority for which the proponent shall apply and get the approval of this Authority.	Shall be Strictly Followed.	
G-33	The authority reserves the right to add additional safeguard measures subsequently if found necessary and to take action including revoking of the environment clearance under the provisions of the Environment (Protection ) Act 1986 to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	All the safeguard measures are done as per Environment (Protection ) Act 1986.	
G-34	The stipulations by statutory 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.	Scrupulously Follows the directions contained.	Annexure 6
G-35	The project proponent should advertise in atleast two local newspapers widely circulated in the region ,one of which (both the advertisement and the news paper ) shall be in the vernacular language informing that the project has been	Advertised in Local newspaper and submitted a copy of it as a proof in this compliance.	Annexure 7



	accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at <a href="http://www.seiaakerala.org">www.seiaakerala.org</a> . The advertisement should be made 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.		
G-36	A copy of the Clearance letter shall be sent by the proponent to concerned grama panchayat /District Panchayat /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.	Scrupulously Follows the directions contained .	Annexure 8
G-37	The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) and upload the Status of compliance of the stipulated EC conditions including results of monitored data on their website. 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.	Conditions are being complied with.This report is in compliance with submission of six monthly compliance reports.	Annexure 9
G-38	The details of Environmental Clearance should be prominently displayed in a metallic board of 3ft 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.	The conditions of Environmental Clearance are prominently displayed in a metallic board.	Annexure 10
G-39	The proponent should provide notarized affidavit (Indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall	The proponent has provided notarized affidavit (Indicating the number and date of	

	be Scrupulously Followed.	Environmental Clearance proceedings ) that all the conditions stipulated in the EC has been Scrupulously Followed.	
40	No Change in Mining Technology and scope of working should be made without prior approval of the SEIAA. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA as applicable.	Scrupulously follows the directions contained.	
41	The project proponent shall ensure that no natural water course and /or water resources shall be obstructed due to any mining operations . Necessary safeguard measures to protect the first order streams.if any originating from the mine lease shall be taken.	Ensured that no natural water course and/or water resources were obstructed due to any mining operations.	
42	Monitoring of Ambient Air Quality to be carried out based on the notification 2009 as amended from time to time by the central pollution control board . Water sprinkling should be increased at places loading and unloading points and transfer point to reduce fugitive emissions.	Scrupulously follows the directions contained as per the conditions in the time of workings.	
G-43	The top soil if any shall be temporarily be stored at earmarked sites only for the Top soil shall be used for land reclamation and plantation. The overburden (OB) generated during mining operations shall be stacked at earmarked dumpsite(s) only.The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of dumps shall be maintained 45 degrees. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface runoff.In critical areas use of geotextiles shall be undertaken for stabilization of the	Scrupulously follows the directions contained as per the conditions.	

	dumps . The entire excavated area shall be backfilled .Monitoring and management of rehabilitated areas should continue until the vegetation becomes self sustaining.		
G-44	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 in to the river and other water bodies. The water so collected should be utilized for watering the mine area,roads green developments etc. The drains shall be regularly desilted particularly after the monsoon and Maintained properly.	Scrupulously follows the directions contained.	
G-45	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM 2.5such as haul road ,loading ,and unloading points and transfer points-it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Scrupulously follows the directions contained and ensured that the Ambient Air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	
G-46	Fugitive dust emissions from all the sources should be controlled regularly.Water spraying arrangements on haul roads ,loading ,and unloading and at transfer points should be provided and properly maintained	Scrupulously follows the directions contained.	
G-47	Measures should be taken for control of noise levels below 85dBA in the work environment.	Measures have been taken for the control of Noise Levels below the 85dBA in the work environment.	
G-48	A Separate Environment Management Cell with suitable qualified personnel should be set up under the control of a senior Executive who will report directly to the Head of the Organization.	A separate Environmental Management cell withsuitable qualified personnel has been set up under the control of a senior executive who will report directly to the Head of the Organization.	

G-49	<p>The funds earmarked for environmental protection measures and CSR activities should be kept in separate account and should not be diverted for other purposes.</p> <p>Yearwise expenditure should be reported to the State Environmental Impact Assessment Authority ( SEIAA) office</p>	<p>The funds earmarked for environmental protection measures and CSR activities shall be kept in separate account and shall not be diverted for other purposes.</p> <p>Yearwise expenditure shall be reported to the State Environmental Impact Assessment Authority ( SEIAA) office</p>	
G-50	<p>The regional office of MoEF&amp;CC Located at Bangalore shall monitor compliance of the stipulated conditions.The project authorities should extend full cooperation to the officer(S) of the Regional Office by furnishing the requisite data/information /monitoring reports.</p>	<p>The regional office of MoEF&amp;CC Located at Bangalore shall monitor compliance of the stipulated conditions.The project authorities shall extend full cooperation to the officer(S) of the Regional Office by furnishing the requisite data/information /monitoring reports.</p>	
G-51	<p>Any Appeal against this Environmental Clearance shall lie with the National Green Tribunal ,if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act 2010.</p>	<p>Strictly follow the rules and Scrupulously follow the directions contained.</p>	
G-52	<p>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 the Environment ( Protection )Act 1986.</p>	<p>Strictly follow the rules if any factual data is concealed or false /Fabricated data is submitted and failure to comply with any of the conditions mentioned above is found.</p>	
G-53	<p>The SEIAA may revoke or suspend the order for non compliance of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to</p>	<p>SEIAA can revoke any order if any of the specific or this implementation of any of the above conditions</p>	

	alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	is not satisfactory.	
G-54	The above conditions shall prevail not withstanding anything to the contrary in consistent ,contained in any other permit license on consent given by any other authority for the same project.	Yes all the 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.	
G-55	This order is Valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala,whichever is earlier.	Yes. This order is Valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala,whichever is earlier.	
G-56	The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project in any court of law.	Yes, The Environmental Clearance is subject to the final order of the courts in any pending litigation related to the land or project in any court of law.	
G-57	The Mining operation shall be restricted to above ground water table and it should not intersect ground water table.	The Mining operation has been restricted to above ground water table and shall not intersect ground water table.	
G-58	All Vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized Pollution taking centre.Washing of all vehicles shall be inside the lease area.	Scrupulously follows the directions contained.	
G-59	Project proponent should obtain necessary prior permission of the competent	Scrupulously follows the	

	authorities for drawal of requisite quantity of surface water and ground water for the project	directions contained.	
G-60	Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and reported in the six monthly reports to SEIAA.	Shall be Ensured and complied when required.	
G-61	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures if needed.	Shall be ensured and complied.	


