

To,

Director  
Department of Environment and Climate Change  
Government of Kerala

Sub: Environmental Clearance – Proposed quarry Project at Sy. No:229 of Vandazhi-1 Village, Alathur Taluk, Palakkad District, Kerala ,for an area of 0.9712 Ha - Compliance report-Reg.

Ref: Environmental Clearance No. DIA/KL/PL/25/2018 dt. 29/11/2018

Respected Sir,

Our Quarry project was accorded with Environmental Clearance vide Environmental Clearance No. DIA/KL/PL/25/2018 dt. 29/11/2018. The compliance report of the specific and general conditions of the Environmental clearance is enclosed.

Thanking You,

Yours Faithfully



Prakash.N

Proprietor

Copy to

The Regional Director

MoEF Regional Office , southern zone, KendriyaSadan, 4<sup>th</sup> Floor,

E&F Wing , II Block, Koramangala , Bangalore-560034.

Encl :as above

**Quarry Project of**

**Shri.Prakash.N**

**Vandazhi-1 Village**

**Alathur Taluk**

**Palakkad District**

**Kerala State**

# **1<sup>st</sup> Half Compliance Report**

**(April-September,Up to December 2019)**



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## **I.ABOUT THE PROPONENT**

Sri.Prakash.N, possess quarry project in Vandazhi-1 village,Alathur Taluk and Palakkad District, Kerala state.

District Environment Impact Assessment Authority (DEIAA)Palakkad accorded Environmental Clearance, No: DIA/KL/PL/25/2018 dt.29-11-2018 to the quarry project in Vandazhi-1 village,Alathur Taluk and Palakkad District, Kerala state

The quarry project is controlled and managed by Sri.Prakash.N, Prakash Nivas,Mudappalloor(po), Alathur,Palakkad District, Kerala state.

## **II.ABOUT THE PROJECT**

### **1. project category**

The project comes under the Category Activity 1(a), (i) of schedule of EIA Notification 2006 and subsequence amendments.

### **2. project location**

Sy. No. 229 at Vandazhi - I Village, Alathur Taluk, Palakkad District, Kerala State. The proposed project site falls within 10°32'18.59" N to 10°32'.29.99" N and 76°32'11.45" E to 76°32'17.46" E.

### **3. project extend and activity**

The project is for quarrying of building stone from an area of 0.9712 Ha of land located as specified above. The average production capacity is 60,000 MTA

### **4. project description**

The proposed 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 proposed project does not involve any underground mining activities. The mining is done by open cast semi mechanized method.

## III.REPORT OF COMPLIANCE

### A.SPECIFIC CONDITIONS

SI NO	STIPULATIONS IN EC	STATUS OF COMPLIANCE	REMARKS
S1	The natural flow of river seen in the northern side of the applied area should not be disturbed. Outflow of sediment water from the quarry should not be allowed to the river and for this a sedimentation tank of proper size should be put in to operation.	The direction contained shall be scrupulously followed	
S2	Quarrying should be practised in benching system as mentioned in approved mining plan. .	The direction contained shall be scrupulously followed.	
S3	A qualified person shall be appointed to control,direct,manage and supervise the quarrying operations..	The direction contained shall be scrupulously followed	
S4	The approach road to the quarry shall be in good motorable condition.	The approach road to the quarry is in good condition	
S5	Controlled blasting should be practised and blasting shall be done only during day time.	Blasting shall be done only during day time.	Plate No:1 Blasting time Display board.
S6	Plantation shall be done which includes a greenbelt of adequate width around the mining lease area excluding the rocky area, along roads, overburden dumps and non-mineralised area by planting suitable native species in consultation with the Local DFO/Agricultural Department.	The direction contained shall be scrupulously followed	
S7	A rain water structure shall be provided in the northern side outside the applied area	The direction contained shall be scrupulously followed	

S8	The drains should be regularly de silted and maintained properly. Check dam and gully checks shall be constructed where ever required to arrest siltation.	The direction contained shall be scrupulously followed	
S9	Fencing must be maintained properly all around the lease area.	The direction contained shall be scrupulously followed	
S10	Appropriate sign board should be displayed.	The direction contained shall be scrupulously followed	Plate No:2 Sign board board
S11	The blasting time must be displayed and strictly adhered to.	The direction contained shall be scrupulously followed	Plate No:1 Blasting time Display board
S12	Dust suppression mechanism must be in place.	The direction contained shall be scrupulously followed	
S13	Health and welfare measures for the persons employed shall be implemented.	The direction contained shall be scrupulously followed	
S14	Overburden shall be properly stacked and suitably protected from soil erosion by planting fodder grass and leguminous plants during temporary storage.	The direction contained shall be scrupulously followed	

