

HALF YEARLY COMPLIANCE REPORT

FOR

APRIL 2018 - SEPTEMBER 2018

IN RESPECT OF

BUILDING STONE QUARRY

Extent: 4.3049 ha & Capacity: 59510 Cum/ Annum

OF

Mr. Shiju Thomas,

AT

**294/1 pt, 294/2 pt, 295/5, 295/6 pt, 296/2 pt & 356/1-1 pt,
Block no-32 of
Alakodu Village, Thodupuzha Taluk,
Idukki, Kerala State - 685 588.**

DECEMBER 2018

Proceedings of the District Environment Impact Assessment**Authority Idukki District****[Present Sri. G.R Gokul I.A.S(chairman),****Sri. P.G Radhakrishnan (member secretary),****Sri.Narendra babu I.F.S(member), Dr .George Abe(member)]**

Subject :Environmental clearance for the building stone quarry project in Survey No's 294/1 pt, 294/2 pt, 295/5, 295/6 pt, 296/2 pt and 356/1-1 pt in Alakodu Village, Thodupuzha Taluk, Idukki District by Sri. Shiju Thomas, Pallivathukkal House, Chilavu P.O.,idukki(dist)-EC granted orders issued.

District Environment Impact Assessment Authority ,Idukki

no:1/2016/deiaa/idk/ker

Dtd:20/04/2017

Ref (1):Application from sri. Shiju Thomas ,Pallivathukkal(h),chilavu p.o,

Thodupuzha

(2):Minutes of district level environment appraisal committee dtd 03.02.2017

(3):Site inspection report of sub committee of DEAC submitted by

senior geologist , Department of mining and geology, Idukki

(4):Minutes of first meeting of DEIAA dtd 30.03.17

(5):Ltr no;doi/250/m/16 dtd 12/04/2017 of District Geologist, Mining and

Geology Idukki

Sri. Shiju Thomas, Pallivathukkal House, Chilavu P.O, Thodupuzha vide his application submitted through web site has sought Environmental Clearance under EIA notification, 2006 for the building stone quarry project in Survey Nos 294/1 pt, 294/2 pt, 295/5, 295/6 pt, 296/2 pt, 356/1-1 pt in Block 32 of Alakodu Village, Thodupuzha Taluk, Idukki Dist. for an area of 4.3049 hectares. The project falls under the category B2 as per the EIA notification No. S.O 1533 (t) dated. 14.09.2006 of MOEF & CC, other details of the project are as follows:-

1.About the project

Name of Project :- Building stone Quarry of Mr. Shiju Thomas, Pallivathukkal House, Chilavu P.O.

Brief description of the Project :- The proposed rough stone quarry project is spread over an area of 4.3049 hectare, the proposed production is of 59510 m³ per annum and the span of the quarry is 5 years. The quarry operation is proposed up to 109 meter above MSL and to carry out with semi mechanized opencast mining with 5.0 meter vertical benches with a back width of 5.0 meter. Quarry operation is to carry out by splitting of rock mass from the permit rock area by jackhammer drilling and blasting. Hydraulic excavators are to use for loading the stone from pit head and tippers will be used for transportation of stones. Hydraulic excavators are intended to be attached with rock breakers for breaking of large boulders to avoid secondary blasting.

Category/sub category & schedule	B2 (Mining of mineral)
Topography	Hilly Terrain
GPS Co-ordinates	Latitude (N)- 09° 51' 40.90" N to 09° 51' 50.08" N Latitude (E)- 76° 45' 40.88" E to 76° 45' 45.26" E
Extent of area	4.3049 Hectare
Span of mine proposed	5 years
Depth of mining	52m
Distance from the adjacent quarry	There are no adjacent quarries within 500 meters from the mine lease area.
Capacity of production	59510 m ³ /annum
Details of Project cost	56,20,000 (Rupees Fifty Six Lakhs Twenty Thousand Only)

Water requirement & resources:- Details of water requirements in KLD(Kilo litre per day) as given below:

Domestic and drinking purpose	2.0 KLD
Dust suppression	12.0"
Green Belt	3.0"
Total	17.0 KLD

Drinking water is sourced from the open well which will be purified in a small reverse osmosis plant.. For dust suppression and green belt, water is obtained from the open wells/storm water reservoir of proposed site.

Recycled water :- The storm water / mine water will be used for dust suppression and green belt developments.

Liquid effluent : Domestic effluent sent to septic tanks followed by soak pit.

Land:-Access of road to the site : The district road connecting Thodupuzha and Anakayam Via Enchiyani is at a distance of 0.5 km from to project site.

Facility for solid waste management	The waste generated during the mining period is 16921m ³ will be proposed dumping to south side of the lease area and along the lease boundary
Topographic features	The area applied for quarry site is almost a hilly terrain with the highest elevation of 109 meter to a lowest elevation of 89 meter above MSL
proneness of the area for land slides	Semi mechanized open cast mining with benches will be carried out .ultimate slope of the mine will be maintained at 45 degree. Since the granite is hard rock formation ,land slides are not envisaged. The area falls in seismic zone-3 and is moderate damage risk zone.

Air:-

Air quality requirements	Air quality to meet requirements as per rules
Noise level meeting requirement	Noise level to be within limits as per rules
Likely emission affecting environment	Emission of dust, SO ₂ ,Nitrous Oxide during drilling ,blasting , loading and transport activities. Noises will be generated by the mining machineries.

Biodiversity:-

Presence of any endangered species or red listed category	None
Loss of native species and generic diversity	Not envisaged ,except small bushes, Arecanut , Rubber,Cocoa and other plants. No major vegetation cover/valuable flora is found within the mining area.

Social aspects:-
 Proximity to nearest habitation :Nearest house is at 104 meter away

Corporate social responsibility

SL.no	Description of item	Amount proposed(in rupees)
1	Distribution of books to Enchiyani Govt.L.P school students	250000
2	Repairing of Thodupuzha-Anakkayam road	250000
3	Sanitary facility for Enchiyani Govt.L.P school(toilets,drinking water facility)	300000
4	Organizing Health camps	200000
5	Total	10,00,000

General

Does it propose environment management plan	EMP is submitted along with form 1M
Biomedical waste management	There is no biological waste generation in the building stone quarry
E-waste management	There is no E-waste generation in the building stone quarry
Sufficiency of parking spaces/ Traffic management	Enough space is available
Litigation/court case if any against the project	Non as of now
Details of authorized signatory	Mr.Shiju Thomas,pallivathukkal(house) Chilavu p.o,Thodupuzha.Idukki (dist) Pin:685588; mobile no:9447522690
Details NABL approved laboratory	ABC techno labs India pvt ltd. No:950/3,3rd cross street ,sector 2,south face Ambattoor industrial estate,Chennai. Phone:044-26257788.certificate no.T.1586 DTD 08/10/15 valid up 07/10/2017

2. On submission of approved mining plan as per KMMC rule 2015,the proposal was placed in the first meeting of DEAC. Further to intimation of DEAC,the proponent along with the consultant attended the meeting. The DEAC decided to defer the item for field inspection and constituted a sub committee for the same. The sub committee inspected site on 25/01/2017 and put forward some conditions.