# ANNEXURE:I

**Pindimana Grama Panchayat**  
**RECEIPT 119010100852** GSTIN:32AAALP2639L1ZX 07/09/2019 **5601147**

P J JOSE  
 POTHANIKKATTU  
 KOTHAMANGALAM

**CASH RECEIPT**

(Other Receipts)  
 Other Earmarked Social Funds 2019-20/1HF 40000.00



Rnd. Off(0.00)  
 Total : 40000.00

Forty Thousand Rupees Only

Remarks : CSR FUND FOR TREATMENT PURPOSE

Counter No. & Staff : Front Office MALEEHA P A Secretary

---

**Pindimana Grama Panchayat** **5601147**  
 Pindimana P.O, Kothamangalam,  
 Phone:0485-2570262

**Inward No** 2632 **Year** 2019  
**Date of Receipt** 07/09/2019  
**Name of Applicant** P J JOSE, POTHANIKKATTU, KLM  
**Subject** CSR FUND FOR TREATMENT PURPOSE

**Date of Delivery**

Remarks : Section Accountant

Counter No. & Staff : Secretary

KREWS (GLM, KANJIKODE) 2017  
 Cheques are subject to realisation  
 Mention Trade Links # 0471 2444410

**Pindimana Grama Panchayat**  
**Pindimana P.O, Kothamangalam,**  
**Phone: 0485-2570262**

**1150789**

**Inward No** 115 **Year** 2019

**Date of Receipt** 16/01/2019

**Name of Applicant** P J JOSE, 13, POTHANIKATTU, PINDIMAN

**Subject** CSR FUND- BALANCE AMOUNT REGARDING

**Date of Delivery**

**Section** A4

Remarks:

Counter No. & Staff: Secretary

**Pindimana Grama Panchayat**

**RECEIPT 118010102450 GSTIN:**

P J JOSE  
 POTHANIKATTU  
 MADURANI P.O, KOTHAMANGALAM

**16 Jan 2019**  
**A0071594**

**CASH RECEIPT**

1. Other Fees	0018-19/One	60000.00
		Rnd. Off(0.00)
		<b>Total 60000.00</b>

Sixty Thousand Rupees Only

FOR USE - (BANK)

Remarks:

Counter No. & Staff: Secretary

KREWS (GLM, KANJIKODE) 2017

Cheques are subject to realisation

Marion Trade Links # 0471 2444410



# ANNEXURE:II

**अनुज्ञप्ति प्रमाणित**  
**LICENCE ENDORSED**

**अनुज्ञप्ति प्ररूप एल.ई.-3 | LICENCE FORM LE-3**

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

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

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

अनुज्ञप्ति सं. (Licence No.) : E/SE/KL/22/195(E113930)  
वार्षिक फीस रूपए (Annual Fee Rs): 2400/-

1. Licence is hereby granted to  
Shri P.J. Jose (अधिभोगी / Occupier : Shri P.J. Jose), Pothanankkattu House, Nadukani  
P.O.,Kothamangalam, Ernakulam, Town/Village - Kothamangalam, District-ERNAKULAM, State-  
Kerala, Pincode - 686691

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : **Individual**

3. अनुज्ञप्ति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।  
Licence is valid only for the following purpose.

possess for use of Nitrate Mixture, Safety Fuse,  
: Electric and/or Ordinary Detonators, चके उपयोग के लिए

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

क्र. सं. No.	नाम और विवरण Name and Description	वर्ग और प्रभाग Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2, 0	0	140 Kg.
2.	Safety Fuse	6, 1	0	1500 Mtrs
3.	Electric and/or Ordinary Detonators	6, 3	0	3000 Nos.

(ख) किसी एक कलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा (अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञप्ति के लिए) 3 times as above.

(b) Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)]:

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञप्त परिसर की पृष्टि होती है।  
The licensed premises shall conform to the following drawing(s):

रेखाचित्र क्र. (Drawing No.) E/SE/KL/22/195  
(E113930)  
दिनांक (Dated) 24/09/2018

6. अनुज्ञप्ति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:  
Survey No. 492/4-1, ग्राम (Town/Village) : Pindimana Village, पोथानाङ्कट्टु (Poathanankkattu),  
जिला (District) ERNAKULAM, राज्य (State) Kerala, पिनकोड (Pincode) 686691  
दूरभाष (Phone) 9745044529 ई.मेल (E-Mail) केबस (Fax)

7. अनुज्ञप्ति परिसर में निम्नलिखित सुविधाएं अतिविष्ट हैं।  
The licensed premises consist of following facilities.

2 Portable magazines of H & E types bearing sl.nos.25 & 1105 respectively fabricated by M/s.Thekkans Engineering & Fabrication Works, Ernakulam

8. अनुज्ञप्ति समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबंधों के अधीन रहते हुए अनुदत्त की जाती है।  
The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.

1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सज्जिमोप संबंधी और अन्य विवरण दर्शित करती हूँ)।  
Drawings (showing site, constructional and other details) as stated in serial No. 5 above.

2. अनुज्ञप्ति प्राधिकारी द्वारा हस्ताक्षरित इस अनुज्ञप्ति की शर्तों और अतिरिक्त शर्तों।  
Conditions and Additional Conditions of this licence signed by the licensing authority.
3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञप्ति तारीख 31 मार्च 2023 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2023.

यह अनुज्ञप्ति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन तथा उपवर्णित इस अनुज्ञप्ति की शर्तों का अधिकमण करने या यदि अनुज्ञप्त परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहत की जा सकती है, जहां वह लागू हो।

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 24/09/2018

उप मुख्य विस्फोटक नियंत्रक | Dy. Chief Controller of

नवीनीकरण के पृष्ठांकन के लिए स्थान  
Space for Endorsement of Renewal

Explosives  
Ernakulam  
उप मुख्य विस्फोटक नियंत्रक  
Deputy Chief Controller of Explosive  
एरनाकुलम Ernakulam

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
------------------------------------	------------------------------------	--

कानूनी चेतावनी : विस्फोटकों को गलत ढंग से चलाने या उनका दुरुपयोग विधि के अधीन गंभीर दंडिक अपराध होगा।

Statutory Warning : Mishandling and misuse of explosives shall constitute serious criminal offence under the law.

ANNEXURE:III

**TOP SOIL DUMP**



ANNEXURE:IV

**EXPLOSIVE MAGAZINE**



# ANNEXURE NO:V



## KERALA STATE POLLUTION CONTROL BOARD

FILE NO. :6824923

Date of issue :31/01/2018

### INTEGRATED CONSENT TO OPERATE - RENEWAL

Consent No : R15ERNA946389

Ref : Consent variation order issued dated 28.06.2016 with validity up to 31.12.2017

The 'Integrated Consent to Operate' issued as per reference above to M/s SHRI P J JOSE POTHANIKKATTU HOUSE NADUKANI P.O MALAYINKEEZHU KOTHAMANGALAM is hereby renewed up to 23/01/2020 and issued to M/s SHRI P J JOSE POTHANIKKATTU HOUSE NADUKANI P.O MALAYINKEEZHU KOTHAMANGALAM The consent(s)/ variation order(s) cited under reference are integral part of this renewal order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

#### I. GENERAL

S.No.	Items	Description
1	PRODUCT	Black stone rubble@18277 metric tonnes per annum
2	Survey Number	492/4/1, 574/1A/9/9
3	VALIDITY	23.01.2020
4	CAPITAL INVESTMENT	150 LAKHS
5	FEE REMITTED	Rs.55000/-
6	CATEGORY	RED
7	VILLAGE	PINDIMANA

#### II. Stack Details

Stack No.	Source of Emission	Emission Rate(Nm <sup>3</sup> /Hr)	Stack Height above		Control Equipment
			Ground Level(In Meters)	Roof Level(In Meters)	