## B.GENERAL CONDITIONS

SI 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,	Provision is made for storage of rain water.	
G-2	Environment Monitoring Cell as Agreed under the affidavit filed by the proponent should be formed and made functional.	An Environment Monitoring Cell is constituted and made functional. It meets regularly once in a month.	
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.	Solar energy generation and utilization is being explored	
G-5	Sprinklers shall be installed and used in the project site to contain dust emissions.	Sprinklers are installed in project site.	



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 out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with 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 the 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 in tune with the conditions specified in the Companies Act, 2013.	Activities towards Corporate Social Responsibility are being done in tune with the conditions specified in the Companies Act, 2013.	.
G-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.	The direction contained shall be scrupulously followed	
G-10	Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per Stipulations of Explosive Department.	Warning alarms shall be installed in the project site.	

G-11	Control measures on noise and vibration prescribed by KSPCB should be implemented.	Scrupulously follows the directions contained	
G-12	Quarrying activities should be limited to day time as per KSPCB guidelines.	Scrupulously follows the directions contained.	Attached as Plate 1 – Blasting time display board
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	
G-14	A licensed person should supervise/control the blasting operations.	Scrupulously follows the directions contained.	
G-15	Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.	Access roads to the quarry site are tarred.	Plate No:4
G-16	Overburden materials should be managed within the site and used for reclamation of mine pit as per mined closure plan/ specific conditions.	Overburden is stacked in pre-determined site specified for the purpose.	
G-17	Height of benches should not exceed 5 m and width should not be less than 5 m.	Height of the benches is maintained at 5 x 5 m.	
G-18	Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.	Mats are used during vibration studies	

G-19	Maximum depth of mining from general ground level at site shall not exceed 10m.	The maximum depth of mining is now above ground level.	
G-20	No mining operations should be carried out at places having a slope greater than 45°.	It is ensured that no mining is carried out at places having a slope greater than 45°, if any.	
G-21	Acoustic enclosures should have been provided to reduce soundamplifications in addition to the provisions of green belt and hollowbrick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.	Scrupulously follows the directions contained.	
G-22	The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.	The workers on the site is provided with the required protective equipment such as ear muffs, helmet, etc.	
G-23	Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.	Garland drains are provided to channelize storm water.	
G-24	The transportation of minerals should be done in covered trucks to contain dust emissions.	The transportation of minerals is done in covered trucks to contain dust emissions.	
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.	Saplings are planted in the project site.	
G-26	Disposal of spent oil from diesel engines should be as specified under relevant	Not applicable	

	Rules/Regulations.		
G-27	Explosives should be stored in magazines in isolated place specified and approved by Explosive Dept.	Explosives are stored in magazine located in isolated place.	
G-28	A Minimum buffer distance of 100 m from the boundary of the quarry to the nearest dwelling unit or other structure , not being any facility for mining shall be provided	Statutory safe distance shall be maintained without fail.	
G-29	100 m buffer distance should be maintained from forest boundaries.	Statutory safe distance shall be maintained without fail.	
G-30	Consent from Kerala State Pollution, Control Board under Water and Air (Acts) should have been obtained before initiating mining activity.	: File No:PCB/PLKD/ICO/1100/7795249/2018,DT 13/12/2018,valid upto 28/11/2021is obtained from Kerala State Pollution control board .	. <b>Annexure 2-</b> Copy of consent variation order issued by Kerala State Pollution control board
G-31	All other statutory clearances should be obtained, as applicable, by project proponent from the respective competent authorities including that for blasting and storage of explosives.	Clearances are obtained from : Vandazhi Grama Panchayath (Lisence No:34/2019-20),dt 1/4/2019  :Petroleum and Explosive Safety organisation(No.E/SE/KL/22/157(E109529),valid up to 31-3-2022 : Copy of Quarrying permit issued by District Geologist,Dept.of Mining & Geology Palakkad	<b>Annexure 3:</b> Copy of ( Lisence No:34/2019-20),dt 1/4/2019,issued by Vandazhi Grama Panchayath <b>Annexure 4</b> Copy of License No.E/SE/KL/22/157(E109529), valid up to 31-3-2022 issued by Petroleum and Explosive Safety organisation <b>Annexure 5-</b> Copy of Quarrying permit issued by District