3. The conditions are as follows.

- The boundary pillars should be numbered and fixed in the lease area as per the approved mining plan
- Fencing with barbed wires should be provided all along the boundary of the lease area except the part needed for vehicular traffic.
- The boundary between the govt surplus land in survey no.356 on the south-eastern side of the lease area and the applied lease area must be clearly demarcated.
- There should not be any further quarrying in the already quarried pit as the depth of pit has already reached more than 20 meters at present. The quarried pit should be retained as a rain water storing site.
- There should not be any further quarrying in the buffer zone area on the eastern side of the lease area where already quarrying was carried out as per the earlier permits
- A greenbelt should be maintained all around the quarry by planting trees.
- The ultimate depth of the quarry must be limited to 20 meter, from ground level as per the mining plan.
- There should be some rain harvesting structure at the north-eastern valley part of the quarry lease area
- The water draining from the quarry to the out side area must be after clearing the sediments and impurities by passing through one or two settling tanks
- Dust suppression mechanisms using sprinklers must be established in the quarry.
- The approach road to the quarry must be tarred using metal.
- It is instructed to only remove topsoil up to a maximum depth of 2 meter while quarrying.

4. In the 2nd meeting of DEIAA held on 30/03/2017, the committee after studying the case in detail accepted the 13 conditions raised by the DEAC. The committee also decided to collect the mining history of the proponent and authorized member secretary to collect it from district geologist. As decided by the 1st meeting of DEIAA, the documents of lands called for been submitted by the proponent and mining history of the proponent have been submitted by Senior Geologist, Mining and Geology Idukki District as reference (5). As per reference(5) it is found out that there are no charges were against the proponent for activities like illegal mining, mining outside the area and violation of lease permit to collect it from district geologist. The details of the ownership of the private land in which the project is proposed is as follows

Sy.no	Extent(hect)/T.p no	Name of owner	Document details/date	Prior document details 1	Prior document details 2	Old sy.no
294/1pt	0.3150 T.P 32/589	Shaji joseph cherthalackal Anchiry	557/14 DTD 12.02.14 561/14 DTD 12.04.14 876/15 DTD 26.03.15 1196/14 DTD 28.03.14 SRO KARIKODU	927/72 1255/61 sro karikodu 1664/62 sro Thodupuzha	1285/58 sro Thodupuzha	1026/1/7
356/1-1 pt	0.0853 T.P 32/589					
294/2pt	1.4385 T.P 32/2046	John pathrose villanguparayil, Anchiri	2061/97 dtd 10.06.97 sro karikodu	3580/58 DTD 01.10.58 sro thodupuzha	922/52 sro Kanjirappally	1026/1

295/5	1.0230 TP 32/1047	Selestian s/o mathew .plakkootathil(h),anchir y	2075/90 dtd 16.08.90 sro karikodu	2129/77 sro karikodu		1026/1/7
295/6	0.7667 TP 32/1047					
296/2pt	1.4385 TP 32/3460	Roger mathew,Plakkuttathil.an chiry	899/05 dtd 28.02.05 sro karikodu	2476/89 2458/89 1201/98 sro karikodu	2952/85	

Examining the details of land it is understood that the proposed site is a private land which is not assigned under any assignment rule of kerala but it is pandaravaka land as per the basic tax register. Land owners and the proponent has executed an agreement to excavate the granite building stone for the period of 15 years from the above mentioned area. Also going through the documents submitted by proponent such as detailed mining plan, mine closure plan,environment management plan and pollution control methods the committee is satisfied by the methods suggested there to reduce the gravity of pollution and steps to mitigate the risk of environment hazard. In addition to the above facts the committee analyzed the fact of severe shortage of granite building stone in the said region and its impact on social-economic condition of public and development of the region,the District Level Impact Assessment Authority Idukki hereby grant environmental clearance to the proposed quarry project of sri.Shiju Thomas,pallivathukkal(h),chilavu in Thodupuzha taluk of Idukki district for an area of 4.3049 hectares subject to the condition specified in para 3

5. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures in the environment management plan of the pre-feasibility report and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The undertaking and conditions regarding mining,blasting, pollution control and progressive mine closure plan of the mining plan submitted will be deemed to be part of this proceedings as condition as undertaken by the proponent,as if incorporated herein.

6.Validity of the environmental clearance will be five years from the date of this environmental clearance ,subject to the 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.

7.Complaints of the conditions herein will be monitored by DEIAA and higher authorities of ministry of environment and forest government of India.

(i) This E.C is one among the licenses to be obtained by proponent from mining. In order to start the mining activities and operations in the project the proponent must obtain the other licenses from the concerned authorities.

(ii) 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.

(iii) Instances of violation if any shall be reported to District collector,Idukki to take legal action under the environment protection act,1986.



(Signature)
P.G Radhakrishnan
Member secretary
DEIAA,Idukki
&
Revenue divisional officer, Idukki

To

Sri.Shiju Thomas

Pallivathukkal(h)

Chilavu p.o

Thodupuzha

Copy to

1.State Level Environmental Impact Assessment Authority Kerala

2.Director of mining and geology, Thiruvananthapuram

3.Chairman DEIAA, District Collector Idukki

4.Geologist ,Mining and Geology, Idukki

5.Tahsildhar Thodupuzha

6.Secretary Alakodu Grama Panchayath

7.Web site

8. Stock file

9. Despatch confirmation

**COMPLIANCE TO THE CONDITIONS STIPULATED IN THE
ENVIRONMENTAL CLEARANCE ISSUED BY DISTRICT LEVEL
ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, IDUKKI**

Vide

No. 1/2016/DEIAA/IDK/KER

Dated: 20/04/2017

Building Stone Quarry Project in Survey Nos. 294/1 pt, 294/2 pt, 295/5, 295/6 pt, 296/2 pt & 356/1-1 pt, Block no-32 at Alakodu Village, Thodupuzha Taluk, Idukki, Kerala State - 685 588 over an extent of 4.3049 Ha by Mr. Shiju Thomas, Pallivathukal House, Chilavu P.O, Thodupuzha, Idukki District - 685 588