#### III. CONDITIONS

- 3.1. This consent is granted based on the application, affidavit and other particulars filed by the occupier, certificate from the Village officer and subject to the power of the Board to review and make variation in or revoke the conditions as the Board deems fit.
- 3.2. This consent granted based on the Environmental Clearance No.02/2018 dated 23.01.2018. The quarrying shall be done after obtaining all statutory/necessary clearances from concerned authorities and is valid only when all other clearances from other concerned authorities are valid.
- 3.3. This consent unless withdrawn earlier and subject to condition no 3.1 & 3.2 shall be valid up to 23.01.2020. For continuing to operate beyond the validity date application for the renewal has to be submitted through online (website: krocmmms.nic.in) at least 3 months prior to the expiry of this consent.
- 3.4. No change, deviation or alteration that may affect the environment, extent and location of quarry shall be made.
- 3.5. Any change in particulars furnished in the application/the identity of the occupier/ authorised agent is to be intimated to the Board forthwith.
- 3.6. There shall be a minimum distance of 50m from boundary of quarry operating area to residential building, place of worship, public buildings, public road having vehicular traffic, river or lake, railway line, bridges etc.
- 3.7. Quarrying shall be done only within the area marked in the location plan.
- 3.8. Quarrying area shall be earmarked before commencement of quarrying activities.
- 3.9. Blasting and quarrying shall be done without causing any nuisance or damage to occupants of adjoining or neighbouring land or building or posing damage to health, life or property.
- 3.10. After completion of excavation at any site, the abandoned quarry shall be utilized for rain water harvesting with protective barriers/ any other suitable approved purpose or may be reclaimed as per specification.
- 3.11. Proper fencing/barriers shall be provided and maintained all around the abandoned deep quarry pits to avoid accidents.
- 3.12. Mining below normal water table by continuous pumping shall be avoided in summer period (March, April & May) to prevent drinking water shortage in that area.
- 3.13. Noise creating activities such as drilling, blasting, breaking loading etc shall not be done during night time (6pm - 6am).
- 3.14. Blasting shall be done at specified time with prior signals to avoid accidents.
- 3.15. The PM10 in ambient air at the boundary shall not exceed 100 g/m<sup>3</sup>, max.
- 3.16. The Sound level (Leq) at 1m outside the boundary of the site and near residential locations should not exceed the ambient noise standard applicable to the adjoining areas.
- 3.17. "The consent issued from the Board will be valid only for a period during the period when all other statutory or necessary clearances from other concerned authorities are valid. The consent issued from the Board is only with respect to the powers vested under the Water Act, 1974, Air Act 1981 and Rules there under. The operation of the unit shall be commenced only after obtaining clearances from all concerned authorities".
- 3.18. No other machineries shall be operated without prior Consent of the Board.
- 3.19. Quarrying operations shall be started only after obtaining Mining permit/lease from Mining & Geology Department and D & O License under the Kerala Panchayat Raj Act from the concerned Local Self Government.

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

DATE :31/01/2018

**JOSEMON J**

Digitally signed by JOSEMON J  
Date: 2018.01.31 18:01:59 -08'00'

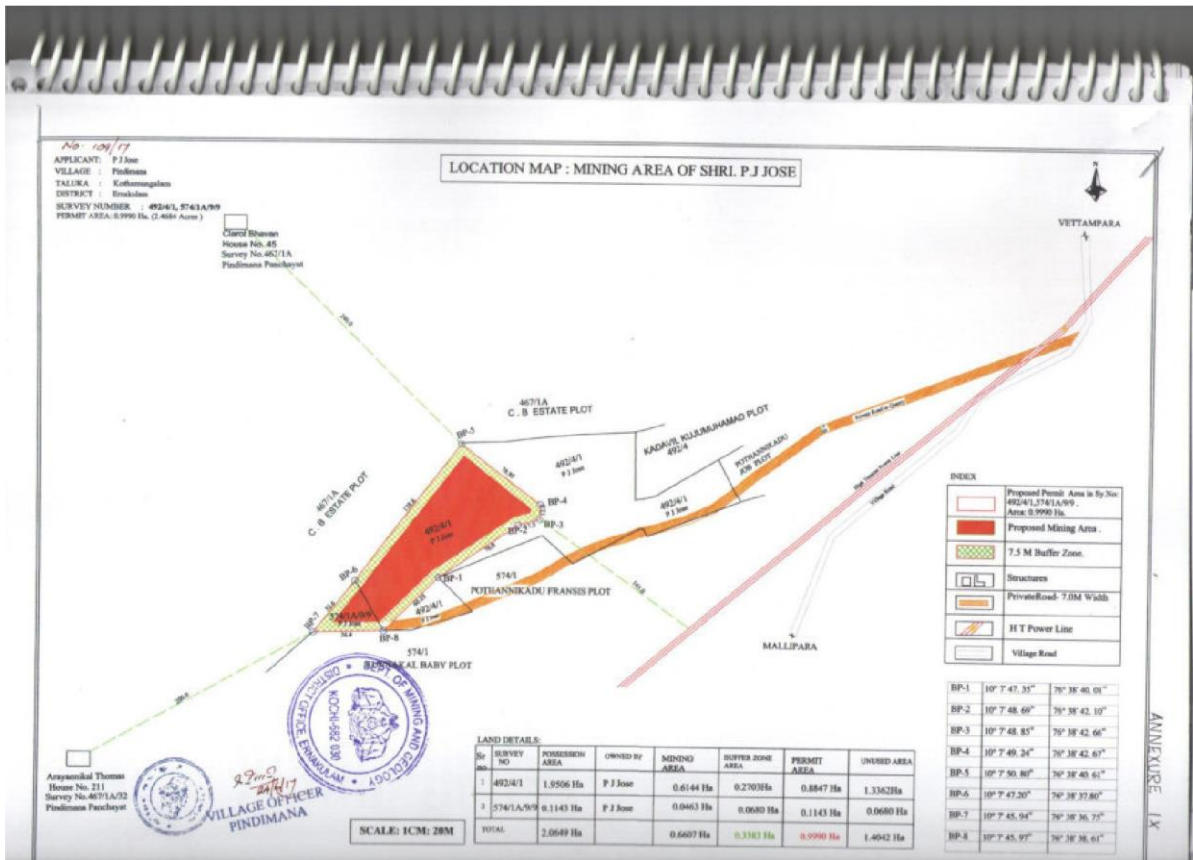
SIGNATURE & SEAL OF ISSUING AUTHORITY  
ENVIRONMENTAL ENGINEER



To

SHRI P J JOSE  
POTHANIKKATTU HOUSE  
NADUKANI P.O  
MALAYINKEEZHU  
KOTHAMANGALAM 686691

1. This digitally signed document is legally valid as per the Information Technology Act 2000
2. For verifying this document please go to [krocmmms.nic.in](http://krocmmms.nic.in) and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.



# ANNEXURE VI



## POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY  
PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

### TEST REPORT


Page 01 of 01

Client Name & Address  Mr.P J Jose Pindimana Kothamanglam	Certificate No:	PL/AMB/RT/10010/2020
	Date of issue:	04/01/2021
	Date of monitoring	28/12/2020 10.00 Hrs to 29/12/2020 10.00 Hrs
	Date of sample received:	29/12/2020
	Date of analysis	30/12/2020
	Monitoring Location	Quarry Owned By: Mr. P J Jose Sy.No.492/4/1,574/1A/9/9 Taluk:Kothamangalam Village: Pindimana District: Ernakulam, Kerala.
	Sample description	Ambient air – Near East Side Boundary
Sample code given by client	Nil	

SL NO	PARAMETERS	TEST METHOD	RESULTS	Limit as per NAAQS
01	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23 2006 RA 2012	57.6 µg/m <sup>3</sup>	100 µg/m <sup>3</sup>
02	Particulate Matter (PM <sub>2.5</sub> )	CPCB	24.5 µg/m <sup>3</sup>	60 µg/m <sup>3</sup>
03	Sulphur dioxide	IS 5182 Part 2 2001 RA 2017	3.4 µg/m <sup>3</sup>	80 µg/m <sup>3</sup>
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	4.1 µg/m <sup>3</sup>	80 µg/m <sup>3</sup>

Note: NAAQS-National Ambient Air Quality Standards

\* End of the Report\*

The results are related only to the sample collected for analysis. This certificate shall not be reproduced except in full and without the written permission with authorized signatory	For and on behalf of POLUCHEM LABORATORIES (P) LTD.
	 <b>AUTHORIZED SIGNATORY</b> Quality Management PoluChem Laboratories