			Geologist, Dept. of Mining & Geology Palakkad
G-32	In the case of any change in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/ impacts as assessed, based on which only the E.C 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.	The company shall abide by the directions of SEIAA Kerala in such a context, if arises	
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.	The company shall abide by the directions of SEIAA Kerala in such a context, if arises	
G-34	The stipulations by Statutory Authorities under different Acts and Notifications should be complied with including the provisions of Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.		
	The project proponent should advertise in at least two local newspapers widely	scrupulously follows the directions contained.	

G-35	<p>circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. Of Kerala and may also be seen on the website of the Authority at <a href="http://www.seiaakerala.org">www.seiaakerala.org</a>. 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.</p>		
G-36	<p>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.</p>	<p>Copy of EC has been forwarded to Secretary Vandazhi Gramapanchayath 2.Copy of EC has been displayed in the notice board of company.</p>	
	<p>The proponent shall submit half yearly reports on the status of compliance of the stipulated EC</p>	<p>Conditions are being complied with. This report is in compliance with the sixth monthly compliance report.</p>	

G-37	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. It shall be sent to the Regional office of MoEF., Govt. of India and also to the STATE Environment Impact Assessment Authority (SEIAA) Office		
G-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.	The details of Environmental clearance are prominently displayed in the metallic board	<b>Plate No:3</b> Display board
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 be scrupulously followed.	Affidavit was submitted to SEIAA.	.
G-40	No change in mining technology and scope of working should be made without prior approval of SEIAA, No further expansion or modification in the mine shall be carried out without prior approval of the SEIAA, as applicable.	Scrupulously follows the directions contained	

G-41	The project proponent shall ensure that no natural water course and/or water resource shall be obstructed due to any mining operations. Necessary safeguarded measures to protect the first order streams, if any, originating from the mine lease shall be taken	Scrupulously follows the directions contained.	
G-42	Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended places loading and unloading points & transfer point to reduce fugitive emissions.	Scrupulously follows the directions contained.	<b>Annexure No:6</b>
G-43	The Top soil, if any, shall temporarily to be stored at earmarked sites, only. For the topsoil shall be used for land reclamation and plantation. The over burden generated during the mining operations shall be stacked at earmarked dump site only. the maximum height of the dumps shall not exceed 8 m and width 20m and overall slope of the dumps shall be maintained to 45°. the OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.	Scrupulously follows the directions contained.	
	Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run	Scrupulously follows the directions contained.	



G-44	off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilizing for watering the mine area. Roads, green belt development t etc. the drains shall be regularly desilted particularly after monsoon and maintained properly.		
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 PM <sub>10</sub> and PM <sub>2.5</sub> 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.	Scrupulously follows the directions contained.	
G-46	Fugitive dust emissions from all the sources should controlled regularly. Water spraying arrangement 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 85 dBA in work environment .	Scrupulously follows the directions contained.	
G-48	A separate environmental management cell with suitable qualified personal should be set-up under the control of a senior Executive ,who will report directly to the head of the organization .	An Environment management cell was formed with Sri.Prakash as head of the monitoring cell and made functional.	
G-49	The funds earmarked for environmental protection measures and CSR activities should be kept in separate account and should be reported to the state Environment Impact		

	Assessment Authority (SEIAA) office.		
G-50	The Regional Office of MOEF&CC Located at Bangalore shall extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data /information /monitoring reports		
G-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		
G-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 the this clearance and attract action under the provisions of Environment (protection)Act,1986		
G-53	The SEIAA 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 SEIAA reserves the right to alter /modify the above conditions or stipulate any further conditions in the interest of environment protection.		
G-54	The above conditions shall prevail not withstanding anything to the contrary in consistent ,or simplified, contained in any other lease,licence on consent given by 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 .		