Sr. No.	Specific Conditions	Compliance Status
1.	Boundary pillars should be numbered and fixed in the lease area as per the approved mining plan.	Boundary pillars are fixed and numbered as per the approved mining plan. The photographs showing the boundary pillars are attached as Annexure 1.
2.	Fencing with barbed wires should be provided all along the boundary of the lease area except the part needed for vehicular traffic.	Fencing with barbed wires all along the lease boundary is being carried out. The photographs showing the barbed wire fencing is attached as Annexure 2
3.	The boundary between the Government surplus land in Survey number 356 on the south eastern side of the lease area and applied lease area must be clearly demarcated.	The boundary between Government surplus land in Sy. No. 356 on the south eastern side of the lease area and applied lease area has been clearly demarcated with fencing. Photographs attached as Annexure 3
4.	There should not be any further quarrying in the already quarried pit as the depth of the pit has already reached more than 20 meters at present. The quarried pit should be retained as rain water storing site.	Noted. The already excavated pit shall be retained as rain water storing site. Photograph attached as Annexure 4

5.	There should not be any further quarrying in the buffer zone area on the eastern side of the lease area where already carried out as per earlier permits.	Noted. There shall be no further quarrying on the eastern side of the lease area.
6.	A greenbelt should be maintained all around the quarry by planting trees.	Greenbelt is being established all around the quarry. Photographs showing the nursery for saplings for greenbelt development is attached as Annexure 5
7.	The ultimate depth of the quarry must be limited to 20 meters, from the ground level as per the mining plan.	Noted and shall be followed as per the mining plan.
8.	There should be some rainwater harvesting structure at the north-eastern valley part of the quarry lease area.	Rainwater harvesting structure has been developed on the north-eastern valley part. Photographs attached as Annexure 6
9.	The water draining from the quarry to the outside area must be after clearing the sediments and impurities by passing through one or more settling tanks.	Settling tanks for clarification of water from the quarry area has been established as a part of rainwater harvesting plan.
10.	Dust suppression mechanisms using sprinklers must be established in the quarry.	Sprinklers shall be established at the quarry for dust suppression. At present dust suppression through water tankers are carried out. Photographs of the water tankers for dust suppression is attached as Annexure 7
11.	The approach road to the quarry must be tarred using metal.	The approach road to the quarry shall be asphalted.
12.	It is instructed to only remove topsoil up to a maximum depth of 2m while quarrying.	Only 2m of topsoil shall be removed while quarrying. The same will be utilized for the greenbelt development.

Sr. No.	General Conditions	Compliance Status
1.	Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR/KPBR, unless otherwise specified.	RWH facility as per the required guidelines shall be implemented at the site. Refer Annexure 6
2.	Environmental Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.	Environmental Monitoring Cell headed by Quarry Manager along with qualified Environmental Consultant / Engineers is being engaged for effective implementation of the pollution control measures.
3.	Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, inclusive of approach road and internal roads.	Avenue trees along the side of the road and open parking areas will be developed as a part of Green Belt development. Already saplings have been planted. Refer: Annexure 5
4.	Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.	Solar lamps shall be installed at the parking areas and approach roads.
5.	Sprinkles shall be installed and used in the project site to contain dust emissions.	Sprinklers shall be installed in the project site and also outside the project site to minimize the dust emission from the process and vehicles. At present Water tankers are used for dust suppression. Refer Annexure 7
6.	Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.	Eco-restoration plan as per the Post Mine Closure Plan Will be Implemented in the quarry as per the plan submitted.
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 EC	Will be followed as per the guidelines.

8.	Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented.	CSR plan as agreed is being taken up and shall be implemented. Receipts of CSR activities attached as Annexure 8
9.	The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of the mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all the times and shall be conspicuous.	Fencings all around the boundary of quarrying area shall be provided to avoid the incidence. Refer: Annexure 2
10.	Warning alarms indicating the time of blasting (to be done specific timing) has to be arranged as per stipulations of Explosive Department.	As per the stipulations of Explosive Department the warning alarms by indicating the blasting time is provided. Photographs are attached as Annexure 9
11.	Control measures on noise and vibration prescribed by KSPCB should be implemented.	Prescribed control measures from KSPCB shall be followed.
12.	Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.	Quarrying activities are limited to only day time.
13.	Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.	Blasting shall be done in controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
14.	A licensed person should supervise/ control the blasting operation.	All activities are supervised by a licensed Blaster and Mines Manager. License attached as Annexure 10
15.	Access road to the quarry shall be tarred to contain dust emission that may arise during transportation of materials.	Access road to the quarry shall be tarred and maintained affectively.
16.	Overburden materials should be managed within the site and used for reclamation of the mine pit as per mine closure plan / specific conditions.	Noted and shall be followed.
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.	Noted and is being followed. Photograph attached as Annexure 11
18.	Mats to reduce fly rock blast to a minimum of 10 PPV should be provided	Mats to reduce fly rock blast shall be provided

19.	Maximum depth of the mining from general ground level at site shall not exceed 10 m.	Noted and will be followed.
20.	No mining activity shall be carried out at places having slope greater than 45°	Noted and shall be complied.
21.	Acoustic enclosures should have been provided to reduce sound amplification in addition to the provisions of green belt and hollow brick envelop for crushers to 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, helmets, etc.	All workers are provided with required PPE's. Photographs attached as Annexure 12
23.	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Garland Drains shall be provided to channelize the storm water during the monsoon.
24.	The transportation of minerals should be done in covered trucks to contain dust emissions.	Trucks used for transportation will be covered to reduce 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.	Greenbelt is developed as per the guidelines.
26.	Disposal of spent oil from diesel engines should be as specified under relevant Rules / Regulations.	Spent oil for diesel engines shall be handed over to authorized recyclers.
27.	Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.	Explosives are stored in magazines in earmarked area as specified by the authority. Photographs attached as Annexure 13
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.
29.	100 m buffer distance should be maintained from forest boundaries.	NA.
30.	Consent from KSPCB under Water and Air Act(s) should be obtained before initiating mining activity.	Required consent from KSPC has been obtained. Attached as Annexure 14

31.	All other statutory clearance should have been obtained, as applicable, by project proponent from the respective competent authorities including that for blasting and storage of explosives.	All the statutory clearances /permissions are obtained which is applicable to the project.
32.	In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting environmental parameters/impacts as assessed, based on which EC is issued, the project would require a fresh appraisal by this authority, for which the proponent shall apply and get approval of this Authority.	Will adhere as per the EIA Notification.
33.	The Authority reserves the right to add additional safeguards measures subsequently, if found necessary, and take actions including revoking of the Environment clearance under the provisions of the Environment (Protection) Act 1986, to ensure effective implementation of the suggested safeguards measures in a time bound and satisfactory manner.	Noted.
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 and Air (Prevention and Control of Pollution) Act 1981, the Environment (protection) Act 1986, the Public liability (Insurance) Act 1991 and EIA Notification, 2006.	Stipulated conditions shall be implemented. Air and Water Analysis reports are enclosed as Annexure No 15 & 16.
35.	The Project proponent should advertise in at least two local newspapers widely circulated in the region, one of which shall be in vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at www.seiaakerala.org . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the office of this Authority as confirmation.	Advertised in the news paper.