**POLUCHEM LABORATORIES (P) LTD.**  
**CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY**  
 PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104  
 Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

TEST REPORT

Page 01 of 01

<b>Client Name &amp; Address</b>	<b>Certificate No:</b>	<b>PL/RT/SD/10011/2020</b>	
Mr. P J Jose Pindimana Kothamanglam	Date of issue:	04/01/2021	
	Date of monitoring	28/12/2020 - 29/12/2020	
	Monitoring Location	Quarry Owned By: Mr. P J Jose Sy.No.492/4/1,574/1A/9/9 Taluk:Kothamangalam Village: Pindimana District: Ernakulam, Kerala.	
	Sample Description	Ambient Sound Level –East Side	
<b>HOURLY INTERVAL</b>	<b>RESULT</b>	<b>HOURLY INTERVAL</b>	<b>RESULT</b>
06.00 Hrs	38.5 dB (A)	23.00 Hrs	34.2 dB (A)
07.00 Hrs	39.6 dB (A)	00.00 Hrs	35.1 dB (A)
08.00 Hrs	42.5 dB (A)	01.00 Hrs	33.4 dB (A)
09.00 Hrs	43.6 dB (A)	02.00 Hrs	34.1 dB (A)
10.00 Hrs	45.2 dB (A)	03.00 Hrs	33.2 dB (A)
11.00 Hrs	46.8 dB (A)	04.00 Hrs	34.6 dB (A)
12.00 Hrs	47.6 dB (A)	05.00 Hrs	33.2 dB (A)
13.00 Hrs	48.6 dB (A)	LDay	47.2 dB (A)
14.00 Hrs	46.3 dB (A)		
15.00 Hrs	45.2 dB (A)		
16.00 Hrs	44.2 dB (A)		
17.00 Hrs	43.1 dB (A)	LNight	34.1 dB (A)
18.00 Hrs	39.8 dB (A)		
19.00 Hrs	38.5 dB (A)		
20.00 Hrs	36.4 dB (A)		
21.00 Hrs	35.4 dB (A)		
22.00 Hrs	34.1 dB (A)		

Limits: Industrial Area Day Time-75dB(A),Night Time- 70dB(A),Commercial area Day Time -65 dB(A),Night Time 55dB(A), Residential area Day Time -55 dB(A),Night Time -45dB(A),Silence zone day time-50dB(A),Night time-40dB(A)  
 Day Time from 06.00 am to 10.00 pm & Night Time from 10.00 pm to 06.00 am

\*End of the Report \*

For PoluChem Laboratories (P) Ltd.

Authorized Signatory  
 JA RAMESH  
 Quality Management  
 PoluChem Laboratories



# POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

ACCREDITED BY KSPCB AS "A" GRADE LABORATORY

## TEST REPORT

Page 01 of 01

Ref.No. PL/RT/OW/10013/2020

Date of Issue: 04/01/2021

Name & address of customer : Quarry Owned By: Mr. P J Jose  
Sy.No.492/4/1,574/1A/9/9  
Taluk:Kothamangalam  
Village: Pindimana  
District: Ernakulam, Kerala.

.Sample drawn by : PoluChem Laboratory Sample Collector  
Sample description : Drinking Water  
Location of sampling : Openwell water-East Side  
Date of sample collected : 29/12/2020  
Date of analysis started : 29/12/2020  
Date of completion of analysis : 02/01/2021

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	4 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	BDL	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	5.87	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	36mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 – 1983 RA2014	14.3 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 – 1986 RA2014	8.6 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986 RA2014	BDL	0.2 mg/l
Chloride as Cl <sup>-</sup>	IS 3025 (P) 32 – 1988 RA2014	14.3 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	3.24 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	1.24 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.36 mg/l	1 mg/l
Sulphate as SO <sub>4</sub>	IS 3025 (P) 24 – 1986 RA2009	BDL	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l
Zinc as Zn	IS 3025 (P)49 – 1994 RA2014	BDL	5 mg/l
Manganese as Mn	IS 3025(P) 59– 2006 RA2017	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992 RA2014	BDL	0.003 mg/l
Lead as Pb	IS 3025(P) 47– 1994 RA2014	BDL	0.01 mg/l
Coliforms(MPN/100ml)	IS 1622: 1981 RA 2009	Absent	Absent
Ecoli (Present or Absent/100ml)	IS 1622: 1981 RA 2009	Absent	Absent

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

\* End of the report\*

Authorized signatory

abo.ans

The above results are related only to the sample submitted for analysis. This test report shall not be reproduced except in full, without the written approval of the laboratory.



## POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

PALLATH BUILDING, N. KALAMASSERY P. O., ERNAKULAM - 683104

Phone : 0484-2544030, 8281982322, 9747400085, 9747400089, www.poluchem.com, poluchem@gmail.com

ACCREDITED BY KSPCB AS 'A' GRADE LABORATORY

### TEST REPORT

Client Name & Address	Certificate No:	PL/RT/SO/10012/2020
Mr.P J Jose Pindimana Kothamanglam	Date of issue:	04/01/2021
	Date of monitoring	29/12/2020
	Monitoring Location	Quarry Owned By: Mr. P J Jose Sy.No.492/4/1,574/1A/9/9 Taluk:Kothamangalam Village: Pindimana District: Ernakulam, Kerala.
	Sample Description	Soil

Parameter	Test Method	Results
pH	IS 2720(Part25)-1973	6.52
Electrical Conductivity	IS 14767:2000RA2016	102 µS/cm
Potassium as K	EPA 3050 B	54 mg/kg
Phosphorus as P	IS 10158 :1982 RA 2014	95 mg/kg
Nitrogen as N	IS 14684: 1999 RA 2014	103 mg/kg
Organic Carbon	IS2720(Part 22)-1972	0.84 %
Calcium	EPA 3050 B	87 mg/kg
Magnesium	EPA 3050 B	54 mg/kg
Chloride	UEPA9212	123 mg/kg
Sulphate	IS 2720 Part27:1977	98 mg/kg

For PoluChem Laboratories (P) Ltd.

Authorized Signatory.

**JA RAMESH**  
Quality Management  
PoluChem Laboratories

\*End of the Report\*


The above results are related only to the sample submitted for analysis. This test report shall not be reproduced except in full, without the written approval of the laboratory.

**NEWSPAPER ADVERTISEMENT**

**നോട്ടീസ്**

പൊതുജനശ്രദ്ധയ്ക്കായി കേരള സംസ്ഥാനം എറണാകുളം ജില്ല കോതമംഗലം താലൂക്ക് പിണ്ടിമന ഗ്രാമപഞ്ചായത്തിൽ പിണ്ടിമന വില്ലേജിൽ സർവ്വേ നമ്പർ 492/4 - 1,574/1 A/9/9 -ൽ പാറചെനം ചെട്ടുനത്തിനുവേണ്ട പരിസ്ഥിതി അനുമതി പി.ജെ.ജോസ് (പോത്താനിക്കാട് വീട്,നാടുകാണി പി.മെലയിൻകീഴ്,കോതമംഗലം,എറണാകുളം ജില്ല) എന്ന വ്യക്തിക്ക് എറണാകുളം ജില്ല പരിസ്ഥിതി ആലാത നിർണയ അതോറിറ്റിയിൽ നിന്നും (DEIAA) ഓർഡർ നമ്പർ P/6056/2017- DIA/KI/MIN/8130/2017 തീയതി 23/01/2018 - ഓർഡർ പ്രകാരം ലഭിച്ചിരിക്കുന്നു. ഈ ഓർഡറിന്റെ പകർപ്പ് എറണാകുളം ജില്ല പരിസ്ഥിതി ആലാത നിർണയ അതോറിറ്റിയിൽ ലഭ്യമാണ്. [www.environmentclearance.nic.in](http://www.environmentclearance.nic.in) എന്ന വെബ്സൈറ്റിൽ കൂടിയും പകർപ്പ് കാണാവുന്നതാണ്.