G-56	The Environmental Clearance will be subject to the final order of the court 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.	Scrupulously follows the directions contained.	
G-58	All vehicles used for transportation and within the mines shall have PUC certificate from authorized pollution talking 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 authorities for drawl of requisite quantity of surface water and ground water for the project.	Scrupulously follows the 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 area shall be carried out and reported in the six monthly reports to SEIAA.		
G-61	Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and corrective measures ,if needed.	Scrupulously follows the directions contained.	

# PLATES

**Plate No:1**

**അപകട മേഖല  
DANGER ZONE  
QUARRING AREA**

**BLASTING TIME**

**7.00 am TO 5.00pm**

**അറിയിപ്പ്**

**അനുവാദം കൂടാതെ  
അന്യർക്ക് പ്രവേശനം  
പാടില്ല**

**Plate No 2**

**എസ്  
മാനേജ്മെന്റ്**

**PRAKASH GRANITES**

**VADAKKEKALAM, MANGALAM DAM PALAKKAD. 678706**

**1. NAME OF OWNER: N. PRAKASH**

**2. ENVOIRMENTAL CLEARANCE NO. DIA/KL/PL/25/2018**

**3. LOCATION SURVAY NO.**

**VANDAZHY I VILLAGE, ALATHUR THALUK,  
PALAKKAD ( DT ), KERALA**

**RE. SY. NO. 229**

**4. EXTEND OF AREA- 0.97.12 Ha.**

**POLICE - 100**

**FIRE - 101**

**AMBULANCE - 102**

**Plate No :3**



**Plate No:4**



**Plate No:5**

# **ANNEXURES**

**Proceedings of the District Environment Impact Assessment Authority  
Palakkad**

Present: D.Balamurali IAS, Chairman, Asif K Yusuf IAS, Member Secretary,  
Narendranath.V IFS, Member

Sub: Environmental Clearance for the building stone quarry project in Survey No. 229 of Vandazhi-I Village of Alathur Taluk, Palakkad District by Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District - EC Granted- Orders issued.

**District Environment Impact Assessment Authority, Palakkad**

**EC No. DIA/KL/PL/25/2018**

**Dated: 29/11/2018**

- Ref:
1. No. SO 190(E) dt: 20/01/16 of MoEF Government of India.
  2. Lr. No. LRG 5-2016/37766/9 dt: 17/06/2016, of District Collector, Palakkad.
  3. Lr. No. 4195/EC2/2015 SEIAA dt: 10/06/2016, 19/07/2016 of SEIAA, Thiruvananthapuram.
  4. Online application filed by Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.
  5. Minutes of the 21<sup>st</sup> meeting of DEAC held on 12/07/2018.
  6. Minutes of the 13<sup>th</sup> meeting of DEIAA held on 19/11/2018.

**ENVIRONMENTAL CLEARANCE NO. DIA/KL/PL/25/2018**

Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District vide his application received on 18/05/2018 has sought Environmental Clearance under EIA notification, 2006 for the quarry project in Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District for an area of 0.9712 Hectares. The project comes under category B Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50hectares) and as per O.M No. L-11011/47/2011-1A.11(MM) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-1A-II (I) dated 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares. Other details of the project are as under:

Location sy no/district, Taluk/ village etc.		Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District.	
GPS co- ordinates		Latitude(N)	N 10° 32' 18.59" N to 10° 32' 22.99"
		Longitude(E)	E 76° 32' 11.45" E to 76° 32' 17.46"
For mining projects	Extent of area (in hectares)	0.9712 Hectares	
	Minimum and maximum height of excavation (MSL)	90m to 122m	



Life of mine proposed	3 years
Ultimate depth of mining (in MRL)	90m (3 Years)
Distance from the adjacent quarry	There is no working quarry within 500m.
Capacity of production	60000 TPA
Details of project cost	30,00,000

### **ABOUT THE PROJECT**

#### ***Environmental Parameters Considered***

#### **WATER**

Water requirement & sources	The total requirement of water is 5.0 KLD. About 1.0 KLD is required for domestic consumption, 4.0 KLD is required for dust suppression and for green belt development. Ample water collected by rain water harvesting is available in the old pits in the southern boundary.
RWH units proposed	A rain water harvesting structure shall be provided in the northern side outside the applied area.
Facilities for liquid waste treatment	There will not be any disposal of water from mine and hence no treatment of water is required.
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	The drains should be regularly de silted and maintained properly. Check dams and gully checks shall be constructed wherever required to arrest siltation.
Water quality meeting requirements	There is no natural water body in the permit area. Mining operation will terminate much before the water table and there will not any intersection on the ground water body.
Does it have provisions for use of recycled water	No