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, are received while processing the proposal. The Clearance letter shall also be put on the website of the company by the proponent.	Copy of the EC letter is submitted to Gram Panchayat and acknowledgment is submitted SEIAA, Kerala.
37.	The Proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional office of MoEF, Govt. of India and also to the SEIAA Office.	Half yearly compliance report shall be submitted regularly to the Concerned Department as specified.
38.	The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft X 3 ft. 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 public	Details of Environmental Clearance are displayed. Photographs attached as Annexure 17
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.	Affidavit to follow the conditions stipulated in EC has been provided.
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.	Noted and shall be followed.
41.	The project proponent shall ensure that no natural water course and/ or water resources shall be obstructed due to any mining operation. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	Noted and shall be followed.
42.	Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the CPCB. Water sprinkling should be increased at places loading and unloading points &	Regular monitoring of Ambient Air Quality shall be carried out as per the Notification and water sprinkling shall be done to reduce

	transfer point to reduce fugitive emission.	dust emissions.
43.	The top soil, if any, shall be temporarily be stored in earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface runoff. 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 of rehabilitated areas should continue until vegetation becomes self sustaining.	Noted and shall be strictly followed as per the guidelines.
44.	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent runoff of water and flow of sediments directly into the rivers and other water bodies. The water so collected should be utilized for watering the mine area, roads, greenbelt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.	Noted and shall be followed.
45.	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having levels of PM ₁₀ and PM _{2.5} 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 CPCB.	Necessary actions to curb air pollution will be taken at the project site and shall ensure that the Ambient Air Quality parameters conform to the norms prescribed by the CPCB.
46.	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading points and transfer points should be provided and properly maintained.	Noted and shall be followed.
47.	Measures should be taken for control of noise levels below 85 dBA in the work environment.	Noted and will be followed. Noise level monitoring report is attached as Annexure 18
48.	A separate environmental management cell with suitable qualified personnel should be set up under the control of Senior Executive, who will report directly to the Head of the Organization.	Environmental Monitoring Cell headed by Quarry Manager along with qualified Environmental Consultant / Engineers is being engaged for effective implementation of the

		pollution control measures.
49.	The funds earmarked for environmental protection measures and CSR activities should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA office.	CSR activities as agreed is being taken up. Refer Annexure 8
50.	The Regional Office of MoEF&CC located in 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	Noted and full cooperation shall be given.
51.	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.	Noted.
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.	Noted.
53.	The SEIAA may revoke or suspend the order, for non implication of any of the specific or this implementation of any of the above conditions or stipulate any further condition in the interest of environment protection.	Noted.
54.	The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license or consent given by any other authority for the same project.	Noted.
55.	This order is valid for a period of 5 years or the expiry date of mine lease period issue by the Government of Kerala, whichever is earlier.	Noted.
56.	The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or the project, in any court of law.	Noted.
57.	The mining operations shall be restricted to above ground water table and it should not intersect the ground water table.	Noted and will be strictly adhered.
58.	All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution testing centre. Washing of all vehicles shall be	All Vehicles used within the quarry areas are having PUC certificate.

	inside of the lease area.	
59.	Project proponent shall obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.	Noted and shall be followed.
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 SEIAA.	Noted and shall be followed.
61.	Occupational health surveillance program of the workers should be undertaken periodically to observe any contradictions due to exposure to dust and take corrective measures, if needed.	Regular health checkups for the workers shall be done.

Half yearly Compliance Report

Photographs of Boundary Pillars

ANNEXUE 1

ANNEXURE 1



Half yearly Compliance Report

Photographs of Fencing

ANNEXURE 2

ANNEXURE 2



Photographs showing fencing with barbed wires

Half yearly Compliance Report

Photographs of Govt.
excess land demarcation

ANNEXURE 3

ANNEXURE 3



Half yearly Compliance Report

Photograph of Excavated Pit as pond

ANNEXURE 4

ANNEXURE 4



Photograph showing the excavated pit retained as rainwater storage pond

Half yearly Compliance Report

Photographs of Greenbelt

ANNEXURE 5

ANNEXURE 5



Photographs showing the development of greenbelt in the project area

Half yearly Compliance Report

Photograph of Rainwater Harvesting Structure

ANNEXURE 6

ANNEXURE 6



Photograph showing the rainwater harvesting tank

Half yearly Compliance Report

Photograph of Dust Suppression

ANNEXURE 7

ANNEXURE 7



Dust suppression using water tankers

Half yearly Compliance Report

CSR Receipts

ANNEXURE 8

ANNEXURE 8

12 പേര് ലാലി ശ്യാമപ്രസാദ് വിദ്യാപേര് പ്രൊത്യാനന്തൻ
 സ്ഥലം മുണ്ടിപ്പാലം വിദ്യാനമ്പർ 172 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 3000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

ജനറലിസ്റ്റ്
 2/11/18

എന്ന്,
 പേര് മുരളീധരൻ
 ഒപ്പ് murthi

13 പേര് രമണി വിദ്യാപേര് സെല്വദൂരൻ
 സ്ഥലം കോലാമ്പി വിദ്യാനമ്പർ 71 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 1000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

കോലാമ്പി
 10/11/18

എന്ന്,
 പേര് രമണി
 ഒപ്പ് [Signature]

14 പേര് എ.ജെ.ജെ. മനോൻ വിദ്യാപേര് പ.വ.ദേവൻ
 സ്ഥലം മുണ്ടിപ്പാലം വിദ്യാനമ്പർ 191 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 1600 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

ജനറലിസ്റ്റ്
 23/11/18

എന്ന്,
 പേര് എ.ജെ.മ

5 പേര് ലതീഷ് ലാൽ വിട്ടുപേര് ലതീഷ് ലാൽ പദ്മിനി പദ്മിനി
 സ്ഥലം ഇന്റർനാഷണൽ വിട്ടുനമ്പർ 194 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 5000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

2/7/18
 ഇന്റർനാഷണൽ

എന്ന്,
 പേര് ലതീഷ് ലാൽ
 ഒപ്പ് Real Home

6 പേര് ലീല നളി വിട്ടുപേര് ലീല നളി
 സ്ഥലം ഇന്റർനാഷണൽ വിട്ടുനമ്പർ ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി വിട്ടുപേര് 1000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