# ANNEXURE NO:VIII




ലൈസൻസ് നമ്പർ...1./2018-19... തീയതി...01.02.2018

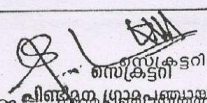
ചിങ്ങമിനം..... ഗ്രാമ പഞ്ചായത്തിൽ നിന്നും

1994 ലെ കേരളാ പഞ്ചായത്ത് രാജ് ആക്ട് ( 1994 ലെ 13 ) 232, 233, 234, 254 എന്നീ വകുപ്പുകളും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും അനുസരിച്ചു നൽകുന്ന

### ഡി & ഒ ലൈസൻസ്

ലൈസൻസിയുടെ പേരും മേൽവിലാസവും	ചി. ജെ. ഭോസ് ചോത്താതികോട്ട് (H) നാട്ടുകാണി P.O. തോന്നമംഗലം	
സ്ഥാപനത്തിന്റെ പേരും സ്ഥലനാമവും	-----	
ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ	കുരിച്ചിൽ തുറി നടത്തുന്നതിന് (0.9999 ഹെക്ടർ) ടാർജ്ജ് നമ്പർ : 492/4/1, 574/1A/4/4 (ചിങ്ങമിനം പഞ്ചായത്ത്)	
കെട്ടിടത്തിന്റെ നമ്പരും വാർഡ് നമ്പരും	വാർഡ് - 13	
ലൈസൻസ് കാലയളവ്	...01-04-2018... മുതൽ...31-03-2019... വരെ	
ഈടാക്കിയ ലൈസൻസ് ഫീസ്	5,000/- രൂപ	സീൽ നമ്പർ 117010102741 01 02 18
ലൈസൻസ് അനുവദിക്കുന്നതിനായി ഹാജരാക്കിയ നിരീക്ഷണ പത്രങ്ങളുടെ വിശദാംശങ്ങൾ ( നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാരസ്ഥാനം)	* 09/04/2017 ജി.ജി.എ.സി. വാർഡ് റിനോട്ട് 09/04/2017 നിലവിലെ DOE/578/E2/17 നമ്പർ NOC * ജി.ജി.എ.സി. വാർഡ് റിനോട്ട് 23/01/18 നിലവിലെ P/6056/2017 [PA/KL/MIN/8130/2017] നമ്പർ NOC (2 ഹെക്ടർ ഭൂമി)	



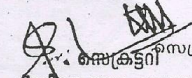


ഔദ്യോഗികമായി  
 ഉദ്യോഗസ്ഥൻ

GLM-30-Y-2014

ലൈസൻസി താഴെ പറയുന്ന വ്യവസ്ഥകൾ അനുസരിക്കേണ്ടതാകുന്നു

1. കേരളാ പഞ്ചായത്ത് രാജ് ആക്ടും അതേ തുടർന്നുള്ള ചട്ടങ്ങളും ബൈലകളും അനുസരിച്ചു പ്രവർത്തിക്കേണ്ടതാകുന്നു.
2. തൊഴിൽ സ്ഥലവും അതിലുള്ള സാധനസാമഗ്രികളും പഞ്ചായത്തധികാരികൾക്കോ / സെക്രട്ടറി അധികാരപ്പെടുത്തുന്ന മറ്റ് ഉദ്യോഗസ്ഥർക്കോ പരിശോധിക്കുന്നതിന് ലൈസൻസി വേണ്ട സൗകര്യം നൽകേണ്ടതും അവർ ആവശ്യപ്പെട്ടാൽ ഈ ലൈസൻസ് കാണിക്കേണ്ടതാകുന്നു.
3. ഏത് സ്ഥലത്തിന്റെ കാര്യത്തിൽ ലൈസൻസ് നൽകിയിരിക്കുന്നുവോ ആ സ്ഥലത്ത് എല്ലാവരും കാണത്തക്ക വിധത്തിലുള്ള ഒരു ഭാഗത്ത് ലൈസൻസി തന്റെ പേരും, ലൈസൻസിന്റെ നമ്പരും ഉദ്ദേശവും കാണിക്കുന്ന ഒരു അടയാളപ്പലക വച്ചിരിക്കേണ്ടതാണ്.
4. പഞ്ചായത്തിൽ നിന്നും അനുവാദം ലഭിച്ചശേഷമല്ലാതെ തൊഴിൽ സ്ഥലം മാറ്റാൻ പാടില്ലാത്തതും തൊഴിൽ നിർത്തുന്ന പക്ഷം വിവരം മുൻകൂട്ടി പഞ്ചായത്തിൽ അറിയിക്കേണ്ടതാകുന്നു.
5. തൊഴിൽ സ്ഥലവും പരിസരങ്ങളും വൃത്തിയായും സാംക്രമികരോഗാണുക്കൾ ഉണ്ടാകാത്ത വിധത്തിലും പൊതുജനോപദ്രവമാകാത്ത വിധത്തിലും വ്യാപാരത്തിനു വച്ചിട്ടുള്ള ഭക്ഷണപദാർത്ഥങ്ങൾ ഈച്ച, അണുക്കൾ, പൊടി മുതലായവയുടെ ശല്യം ഉണ്ടാകാത്ത വിധത്തിലും സൂക്ഷിക്കേണ്ടതാണ്.
6. ഓരോ പ്രവർത്തി ദിവസത്തിന്റെയും ഒടുവിൽ സ്ഥലം വൃത്തിയാക്കേണ്ടതാണ്.
7. ആ സ്ഥലത്തിന്റെയോ പരിസരത്തിന്റെയോ, ഏതെങ്കിലും ഭാഗത്ത് വീഴുകയോ നീക്കേപ്പിക്കപ്പെടുകയോ ചെയ്യുന്ന ചപ്പുചവരോ, മൃഗങ്ങളുടെ അവശിഷ്ടങ്ങളോ മറ്റ് പദാർത്ഥമോ ശേഖരിച്ച്, സെക്രട്ടറിക്ക് തൃപ്തികരമായ രീതിയിൽ നീക്കം ചെയ്യിക്കേണ്ടതാണ്.
8. ലൈസൻസി ഏതൊരു കെട്ടിടത്തിന്റെയും ചുവരുകളുടെ അകവശത്തിന്റെ ഏതൊരു ഭാഗവും മേൽപറഞ്ഞ പരിസരത്തിലുള്ള തറയും നടപ്പാതയും അവിടെ തെറിച്ചുവീഴാനിടയുള്ള ഏതെങ്കിലും ദ്രാവകമോ, മാലിന്യമോ, ചപ്പുചവരോ, അസഹ്യവുമായ ഉപദ്രവകരവുമായ ഏതെങ്കിലും പദാർത്ഥമോ അവിടെ ലയിക്കുന്നത് തടയാത്തവിധം എപ്പോഴും നന്നായി കേടുപാട് തീർത്ത് നിലനിർത്തേണ്ടതാണ്.
9. ലൈസൻസി മേൽപറഞ്ഞ സ്ഥലത്തോ, പരിസരത്തോ അതോടു ചേർന്നോ ഉള്ള ഏതൊരു ഓവുചാലും, അഴുക്കുജലം കളയുന്നതിനുള്ള ഉപകരണവും എപ്പോഴും നന്നായി കേടുപാടുതീർത്ത് വയ്പിക്കേണ്ടതാണ്.
10. അധിത്തം ആചരിക്കുന്ന കടകളുടെ ലൈസൻസ് റദ്ദുചെയ്യുന്നതാണ്.
11. ഏതെങ്കിലും തരത്തിലുള്ള തപക്ക് രോഗമോ കൃഷ്ണ രോഗമോ പ്രണമോ പകർച്ച വ്യാധികളോ ഉള്ള യാതൊരാളും കച്ചവടം നടത്തുന്നതിന് ഉപയോഗിക്കുന്ന സ്ഥലത്തുപരിസരത്തും പ്രവർത്തിക്കുവാൻ പാടില്ലാത്തതാകുന്നു.
12. 40 മൈക്രോണിൽ കുറവുള്ള പ്ലാസ്റ്റിക് കളും മറ്റ് നിരോധിത പ്ലാസ്റ്റിക് ഇനങ്ങളും ഉൽപ്പാദിപ്പിക്കുകയോ ശേഖരിക്കുകയോ വിൽക്കുകയോ കൈകാര്യം ചെയ്യുകയോ ചെയ്യാൻ പാടില്ല.
13. സ്ഥാപനത്തിന്റെ ബോർഡിൽ സ്ഥലനാമം മലയാളത്തിലും ഇംഗ്ലീഷിലും രേഖപ്പെടുത്തേണ്ടതാണ്.
14. 20 സീറ്റിൽ കൂടുതലുള്ള എല്ലാ ഹോട്ടലുകൾക്കും റെസ്റ്റോറന്റുകൾക്കും ടോയ്ലെറ്റ് സൗകര്യം ഏർപ്പെടുത്തേണ്ടതാണ്.
15. നിരോധിത ഉൽപ്പന്നങ്ങളായ പാൻമസാല, ഗ്ലൂട്ടിൻ തുടങ്ങിയവ സംഭരിച്ചുവയ്ക്കുവാനോ വിൽക്കുവാനോ പാടില്ല.
16. ബാലവേല അനുവദിക്കാൻ പാടില്ല.
17. മുകളിൽ കാണിച്ചിരിക്കുന്ന വ്യവസ്ഥകളുടെ ലംഘനം ഈ ലൈസൻസ് റദ്ദു ചെയ്യപ്പെടുന്നതിന് കാരണമാകാവുന്നതാണ്.