#### **LAND**

Proximity of forest lands	No forest land near proposed area.
Access road to the site- width & condition	7 M. Private road. Road must be maintained in good motorable condition.
Storage of explosives/ hazardous substances	The controlled blasting is proposed by adopting all the safety measures as per MMR-1961 and with the permission of DGMS. The explosive by authorised blasting party himself and the blasting should be carried out by registered blasting contractor as per present practices.
Facility for solid waste management	Top soil generated/recovered shall be utilized for afforestation purposes and OB shall be used for reclamation and haul roads formation. There is no other solid waste anticipated during the quarrying operation.
Topographic features/slope	Topography of the quarry permit area is slopping towards North East. The slope steadily diminishes to 104m contour level in the North East of the quarry from the 122m on the South West.

Proneness of the area for landslides	There is no likelihood of any landslide at any stage.			
Significant land disturbance resulting in erosion, subsidence & instability	The final pit slope will not be kept at an angle steeper than 45° which is not likely to cause any problem in respect to the slope stability.			
Top soil, overburden etc.	Top soil and overburden thickness varies from about 0.5m to 1.5m. Top soil estimated to recover is 10000 tonnes.			
<b>AIR</b>				
Air quality meeting requirements	Quality of present ambient air is within permissible limit. There is no industrial activity in and around the proposed permit area. The mining has been proposed by semi-mechanised open cast method. Water spraying shall be done on service road, mining area, loading and unloading places etc. There shall not be any significant impact on ambient air quality.			
Noise level meeting requirements	Noise arising out of the quarrying and processing operations shall be abated or controlled by the lessee at the source so as to keep it within the permissible limit. By applying the air pollution control techniques, no significant noise impact is anticipated.			
Likely emissions affecting environment	No			
<b>ENERGY</b>				
Energy required	All quarry activities shall be carried out using deisel operated machineries and the quarry shall be worked only during day light hours.			
<b>BIO DIVERSITY</b>				
Presence of any endangered species or red listed category	No			
Loss of native species and genetic diversity	No			
Likely displacement of fauna	There is no wild life in core zone, buffer zone and permit area. The agricultural lands with rural activities all around the area do not provide favourable homeland to wild fauna.			
Any introduction of alien/ invasive species	No			
<b>SOCIAL SPECIES</b>				
Proximity to nearest habitation	There is no habitation within 100m radius of the proposed site.			
CSR related to the project/ allocation/ time frame	Sl No	Particulars	Approx. Amount	
			Recurring	Non- Recurring
	1	Health	Rs. 45,000/-	Nil
	2	Education	Rs. 30,000/-	Nil
	3	Social aspects	Rs. 25,000/-	Nil
	<b>Total</b>		<b>Rs. 1,00,000/-</b>	

## GENERAL

Does it have eco restoration programmes	During the mine closure stage, the mined out area of 0.6770 Ha shall be reclaimed by with plantation and 0.1 Ha shall retained as rain water harvesting pond.
Sufficiency of parking spaces/ traffic management	The existing transport facility will be utilised for the proposed project. The proposed project does not involve any closure or diversion of existing transport routes.
Litigation/ court cases, if any, against the project (provide details)	No
Right & nature of ownership of land	Private land
Is the property forest land/govt. Land/own land	Non forest private land
Details of Authorised signatory	Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.
Details of NABET approved EIA consultant organisation	Hareesh G Thampy 905 D-9th Street, Sankar Nagar Kaimanam P.O, Trivandrum. RQP/BNG/2296/2013/A

Field visit to the quarry project site of Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District was carried out on 10/07/2018 by the committee members of DEAC, Palakkad comprising Sri. Krishnan.M.N, Sri.K.C. Subramanyan and Sri. Rajesh.A. The proponent with his representatives was present at the site at the time of site visit.