9/8/18
 ഇന്റർനാഷണൽ

എന്ന്,
 പേര് ലീല നളി
 ഒപ്പ്

4 പേര് ഭദ്രേശ്വരി വിട്ടുപേര് ഭദ്രേശ്വരി
 സ്ഥലം ഇന്റർനാഷണൽ വിട്ടുനമ്പർ 203 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 10000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

23/8/18
 ഇന്റർനാഷണൽ

എന്ന്,
 പേര് ഭദ്രേശ്വരി
 ഒപ്പ്

19

പേര് മധുവിന വിദ്യാപേര് മധുവിന
സ്ഥലം മുത്തശ്ശേരി വിദ്യാനമ്പർ 15 ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി 10000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

മുതലർമ്മ
6/12/18

എന്ന്,

പേര് മധുവിന
ഒപ്പ് [Signature]

18

പേര് ജനകി വിദ്യാപേര് മധുവിന
സ്ഥലം മുത്തശ്ശേരി വിദ്യാനമ്പർ _____ ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി 6000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

മുത്തശ്ശേരി
1/12/18

എന്ന്,

പേര് ജനകി
ഒപ്പ് [Signature]

16

പേര് ജേനീസ് വിദ്യാപേര് മധുവിന
സ്ഥലം ചി.ദേശി വിദ്യാനമ്പർ 13 ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഒർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി 10000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

ചി.ദേശി
24/11/18

എന്ന്,

പേര് ജേനീസ്

പേര് ദ്രോണമണി വിദ്യാപേര് തോലിംചാലിൻ
 സ്ഥലം ഉമ്മിപ്പാറ വിദ്യാനമ്പർ 203 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും വീടിന്റെ പണിക്കായി
85, ചാലപ്പാടി കിഴക്കൻ ഭാഗം
 എന്നിവ കൈപ്പറ്റിയിരിക്കുന്നു. ടി മെറ്റീരിയലിന്റെ വില 16000 രൂപയാണ്.

23/6/18
ഉമ്മിപ്പാറ

എന്ന്,
 പേര് ദ്രോണമണി
 ഒപ്പ് [Signature]

13
 പേര് ദ്രോണി വിദ്യാപേര് ചെറുശ്ശീർ
 സ്ഥലം അമ്മിപ്പാറ വിദ്യാനമ്പർ 9 നമ്പർ 61 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും വീടിന്റെ പണിക്കായി
ചാലപ്പാടി
 എന്നിവ കൈപ്പറ്റിയിരിക്കുന്നു. ടി മെറ്റീരിയലിന്റെ വില 5000/- രൂപയാണ്.

അമ്മിപ്പാറ
 24/10/18

എന്ന്,
 പേര് ദ്രോണി
 ഒപ്പ് [Signature]

14
 പേര് ദ്രോണി വിദ്യാപേര് അമ്മിപ്പാറ
 സ്ഥലം ഉമ്മിപ്പാറ വിദ്യാനമ്പർ 36 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലീസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും വീടിന്റെ പണിക്കായി
ചാലപ്പാടി
 എന്നിവ കൈപ്പറ്റിയിരിക്കുന്നു. ടി മെറ്റീരിയലിന്റെ വില അമ്മിപ്പാറ രൂപയാണ്.

ഉമ്മിപ്പാറ
 13/12/18

എന്ന്,
 പേര് ദ്രോണി

8. മിരോസൺ വിട്ടുപോർ മെന്റലി പനസിൽ
 സ്ഥലം മിരോസിൽ വിട്ടുനമ്പർ 60 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി രണ്ടുപതിരം രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

18/9/2018
 ഉബൈദാക്ക

എന്ന്,
 പേര് മിരോസൺ
 ഒപ്പ് [Signature]

7. ജോർജ്ജ് വിട്ടുപോർ മുറിനാഥം
 സ്ഥലം ചിലപ്പ വിട്ടുനമ്പർ 4 ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 3000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

ചിലപ്പ
 16/9/18

എന്ന്,
 പേര് ജോർജ്ജ്
 ഒപ്പ് [Signature]

9. മിനി വിട്ടുപോർ മെന്റലി പനസിൽ
 സ്ഥലം മെന്റലി വിട്ടുനമ്പർ ൽ താമസിക്കുന്ന ഞാൻ
 പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
 DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
 മകന്റെ ചികിത്സയ്ക്കായി 3000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

മിനി
 2/10/18

എന്ന്,
 പേര് മിനി
 ഒപ്പ് [Signature]

10 പേർ സർക്കാർ വിദ്യാപേര് മിഴുഭരണമന്ദിരം
സ്ഥലം മിരശ്ശീശ്ശി വിദ്യാനമ്പർ 78 ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി രണ്ടുപിറാ രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

മിരശ്ശീശ്ശി
10/10/18

എന്ന്,
പേര് സർക്കാർ
ഒപ്പ് [Signature]

11 പേർ സർക്കാർ K.M വിദ്യാപേര് മിഴുഭരണമന്ദിരം
സ്ഥലം മിരശ്ശീശ്ശി വിദ്യാനമ്പർ 78 ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി 1000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

മിരശ്ശീശ്ശി
20/10/18

എന്ന്,
പേര് സർക്കാർ
ഒപ്പ് [Signature]

3 പേർ നഗ്നം വിദ്യാപേര് മെട്രിക്സ് മന്ദിരം
സ്ഥലം മിരശ്ശീശ്ശി വിദ്യാനമ്പർ 113 ൽ താമസിക്കുന്ന ഞാൻ
പാഠമടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ ഭർത്താവിന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി രണ്ടുപിറാ രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

22/10/18
മിരശ്ശീശ്ശി

എന്ന്,
പേര് നഗ്നം
ഒപ്പ് [Signature]

15 പേര് ശ്രീമിത വിദ്യാപേര് മാത്യുജോസ്
സ്ഥലം മമ്മൂരി വിദ്യാനമ്പർ 193 ൽ താമസിക്കുന്ന ഞാൻ
പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ പിതാവ് / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി 2000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

ശ്രീമിത
24/4/18

എന്ന്,

പേര് ശ്രീമിത
ഒപ്പ് [Signature]

17 പേര് മനീ വിദ്യാപേര് കിരൂത്തിൽ കിര
സ്ഥലം പിള്ളൂരി വിദ്യാനമ്പർ 37 ൽ താമസിക്കുന്ന ഞാൻ
പാഠഭടയുടെ ഉടമസ്ഥനായ ഷിജു തോമസ് പക്കൽ ലിസ് നമ്പർ (55/17-18/6319/M3/2016/
DMG E-C നമ്പർ 1/2016/DEIAA/IDK/KERALA) നിന്നും എന്റെ മകന്റെ / ഭാര്യയുടെ /
മകന്റെ ചികിത്സയ്ക്കായി പിള്ളൂരി രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

പിള്ളൂരി
28/11/18

എന്ന്,

പേര് മനീ
ഒപ്പ് [Signature]

Half yearly Compliance Report

Photographs showing
Blasting Time displayed

ANNEXURE 9

ANNEXURE 9



Half yearly Compliance Report

Certificate of Mines Manager

ANNEXURE 10



भारत सरकार/ Govt. of India
 श्रम एवं रोजगार मंत्रालय/ Ministry of Labour & Employment
 खान सुरक्षा महानिदेशालय/ Directorate General of Mines Safety
 बंगलुरु क्षेत्र, द.अ./Bangalore Region ,SZ.