  
 സെക്രട്ടറി  
 പഞ്ചായത്ത് പ്രാമുഖ്യം

N.B :- ഈ ലൈസൻസ് അവസാനിക്കുന്ന തീയതിയ്ക്ക് 30 ദിവസം മുമ്പ് ലൈസൻസ് പുതുക്കുന്നതിനുള്ള അപേക്ഷ സമർപ്പിക്കേണ്ടതാണ്.

## ANNEXURE NO : IX

Proceedings of the District Environment Impact Assessment Authority (DEIAA), Ernakulam  
(Present. Sri. Muhammed Y Safirulla. IAS, District Collector & Chairman DEIAA, Sri. Inbasekar K. IAS,  
Member Secretary, DEIAA & Sub Collector, FortKochi, Sri. A. Renjan I.F.S, DFO Malayattoor &  
Member DEIAA, Dr. P.S. Easa, Member National board for Wildlife & Member DEIAA.)

Environmental Clearance No. 02 /2018  
Building Stone Quarry (36 )

No. P/6056/2017

Ernakulam.

**DIA/KL/MIN/8130/2017**

Dated. 23 /01/2018

Sub: - DEIAA Ernakulam – meeting held on 03/01/2018 – Environmental clearance for excavation of Granite Building Stone – Orders issued

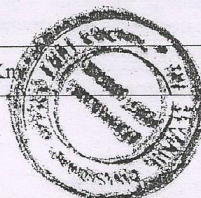
- Ref: -
1. Minutes of the meeting of 15<sup>th</sup> DEIAA held on 03/01/2018 at Chamber of District Collector, Ernakulam
  2. Minutes of the meeting of 13<sup>th</sup> DEAC held on 30/08/2017.
  3. Minutes of the meeting of 14<sup>th</sup> DEAC held on 28/09/2017.
  4. Application filed by Mr. P J Jose , Pothanikattu House, Nadukani P.O, Malayinkeezhu, Kothamangalam, Ernakulam District, Kerala.

\*\*\*\*\*

Mr. P J Jose , Pothanikattu House, Nadukani P.O, Malayinkeezhu, Kothamangalam, Ernakulam District, Kerala filed an application for an Environment Clearance for Mining of Granite Building Stone from the Survey Nos. 492/4/1, 574/1A/979 in Pindimana Village, Kothamangalam Taluk. The total area of land is 0.9990 hectares and the capacity of the Mining lease (TPA) is 18,277 TPA.

**THE DETAILS AS MENTIONED IN FORM 1M (APPENDIX VIII) OF THE APPLICATION.**

1	Proposal No.	DIA/KL/MIN/8130/2017		
2	Name of Mining Lease Site	Granite Building Stone Quarry of Mr. P J Jose		
3	Location / site (GPS Co-ordinates)	B.P.No	Latitude	Longitude
		01	N: 10°7'47.35"	E: 76°38'40.01"
		02	N: 10°7'48.69"	E: 76°38'42.10"
		03	N: 10°7'48.85"	E: 76°38'42.66"
		04	N: 10°7'49.24"	E: 76°38'42.67"
		05	N: 10°7'50.80"	E: 76°38'40.61"
		06	N: 10°7'47.20"	E: 76°38'37.80"
		07	N: 10°7'45.94"	E: 76°38'36.75"
08	N: 10°7'45.97"	E: 76°38'38.61"		
4	Size of the Mining Lease	0.9990 Hectares		
5	Capacity of Mining Lease (TPA)	18,277 TPA		
6	Period of Mining Period	2 Years		
7	Expected cost of the Project	Rs. 1.5 Crores		
Environmental Sensitivity				
8	Distance of Project site from nearest rail or road bridge over the concerned River, Rivulet, Nallah etc	Periyar River ,2 Kms		
	Distance from Infrastructural facilities	Kothamangalam ,11 Km		



	Nearest Airport	Kochi International Airport, 35 Km	
	National Highway	NH-49, 8 Km	
	Major District Road	Aluva- Munnar Road, 11 Km	
	Any Other road	Chelad- Malippara- Vettampara- Kottickal Road, 280 m	
	Electric transmission line pole or tower	High Tension Power Line, 145 m	
	Canal or Check dam or reservoirs or lake or ponds	Dam- Bhoothathankettu, 2 Km	
	In-take for drinking water pump house	Open Well, 100 m	
	Intake for Irrigation canal pumps	Bhoothathankettu, 2 Km	
10	Areas protected under international conventions national or local legislation for their ecological landscape, cultural or other related value	None within Study area	
11	Area which are important or sensitive for ecological reasons – Wetlands water courses or other water bodies, coastal zone, biospheres, mountains forests	Periyar River, 2 Km	
12	Areas used by protected important or sensitive species of flora or fauna flora breeding, nesting foraging resting over wintering migration	None within Study area	
13	Inland, Coastal, Marine or underground waters	None within Study area	
14	State, National boundaries	None within Study area	
15	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	None within Study area	
16	Defence Installations	None within Study area	
17	Densely populated or built-up area, distance from nearest human habitation	Kothamangalam, 11 Km	
18	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Hospital:-	1. Dharmagiri Hospital, Kothamangalam, 11 Km 2. Mar Beselious Medical Mission Hospital, 11 Km 3. Govt. Hospital Kothamangalam, 12 Km
		School &	1. L P School, Malippara, 1 Km 2. St.Stephens HSS Boys School, Oonjappara, 3.5 Km.
		Church	1. St.Mary's Church, Malippara, 1 Km
		Temple	1. Bhoothathankettu, 2 Km
		Mosque	1. Kolangattukuzhy, 1.5 Km
19	Areas containing important high quality or scarce resources (ground water resources, surface resources,	NIL	