The project is located in Survey No. 229 of Vandazhi-I Village of Alathur Taluk, Palakkad District. The applied area geographically falls in latitude N 10° 32' 18.59" N to 10° 32' 22.99" and longitude E 76° 32' 11.45" E to 76° 32' 17.46". The topography of the applied area is an elevated terrain with rocky land with sporadic wild shrubs and grass. An abandoned small quarry is situated in the south eastern part of the applied area. The quarry of TMT granites adjoins the southern boundary of the applied area. The highest elevation of the applied area is 122m above MSL and lowest elevation is 104m above MSL. The area is gently sloping towards northern direction. Managalam river flows at a distance of 110m from the northern boundary of the applied area. The top soil thickness varies from 0.5 to 1.5 mts. The top soil excavated as a part of quarrying activities shall be stacked separately at a predetermined place. The rock type found in the area is gneissic granitic charnockite. No dwelling units are seen in the immediate vicinity of the applied area.

*Based on the overall evaluation of the site the quarry operations may be recommended with general conditions subject to the following specific conditions.*

1. *The natural flow of river seen in the northern side of the applied area should not be disturbed. Outflow of sediment water from the quarry should not be allowed to the river and for this a sedimentation tank of proper size should be put in to operation.*
2. *Quarrying should be practiced by benching system as mentioned in the approved mining plan.*

3. *A qualified person shall be appointed to control, direct, manage and supervise the quarrying operations.*
4. *The approach road to the quarry must be in good motorable condition.*
5. *Controlled blasting should be practiced and blasting shall be done only during day time.*
6. *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 species in consultation with the local DFO/ Agriculture Department.*
7. *A rain water harvesting structure shall be provided in the northern side outside the applied area.*
8. *The drains should be regularly de silted and maintained properly. Check dam and gully checks shall be constructed wherever required to arrest siltation.*
9. *Fencing must be maintained properly all around the lease area.*
10. *Appropriate sign boards should be displayed.*
11. *The blasting time must be displayed and strictly adhered to.*
12. *Dust suppression mechanism must be in place.*
13. *Health and welfare measures for the persons employed shall be implemented.*
14. *The overburden shall be properly stacked and suitably protected from soil erosion by planting fodder grass and leguminous plants during temporary storage.*

The proponent Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District has remitted the processing charge of Rs. 48,560/- (Rupees Forty eight thousand five hundred and sixty Only) as per Chalan No. KL001768943201819M dt: 19/05/2018, Sub Treasury, Palakkad as online processing fee for Environmental Clearance in the name of O/o.Member Secretary, DEIAA, Palakkad (Head of Account-1425-00-501-99). Also the total amount of CSR activities (of 3 years) is Rs. 3,00,000/- (Rupees Three Lakhs only) which needs to be redrafted. An affidavit has been filed to the effect that the quarry has not functioned since 06/12/2016.

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 Managemant Plan in Chapter 11 of the Mining Plan and the mining features including progressive mine closure plan as submitted with the conditions and undertakings in mining, blasting, mine drainage, progressive mine closure plan of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.

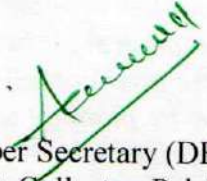
Validity of the Environmental Clearance will be three years from the date of this clearance, subject to earlier review in the event of genuine complaint from anybody from the safety area or violation or non- compliance of the general and specific conditions has to be scrupulously followed.

Under the circumstances stated above, sanction is hereby accorded to Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District for the building stone quarry project having an extent of 0.9712 Hectares of land in Survey No. 229 Vandazhi-I Village of Alathur Taluk, Palakkad District. EC will become operational only after fulfillment of all the pre- mining conditions.

Compliance of the conditions herein will be monitored by the Geologist, Palakkad. 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. Instances of violation if any shall be reported to the District Collector, Palakkad to take legal action under the Environment (Protection) Act, 1986 and Notification No. SO 637 (E) dated 28/02/2014 of the Ministry of Environment and Forest, Government of India.



  
Member Secretary (DEIAA) &  
Sub Collector, Palakkad

To

Sri. Prakash.N, Prakash Nivas, Mudappalloor Post, Alathur, Palakkad District.

- Copy to:
1. The Chairman, DEIAA & District Collector, Palakkad.
  2. The chairman, SEIAA
  3. The Chairman, DEAC & Irrigation Engineer, Palakkad.
  4. The Tahsildar, Alathur.
  5. Geologist, Palakkad.
  6. Village Officer, Vandazhi-I.
  7. Divisional Forest Officer, Palakkad(Member of DEIAA)
  8. Dr. A.V. Santhoshkumar, Professor, Kerala Agricultural University (Expert Member of DEIAA)
  9. Secretary, Vandazhi Grama Panchayath.
  10. Station House Officer, Mangalam Dam.

## STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

### GENERAL CONDITIONS( For mining projects)

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. Atleast 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 over burden 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 4 ft 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 indicating 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 guidelines/specific conditions.
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 conditions.
18. Mats to reduce fly rock blast to a maximum of 10 PPV 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 should 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 atleast 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 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
  29. 100m 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 change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the Environmental parameters/impacts as assessed, based on which only the E.C 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 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.
  34. The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability(Insurance) Act, 1991 and EIA Notification, 2006.
  35. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the 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 conformation.
  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.
  37. The proponent shall submit half yearly reports on the status of compliance of the stipulated EC condition 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, Government of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
  38. The details of Environmental Clearance should be prominently displayed in a mettalic board of 3ft \* 3ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extend 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 SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of SEIAA, 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 Notifications 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increase at places of loading and unloading points and transfer point to reduce fugitive emissions.
  43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the top soil shall be used for land reclamation and plantation. The overburden(OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosions 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 of rehabilitated areas should continue until the vegetations 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 the 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 regulary desilted 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 PM<sub>10</sub> and PM<sub>2.5</sub> 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 measured and CSR activity should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to State Environment Impact Assessment Authority (SEIAA) office.
  50. The Regional Office of MoEF & CC located at Bangalore shall monitor compliance of the stipulated contions. 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, within a period of 30 days as prescribed under Section-16 of the National Green Tribunal Act-2010.
  52. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment Protection Act-1986.
  53. The SEIAA 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 SEIAA reserves the right to alter/ modify the above conditions or stipulate any further conditions in the interest of environment protection.
  54. The above conditions shall prevail notwithstanding anything to the contrary, in consistant, 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 5years or the expiry date 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 operations shall be restricted to above ground water table and it should not intersect ground water table.
  58. All vehicles used for transportation and within the mine 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 this springs and perinnial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
  61. Occupational health surveillance programmes of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

FILE NO : PCB/PLKD/ICO/1100/7795249/2018

Date of issue : 13/12/2018



**KERALA STATE POLLUTION CONTROL BOARD**

**CONSENT TO**

**OPERATE/AUTHORISATION/REGISTRATION**

**ISSUED UNDER**

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

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

and

The Environment (Protection) Act, 1986

**As per Application No. :7795249**

**Dated:03-12-2018**

**TO**

**M/s QUARRY OWNED BY PRAKASH N**

**Mangalam Dam Post ,**

**Vandazhi,**

**Alathur,**

**Palakkad**

**Consent No. :PCB/PLKD/ICO/F/639/2018**

**Valid Upto :28/11/2021**

**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	<b>VALIDITY</b>	28/11/2021
2	Name and Address of the establishment	QUARRY OWNED BY PRAKASH N MANGALAM DAM POST ,VANDAZHI, ALATHUR,PALAKKAD 678706
3	Communication	Telephone :9447620490-9447620490 Fax :- E-mail:Prakashtraderskerala@gmail.com
4	Occupier Details	Prakash N , S/O Nagarajan,Prakash Nivas 18/454 Vaniya Street Mudappallur P0 Palakkad
5	Local Body	Vandazhi
6	Survey Number	Re sy no 229
7	Village	Vandazhi
8	Taluk	ALATHUR
9	District	PALAKKAD
10	Capital Investment(Rs in Lakhs)	Rs.47.50/- in lakhs
11	Scale	Small
12	Category	RED
13	Annual fee(Rs)	Rs.9600/-
	Total Fee remitted(Rs)	Rs.52800/-
14	<b>RAW MATERIAL</b>	<b>PRODUCTS</b>
	BOULDER @100 Metric Tonnes	Quarrying 0.9712 Hecters produce 100 Metric Tonnes granite bouldes
15	Total Power Required (HP)	NA

**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(1) (g) of the Water Act shall also be made along with.
- 2.2 Water consumption: 50 l/D