E-Mail : dir.bqr@dqms.gov.in

No.5, 17th Main, 100 ft Road, 4th Block
 Koramangala, Bangalore- 560034(Karnataka)
 Tel: , 080-25535971-74 FAX: 080-25535972

सं./SZ/BGR/KER/IDU/18/Auth-34(6)/P-95/2016-17/

बंगलुरु, दिनांक,

2017.

प्रेषक,

खान सुरक्षा निदेशक,

बंगलुरु क्षेत्र, द.अ.।

सेवा में,

Shri Shiju Thomas ,

Owner: Shiju Thomas Stone Quarry,

Pallivathukkal House,Chilavu Post,

Thodupuzha,Village:Thodupuzha District: Idukki, Kerala-685 588

वषय:-Authorization under Regulation 34(6) of MMR, 1961 in favour of Sri Gujiri Krishna Chandra, holder of Second Class Manager's Certificate (Restricted) to work as manager of Shiju Thomas Stone Quarry in Vill: Alakkodu, Taluk: Thodupuzha, Dist: Idukki, (Kerala).

सहायक

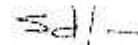
Please refer to your letter No.Nil dated 07.10.2017 on the above subject.

In view of what has been stated in your application, I, in exercise of the powers conferred on the Chief-Inspector of Mines (also designated as Director General of Mines Safety) under the provisions of Regulation 34(6) of the Metalliferous Mines Regulations, 1961 and by virtue of the authorization granted to me by the Chief Inspector of Mines under Section 6(1) of the Mines Act, 1952, I, do hereby authorize Sri Gujiri Krishna Chandra, holder of Second class Manager's certificate (Restricted), Certificate-No: SMR-5737 dated 25.08.2015, to act as Manager of Shiju Thomas Stone Quarry in Vill: Alakkodu, Taluk: Thodupuzha, Dist: Idukki, (Kerala) i.e **up to 30.10.2018**, subject to the following conditions:

1. Manager shall not take up any appointment in any capacity whatsoever in another mine.
2. If required, deep hole drilling machinery not exceeding 100 mm diameter may be deployed with maximum two loading machines with oppo in the mine.
3. In case, deep hole blasting with hole diameter not exceeding 100mm has to be conducted, it shall be carried out under the personal supervision of the manager. Blasting parameters of each blast with a sketch showing the drilling pattern and the holes charged shall be maintained in register kept for the purpose for each blast.
4. The average daily employment of persons at the mine shall not exceed 100 in all, underground workings shall not be made and consumption of explosives per day shall not exceed 500Kgs.
5. No ore dressing/handling/processing plant is attached with the mine.
6. The provisions of Regulation 164(1-A)(c) and 164(1-B)(a) shall be strictly complied with.

7. Where by reason of absence or for any other reason, the manager is unable to exercise daily personal supervision, a person holding at least a valid Foreman's Certificate shall be authorized to act as Manager of the mine in compliance with Regulation 34(7) (a) (1) and if no such qualified person is available, the mine workings should be kept suspended during such absence of the Manager. Attention is drawn to Regulation 34(7)(a) and (b) in respect of the period of authorization permitted, intimation of authorization to Director General of Mines Safety, Dhanbad and the undersigned etc.
8. The above authorization shall stand cancelled as soon as the person to whom it is being granted leaves the service at the mine under reference.
9. Intimation about the termination of manager as a result of his Transfer/Termination of Service/Resignation shall also be submitted in Form I of the First Schedule immediately.
10. Notwithstanding anything contained above, the authorization may be withdrawn at any time as provided in the aforesaid Regulation.
11. If at any time any one of the conditions, subject to which this authorization has been granted, is violated or not complied with, this authorization shall be deemed to have revoked with immediate effect.
12. In the event of any change in the circumstances connected with this authorisation, intimation thereof shall be sent to this Directorate.
13. This authorisation is being granted without prejudice to any other statutory provisions, which may be or may become applicable at any time.
14. This authorisation may be amended, modified or withdrawn at any time if considered necessary in the interest of safety.

आपका विश्वसनीय,




खान सुरक्षा निदेशक,
बैंगलुरु क्षेत्र, द.अं.

स./SZ/BGR/KER/IDU/18/Auth-34(6)/P-95/2016-17/ 182 A-

बैंगलुरु, दिनांक, 08.11.2017

Copy forwarded for information and necessary action to:

✓ Manager, Shiju Thomas Stone Quarry of Shri Shiju Thomas, Pallivathukkal House, Chilavu Post, Thodupuzha, Village: Thodupuzha, District: Idukki, Kerala-685 588


खान सुरक्षा निदेशक,
बैंगलुरु क्षेत्र, द.अं.

Half yearly Compliance Report

Photograph showing
Benches

ANNEXURE 11

ANNEXURE 11



Photograph showing the formation of benches

Half yearly Compliance Report

Photograph showing
workers with PPE's

ANNEXURE 12

ANNEXURE 12



Photograph showing the workers wearing PPE's

Half yearly Compliance Report

Photograph showing
Magazine

ANNEXURE 13

ANNEXURE 13



Photograph showing the explosives stored in Magazines

Half yearly Compliance Report

Consent from KSPCB

ANNEXURE 14

FILE NO : PCB/IDK/CTO/ 85 /2017

Date of issue : 25/04/2017



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

K E R A L A and A L A

The Environment (Protection) Act, 1986

As per Application No. :5189621

Dated:25-04-2017

TO

M/s QUARRY OF SHIJU THOMAS

Chilavu P.O

Chilavu

Consent No. :PCB/IDK/ICO/145/2017

Valid Upto :25/04/2020

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	25/04/2020
2	Name and Address of the establishment	QUARRY OF SHIJU THOMAS CHILAVU P O CHILAVU, THODUPUZHA 685588
3	Communication	Telephone :91-9447522690 Fax :- E-mail:shijuthomasmariya@gmail.com
4	Occupier Details	Sri. Shiju Thomas Pallivathukkal (H) Chilavu P O Chilavu
5	Local Body	Alakkode Panchayathu
6	Survey Number	294/1pt,294/2pt,295/5,295/6pt,296/2pt,356/1-1(4.3049 H)
7	Village	Alakkodu
8	Taluk	THODUPUZHA
9	District	IDUKKI
10	Capital Investment(Rs in Lakhs)	43
11	Scale	Small
12	Category	RED
13	Annual fee(Rs)	6560
	Total Fee remitted(Rs)	19680
14	RAW MATERIAL	PRODUCTS
	Rock @300 Metric Tonnes	Granite building stone @300 Metric Tonnes
15	Total Power Required (HP)	300 HP