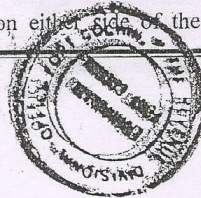
	forestry, agriculture, fisheries, tourism, minerals	
20	Area already subjected to pollution or environmental damage (those where existing legal environmental standards are exceeded)	Quarrying for building stone is being conducted since many years.
21	Area already subjected to natural hazard which could cause the project to present environmental problems	Earth quake Zone-III, Moderate damage risk zone as per BMTPC, Vulnerability atlas Seismic zone of India IS :1893-2002
22	Is proposed mining site located over or near fissure / fracture for ground water recharge	No
23	Whether the proposal involves approval or clearance under the following regulations or acts, namely (a) The Forest (Conservation) Act, 1980 (b) The Wildlife (Protection) Act, 1972 (c) The Coastal Regulation Zone Notification, 2011 If yes, details of the same and their status to be given	Not Applicable
24	Forest land involved (hectares)	Nil
25	Whether there is any litigation pending against the project and /or land in which the project is propose to be set up (a) Name of the court (b) Case No. (c) Orders or direction of the court, if any and its relevance with the proposed project.	As per FORM 1M applicant says that no litigation is pending against the Permit area/applicant of this area in any court of law to the best of knowledge.

**TECHNICAL SCRUTINY AND ENVIRONMENTAL IMPACT ASSESSMENT BY DEAC**

The proposal was placed in the 13<sup>th</sup> DEAC meeting held on 30/08/2017. (Reference 2).The committee appraised the proposal and decided to defer the item for field visit by the sub committee concerned. The DEAC sub committee visit to the Quarry project site of Mr. P J Jose, Pindimana Village, Kothamangalam Taluk and submitted the report to DEAC.

**The field inspection details as reported by DEAC (Reference 3).**

The proposed quarry site located between N-10° 7' 48.85" to E-76° 38' 42.66" forming the top summit of low lying hillock that in general, sloping, on either side, of the area exhibiting maximum



elevation of 120m AMSL and lowest elevation of 87m AMSL. Since the quarry is already under mining, the litho units are very clearly exposed. Central portion of the applied area is water logged and attained an average depth of 15 meters from the general ground surface. The ore body is massive in general, and at some locations, joint sets and other planes of structural weakness are observed. Mineable resource occurs mainly at southern side and the progressive heading is suggested over there. The ore body comprised complex associates of charnockite, quartz, feldspathic gneiss, biotite gneiss. This rock mass underwent repeated episodes of metamorphism resulting continuous sets of moderately spaced joints, vertical lineation, crushed and brecciated structures. (Reference 3).

There are no perennial water courses or streams within the applied area. The rain water passes as minor water courses through natural geographic slope and joins the local water bodies forming dendritic drainage pattern. During inspection the committee members assessed, the probability of environmental impacts cropping up during mining. The potential for natural hazards such as landslides, surface creep, erosion, flooding or any adverse environmental conditions etc. are also ruled out. The proposed site did not possess any high quality or valuable resources other than granite building stone. They also observed that the area is not under any legal environmental procedures. (Reference 3).

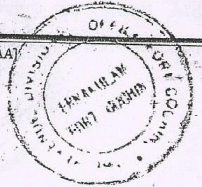
Since the quarry being in existence for more than 10 years the major share of the presently wide quarry is not having systematic bench cuttings. The committee opined that the eco friendly approved mine plan presented by the owner of the quarry is appreciative to incorporate the scientific and modern methods of mining. The ground water assessment could not be made as there is no open wells in the nearby area. (Reference 3).

Considering all the aspects the DEAC approved the mining project and recommended DEIAA to grant Environmental Clearance.

#### DEIAA DECISIONS

As per DEAC recommendation, DEIAA considered the project proposal. The applicant submitted the detailed CSR and the applicant has remitted Rs. 75,000/- (Rupees Seventy five thousand only) as processing fee vide chalan no. KL004919316201718M dt.08/08/2017 of Sub Treasury, Mattancherry. Considering the CSR, the applicant submitted the plan of Rs. 2, 00,000/- (Rupees Two Lakh only) as recurring and non recurring expenses for CSR activities.

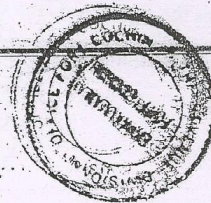
The proposal was considered in the 15<sup>th</sup> meeting of DEIAA (Reference 1). Considering all these aspects the DEIAA committee decided to grant Environmental Clearance to the quarry project of Mr. P J



Jose , Pothanikattu House, Nadukani P.O, Malayinkeezhu, Kothamangalam, Ernakulam District, Kerala in strict compliance with the following General conditions and specific conditions recommended by DEAC.

**GENERAL CONDITIONS**

1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified.
2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
3. Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
5. Sprinklers shall be installed and used in the project site to contain dust emissions.
6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
7. 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, if no other specific condition on reclamation of pit is stipulated in the E.C.
8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.
9. The lease area shall be fenced off with barbed wires to a minimum 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.
10. Warning alarms including the time of blasting ( to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
12. Quarrying activities should be limited to day time as per KSPCB should be implemented.
13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14. A licensed person should supervise/control the blasting operations.
15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.



16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan/specific conditions.
17. Height of benches should not exceed 5m, and width should not be less than 5m, if there is no mention in the mining plan/specific condition.
18. Mats to reduce fly rock blast to a maximum of 10PPV should be provided.
19. Maximum depth of mining from general ground level at site shall not exceed 10m.
20. No mining operations should be carried out at places having a slope greater than 45°.
21. Acoustic enclosures should have been 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.
22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
24. The transportation of minerals should be done in covered trucks to contain dust emissions.
25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
26. Disposal of spent oil from diesel engines should be as specified under relevant rules/regulations.
27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
28. A minimum buffer distance of 50 m from the boundary of the quarry to the nearest dwelling unit or other structures not being any facility for mining shall be provided.
29. 50m buffer distance should be maintained from forest boundaries.
30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
31. All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of Explosives.
32. In the case of any changes in the scope of the project, extent, quality, process of mining technology involved or in any way affecting the environmental 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.
33. The authority reserves the right to add the additional safe guard measures subsequently, if found



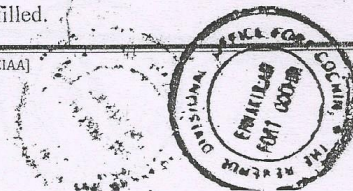
necessary, and to take action including revoking of the environment clearance under the provisions of the environment (Protection Act), 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

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, environment (Protection) Act 1986, the Public Liability (Insurance) Act 1991 and EIA notification, 2006.
35. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and 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 State Environment Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at [www.seiaakerala.org](http://www.seiaakerala.org). The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
36. A copy of the clearance letter shall be sent by the proponent to the concerned Grama Panchayath/District Panchayath/Municipality /Corporation/Urban Local Body also to the 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.
37. The proponent shall submit half yearly reports complaints of the stipulated EC conditions including results of monitored data (both in hard copies as well as by email) 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. Each 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.
38. The details of Environment Clearance should be prominently displayed in a metallic board of 3ft 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.
39. 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.
40. No change in mining technology and scope of working should be made without prior approval of the DEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the DEIAA, as applicable.