2. CONDITIONS AS PER

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

- 2.1 In case of generation of trade effluent from the industry, effluent treatment system consisting of treatment units having adequate capacity established as per the Integrated Consent to Establish issued shall be operational at all times during which the industry is functional. Additional facilities required, if any, to achieve the standards laid down by the Board u/s 17(b) (g) of the Water Act shall also be made along with.
- 2.2 Water consumption: 170:0
- 2.3 Effluent generation: 15:0 liter/day
- 2.4 The characteristics of effluent after treatment shall conform to the following tolerance limits:

SI.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

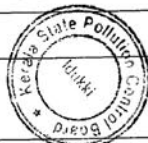
- 2.5 Mode of disposal of treated effluent: septic tank , soak pit(Domestic)

3. CONDITIONS AS PER

The Air(Prevention and Control of Pollution)Act, 1981

3.1 Adequate air pollution control measures shall be operational at all times during the functioning of the industry. Additional facilities required, if any, to achieve the standards laid down by the Board shall also be made along with.

Stack No.	Sources of Emission	Emission Rate(Nm3/Hr)	Stack Height above		Control Equipment
			Ground Level	Roof Level	



3.2 Emission characteristics shall not exceed the following:

Sl.No.	Parameter	Limiting Standards (mg/Nm3)

4. CONDITIONS AS PER

The Environment (Protection) Act, 1986.

4.1 The operation of the industry shall be strictly in compliance with the provisions of the Noise Pollution (Regulation and Control)-Rules 2000.

4.2 Used lead acid batteries shall be disposed of as per the Batteries (Management and Handling) Rules, 2001

4.3 Hazardous waste generated, if any, shall be handled as per the Hazardous and Other Wastes (Management and Transboundary Movement)-Rules, 2016.

4.3.1 Activities for which Authorisation is granted

Collection	transport
Reception	Storage
Treatment	Reprocessing/Disposal

4.3.2 Type, quantity and mode of storage/collection/disposal of hazardous wastes shall be as follows:

Sl.No.	Hazardous Waste	Schedule Category	Quantity/Tonne/year
Mode of			
	Storage		Disposal

4.4 E-waste shall be disposed off safely as per the Waste (Management)Rules, 2016.

5. SPECIFIC CONDITIONS

5.1. This consent is granted subject to the power of the Board to review and make variation in all or any of the conditions and based on the affidavit submitted by the occupier in Rs. 100/- stamp paper dated 25.04.2017 and based on the Environmental Clearance no:1/2016/deiaa/idx/ker dated 20/04/2017 Issued by the member secretary DEIAA, Idukki, letter of intent No.6319/M3/2016 dated 14.07.2016 issued by the



Mining and Geology Department and location sketch attached issued by the Tahsildar Thodupuzha dated 08.02.2016 along with.

- 5.2. The consent issued is subject to conditions specified in the clearances issued by the Mining & Geology Department and Explosive Department and the Environmental Clearance, as per the provisions of the relevant statutes.
- 5.3. There shall be a minimum distance of 100 m from the quarrying point to the nearest residence.
- 5.4. Blasting with electric detonators shall be limited to a maximum of 5 nos. at a time.
- 5.5. Blasting and quarrying shall be done without causing any nuisance or damage to occupants of adjoining or neighboring land or building or causing damage to health, life or property.
- 5.6. Proper fencing of the quarry area shall be done to avoid hazards and accidents.
- 5.7. The PM10 in ambient air at the boundary shall not exceed 100 micro gram/m³.
- 5.8. The sound level in d B (A) Leq at 1m outside the boundary of the site should not exceed the ambient noise standard applicable to the adjoining areas.
- 5.9. Proper fencing/barrier shall be provided and maintained all around the abandoned deep quarry pits if any to avoid accidents.
- 5.10. Air compressors used for quarrying shall be acoustically enclosed to control the noise.
- 5.11. Noise creating activities such as drilling, blasting, breaking loading etc shall not be done during 6 pm to 8 am.
- 5.12. The quarrying operation shall conduct only after obtaining necessary D&O license from local self Government Institutions.
- 5.13. The location of the quarrying area shall be as shown in the location sketch issued from the Tahsildar Thodupuzha, attached along with the application.
- 5.14. Prior signals such as siren shall be blown before and after each blasting period.
- 5.15. The consent issued from the Board will be valid only for a period during the period when the 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, Environment Protection Act 1986 and Rules there under. The operation of the unit shall be commenced only at obtaining clearances from all concerned authorities.

DATE :25/04/2017



SIGNATURE & SEAL OF ISSUING AUTHORITY
**Asst. Environmental Engineer
in full additional charge of
Environmental Engineer**

To

1. Member Secretary, KSPCB, Thiruvananthapuram.
2. Chief Environmental Engineer, Regional Office, Ernakulam.
3. Stock file

Half yearly Compliance Report

Air Quality Monitoring Reports

ANNEXURE 15



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	Certificate No:	PL/AMB/RT/5892/2018
Mr. Shiju Thomas. Pallivathukal (H) Chilavu Post, Thodupuzha, Idukki Pin:685588	Date of issue:	22/09/2018
	Date of monitoring	11/09/2018 12.00 Hrs to 12/09/2018 12.00 Hrs
	Date of sample received:	13/06/2018
	Date of analysis	14/09/2018
	Monitoring Location	Quarry owned by Mr. Shiju Thomas SY Nos.294/1 Pt, 294/2 Pt, 295/5, 295/6 Pt, 296/2 Pt & 356/1-1 Pt. Taluk : Thodupuzha Village : Alakode District : Idukki, 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 ₁₀)	I S 5182 Part 23 2006	48.3 µg/m ³	100 µg/m ³
02	Particulate Matter (PM _{2.5})	WI/AMB2.5/01	23.3 µg/m ³	60 µg/m ³
03	Sulphur dioxide	I S 5182 Part 2 2001	8.8 µg/m ³	80 µg/m ³
04	Nitrogen dioxide	IS 5182 Part 06 2006	5.3 µg/m ³	80 µg/m ³

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.
	 AUTHORIZED SIGNATORY

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

Half yearly Compliance Report

Water Quality Analysis Reports

ANNEXURE 16



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

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TEST REPORT

Page 01 of 02

Ref.No. PL/RT/SW/5892/2018

Date of Issue: 22/09/2018

Name & address of customer

: Mr. Shiju Thomas, Pallivathukal (H), Chilavu P O
Thodupuzha (Via), Idukki

Project Site

: Quarry Owned by Mr. Shiju Thomas
Sy Nos.294/1 |Pt, 294/2 Pt, 295/5, 295/6 Pt, 296/2 Pt
& 356/1-1 Pt.

Taluk : Thodupuzha

Village: Alakode

District: Idukki, Kerala

Sample drawn by

: PoluChem Laboratory Sample Collector

Sample description

: Water Sample

Location of sampling

: Pond Water- Out Side – North Side.

Date of sample collected

: 12/09/2018

Date of analysis started

: 13/09/2018

Date of completion of analysis

: 20/09/2018

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983	6 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984	1 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983	6.92	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 15 – 1984	92 mg/l	500 mg/l
Total Hardness as CaCO ₃	IS 3025 (P) 21 – 1983	28.4 mg/l	200 mg/l
Total Alkalinity as CaCO ₃	IS 3025 (P) 23 – 1986	21.6 mg/l	200 mg/l
Residual Chlorine	IS 3025 (P) 26 – 1986	BDL	0.2 mg/l
Chloride as Cl ⁻	IS 3025 (P) 32 – 1988	10.61 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991	6.22 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994	1.98 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003	0.13 mg/l	0.30 mg/l
Sulphate as SO ₄	IS 3025 (P) 31 – 1988	11.11 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 – 2008	0.15mg/l	1.0 mg/l

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

Authorized Signatory

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.



POLUCHEM LABORATORIES (P) LTD.

CHEMICAL, ENVIRONMENTAL AND MICROBIOLOGY LABORATORY

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Page 02 of 02

Continuation of Test Certificate No: 5892/2018

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 – 2003	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37– 1988	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42– 1992	BDL	0.05 mg/l
Manganese as Mn	IS 3025(P) 59– 2006	BDL	0.1 mg/l
Cadmium as Cd	IS 3025(P) 41– 1992	BDL	0.003 mg/l
Chromium as Cr	IS 3025 (P)52 – 2003	BDL	0.05 mg/l
Zinc as Zn	IS 3025(P) 49 – 1994	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 – 1994	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27 – 1986	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47– 1994	BDL	0.01 mg/l
Aluminum as Al	IS 3025 (P) 5 – 2003	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57– 2005	BDL	0.5 mg/l

Note : BDL – Below Detection Level

MICROBIOLOGY ANALYSIS

Parameters tested	Unit	Test method	Results	Acceptable Limit As per IS – 10500-2012
Coliforms	MPN/100ml	IS 1622: 1981	118	Absent
E coli	Present or Absent/100ml	IS 1622: 1981	Absent	Absent

For PoluChem Laboratories (P) Ltd

Authorized signatory

* 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.

SREEJA RAMESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.

Half yearly Compliance Report

Photographs showing EC
Conditions displayed

ANNEXURE 17



ലൈസൻസി : ഷിജു തോമസ്, പള്ളിവാതുക്കൽ, ചിലന്ദ് പി. ഒ., ഇഞ്ചിയാനി
 ഇല്ല : ഇടുക്കി
 താലൂക്ക് : തൊടുപുഴ
 വില്ലേജ് : ആലക്കോട്
 സർവ്വേ നമ്പർ : 294/1, 294/2, 295/5, 295/6, 296/2, 356/1-1
 വിസ്തീർണ്ണം : 4.3049 ഹെക്ടർ
 E.C. No. : 1/2016/DEIAA/IDK/KERALA.
 dtd:20/04/2017 to 19/04/2022
 LEASE ORDER NO : 55/2017-18/6319/M3/2016 DMG dtd:04/05/2017
 LEASE STARTING DATE: 10/05/2017 ending date: 09/05/2029
 D & O LICENSE : 27/04/2017 to 31/03/2018
 NAME OF MINERAL : Granite (Building Stone)
 ANNU LIC PRODUCTION : 1,45,000 METRIC TONNE

Half yearly Compliance Report

Noise Level Monitoring Reports

ANNEXURE 18



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	Certificate No:	PL/RT/SD/5892/2018
Mr. Shiju Thomas. Pallivathukal (H) Chilavu Post, Thodupuzha, Idukki Pin:685588	Date of issue:	22/09/2018
	Date of monitoring	11/09/2018 12.00 Hrs to 12/09/2018 12.00 Hrs
	Monitoring Location	Quarry owned by Mr. Shiju Thomas SY Nos.294/1 Pt, 294/2 Pt, 295/5, 295/6 Pt, 296/2 Pt & 356/1-1 Pt. Taluk : Thodupuzha Village : Alakode District : Idukki, Kerala
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
East side boundary	12.00 Hrs	44.9 dB (A)
	13.00 Hrs	46.4 dB (A)
	14.00 Hrs	47.2 dB (A)
	15.00 Hrs	49.6 dB (A)
	16.00 Hrs	40.4 dB (A)
	17.00 Hrs	39.9 dB (A)
	18.00 Hrs	38.4 dB (A)
	19.00 Hrs	34.4 dB (A)
	20.00 Hrs	33.9 dB (A)
	21.00 Hrs	33.9 dB (A)
	22.00 Hrs	33.4 dB (A)
	23.00 Hrs	34.5 dB (A)
	00.00 Hrs	35.8 dB (A)
	01.00 Hrs	36.6 dB (A)
	02.00 Hrs	37.1 dB (A)
	03.00 Hrs	38.9 dB (A)
	04.00 Hrs	39.4 dB (A)
	05.00 Hrs	38.4 dB (A)
	06.00 Hrs	39.2 dB (A)
07.00 Hrs	40.7 dB (A)	
08.00 Hrs	41.2 dB (A)	
09.00 Hrs	42.5 dB (A)	
10.00 Hrs	43.3 dB (A)	
11.00 Hrs	41.6 dB (A)	
Leq (Day time)		44.3 dB (A)
Leq (Night time)		33.4 dB (A)

*End of the Report *

For Poluchem Laboratories (P) Ltd.

Authorized Signatory

SREEJA RAJESH
QUALITY MANAGER
POLUCHEM LABORATORIES (P) LTD.