41. The project proponent shall ensure that no natural water course and / or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8 meter and width 20 meter 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 dump. The entire excavated area shall be backfilled. Monitoring and management or rehabilitated areas should continue until the vegetation becomes self sustaining.
44. 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 desalted particularly after monsoon and maintained properly.
45. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading points and transfer points – it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
47. Measures should be taken for control of noise levels below 85 dBA in the work environment
48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization
49. The funds earmarked for environmental protection measures and CSR activate should kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the District Environment Impact Assessment Authority (DEIAA) Office.



50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.
51. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred with a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
53. The DEIAA may revoke or suspend the order, for non implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The DEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
54. The above conditions shall prevail notwithstanding 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.
55. This order is valid for a period of 2 years or the expiry of mine lease period issued by the Government of Kerala, whichever is earlier.
56. The Environmental Clearance will be subject to the final order of the 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 table and it should not interest ground water table.
58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area.
59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
60. Regular monitoring of flow rates and water quality up stream and down stream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to DEIAA.
61. Occupational health surveillance programme of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
62. Commitment of CSR should be fulfilled.



**SPECIFIC CONDITIONS PROPOSED BY DEAC**

1. The applicant should establish a permanent bench mark outside the mining area from which the relative depths of mining should be established and submitted in the calculations as well as in the drawings.
2. The relative levels from the established bench marks should be permanently marked in the boundary points.
3. The solid waste generated during the course of operation shall be utilized for formation of safety Bunds all along 7.5m safety zone, internal road maintenance and green belt works.
4. Sufficient number of suitable parapet walls shall be made all along quarries, haulage roads where ever necessary in order to maintain safe working conditions.
5. Proper blast design avoiding over charging and controlled blasting techniques shall be adopted.
6. Construction of garland drains to divert surface run off away from mining area shall be implemented.
7. Environmental auditing shall be done every year and same shall be reported to District Collector through District Geologist.
8. Quarrying area shall be under water sprinklers for dust control.
9. Ideal locations shall be identified in and around quarry site suitable for rain water harvesting.
10. Implementation of artificial geo-textiles shall be promoted along boarders of buffer zone where chances of rock creep may exist during rainy season.
11. Future excavations shall be conducted by strictly forming systematic benches as per the norms of Mine Safety Departments and Kerala Minor Mineral Concession Rules 2015.
12. All quarry workers shall be allowed to enter the blasting area only with personal protective equipments (helmets, safety shoes, reflecting jackets...etc)

Validity of the environmental clearance will be for two years from the date of production of this clearance before the Geologist, subject to earlier review in the event of genuine complaint from anybody from the safety area or violation or non-compliance of any of the conditions stipulated herein.

**MONITORING AND ACTION AGAINST VIOLATION OF GENERAL & SPECIFIC CONDITIONS**



- 1) This environmental clearance is subject to the general and specific condition mentioned in this proceeding. This EC is liable to be cancelled if general and specific conditions are violated and also Penal action will be taken if DEIAA finds any false statement / information in the project proposal.
- 2) Compliance of the conditions here in will be monitored by the Authority or its agencies and also by the regional office of the Ministry of Environment & Forests, Government of India, Bangalore
- 3) Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
- 4) Instances of violation if any shall be reported to the District Collector, Ernakulam to take legal action under the Environment (Protection) Act, 1986.
- 5) All the inventory records and other documents, related to the operations and maintenance of the quarry should be maintained and produced to the monitory authorities whenever needed or directed to produce the same in the future.
- 6) The given address for correspondence with the authorized signatory of the project of Mr. P J Jose , Pothanikattu House, Nadukani P.O, Malayinkeezhu, Kothamangalam, Ernakulam District, Kerala.



*Inba Sekar*  
22/11/2018  
Sri. Inba Sekar K. IAS  
Member Secretary, DEIAA  
&  
Sub Collector, Fort Kochi

To

Mr. P J Jose , Pothanikattu House,  
Nadukani P.O, Malayinkeezhu, Kothamangalam,  
Ernakulam District, Kerala

Copy to:

1. The Additional Chief Secretary to Government, Environment Dept, Govt. Of Kerala
2. Director, Mining & Geology, Thiruvananthapuram - 4
3. Chairman DEIAA & District Collector, Ernakulam
4. Sri. A. Renjan I.F.S, DFO Malayattoor & Member DEIAA
5. Dr. P.S. Easa, Member, National Board of Wildlife & Member DEIAA
6. Shri. K.N Raman Namboothiri , Geologist, Mining & Geology, Kakkanad, Ernakulam
7. The Secretary, Pindimana Grama Panchayath,

## QUARRY DETAILS BOARD

<b>E C Details</b>		
<b>Name of Licensee</b>	<b>P.J Jose Pothanikattu House Nadukani P.O Malayinkeezhu Kothamangalam Ernakulam</b>	
<b>Environmental Clearance No :</b>	<b>P/6056/2017 DIA/KL/MIN/8130/2017</b>	
<b>Location / Site (GPS Co. Ordinates)</b>		
<b>B.P.No</b>	<b>Latitude</b>	<b>Longitude</b>
1	N: 10°7'47.35"	E:76°38'40.01"
2	N: 10°7'48.69"	E:76°38'42.10"
3	N: 10°7'48.85"	E:76°38'42.66"
4	N:10°7'49.24	E:76°38'42.67"
5	N:10°7'50.80"	E:76°38'40.61"
6	N:10°7'47.20"	E:76°38'37.80"
7	N:10°7'45.94"	E:76°38'36.75"
8	N:10°7'45.97"	E:76°38'38.61"

## **ENVIRONMENTAL MONITORING CELL**

An environmental monitoring cell was formed with Mr. P.J Jose as Chairman of the monitoring cell and made functional.Meeting of monitoring cell is arranged by monthly and discusses the compliance of the specific and general conditions contained in the Environmental clearance order and register maintained. The details of the monitoring cell members are given below:

<b>SI No.</b>	<b>Post</b>	<b>Name</b>
1	Chairman of the Monitoring Cell	P.J Jose (Owner)
2.	Head Incharge (Environment )	Ginoy Stephen(Manager)
3.	Senior Environmental Officer	Biju Joseph
4.	Environmental Officer	Sandheep Sunny
5.	Name of the Environmental Officer in charge	Bibin
6.	Name of the officer environment, Health and Safety	Suresh
7.	Name of the Assistant officer of the Environment ,Health and Safety	Binu
8.	Name of the Environmental Consultant	J R Associates

Natural vegetation including trees, shrubs and present in the quarry site are mentioned in the table below.

### **V.LIST OF TREES IN THE QUARRY SITE**

<b>SI No.</b>	<b>Scientific Name</b>	<b>Common Name</b>	<b>Family</b>
1	Heveabrsiliensis	Rubber	Enphorbiaceae
2	Tectonagrandis	Teak	Verbenaceae
3	Chromolaenaodorata	Communist pacha	Compositae
4	Axonopuscompressus	Carpet Grass	Poaceae

## **RECEIPT**

Date:

Received compliance Report of P.J Jose, Pothanikkattu House, Nadukani P.O, Ernakulam Dist,  
Kerala authorized signatory of (Building Stone )

Quarry with EC.No.02/2018 DEIAA –Dated 23.01.2018 for the period of January 2019 to  
January 2020.