2.3 Effluent generation:

2.4 The characteristics of effluent after treatment shall confirm to the following tolerance limits:

Sl.NO.	Characteristics	Unit	Tolerance Limit	
			Sewage	Trade Effluent

2.5 Mode of disposal of treated effluent:

### 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 E-Waste (Management) Rules, 2016.

## 5. SPECIFIC CONDITIONS

- 5.1. This Integrated Consent to Operate is granted subject to the power of the Board to review and make variation in all or any of the conditions laid hereunder.
- 5.2. This integrated consent, unless withdrawn earlier and subject to condition No.5.1 shall be valid up to 31.05.2023. In case the operation of the Industrial plant is to be continued thereafter, application for renewal of the consent is to be made before 31.03.2023.
- 5.3. Any change in particulars furnished in the application and/or in the identity of the occupier/authorized agent is to be intimated to the Board forthwith.
- 5.4. The applicant shall comply with all instructions that the Board may issue from time to time regarding prevention and control of air, water, land and sound pollution.
- 5.5. The quarry should not be operated between 6:00 PM and 6:00 AM.
- 5.6. Noise measured 1 m outside the boundary of the premises shall not exceed the limit specified for the area under the Ambient Air Quality Standards in respect of noise.
- 5.7. The concentration of particulate matter PM 10 and PM 2.5 at the boundary of the premise shall not exceed 100 micro gram per cubic meter- and 60 micro gram per cubic meter respectively.
- 5.8. Permanent fence made of wire mesh shall be provided and maintained along the boundary of the approved quarry area.
- 5.9. There shall be a minimum distance of 50 m from the boundary of the quarry to the nearest residence, places of worship, railway line, bridge, water body, public building and public road having vehicular traffic.
- 5.10. The applicant shall put up a 6 ft. x 4 ft. signboard near entrance to the quarry for displaying the name of the quarry and owner, production details and time of the day when blasting is permitted to be undertaken.
- 5.11. Location and extent of quarry shall be as per the approved site plan attached.
- 5.12. After completion of quarrying, the land may be reclaimed as per the mining plan approved by the Department of Mining and Geology.
- 5.13. Quarrying operations shall be started only after obtaining the all the statutory clearances required, which shall be valid throughout the period of operations.

DATE :13/12/2018

**KRISHNAN M N**

Digitally signed by KRISHNAN M N  
Date: 2018.12.13 16:12:25 +05'30'

SIGNATURE & SEAL OF ISSUING AUTHORITY  
ENVIRONMENTAL ENGINEER



To

Prakash N ,  
S/O Nagarajan,  
Prakash Nivas 18/454,  
Vaniya Street,  
Mudappallur P0  
Palakkad

- 1. This digitally signed document is legally valid as per the Information Technology Act 2000**
2. For verifying this document please go to [krocmms.nic.in](http://krocmms.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.

## अनुज्ञापते 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 अनुज्ञापति

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

अनुज्ञापति सं. (Licence No.) : E/SE/KL/22/157(E109529)

वार्षिक फीस रूपए (Annual Fee Rs): 2400/-



Licencee/C  
Photo with  
Signature

1. Licence is hereby granted to

**Shri Prakash N S/O. C.V.Nagarajan (अधिभोगी / Occupier : Prakash), Prakash Nivas, Vaniyar Street, Mudappallur, Town/Village - Mudappallur, District-PALAKKAD, State-Kerala, Pincode - 678705**

को अनुज्ञापति अनुदत्त की जाती है।

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

3. अनुज्ञापति निम्नलिखित प्रयोजनों के लिए विधिमान्य है।

Licence is valid only for the following purpose.

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

4. अनुज्ञापति 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 Sr. 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	75 Kg.
2.	Electric and/or Ordinary Detonators	6,3	0	1000 Nos.
3.	Safety Fuse	6,1	0	1500 Mtrs

(ख) किसी एक कलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञापति के लिए]

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

**20 times  
as above.**

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञापत परिसर की पुष्टि होती है।

The licensed premises shall conform to the following drawing(s) :

रेखाचित्र क्र. (Drawing No.) E/SE/KL/22/157  
: (E109529)  
दिनांक (Dated) 24/12/2019

6. अनुज्ञापति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:

Survey No. 229 Block 49 , ग्राम (Town/Village) : Vandavanchal, Alathur

जिला (District) PALAKKAD राज्य (State) Kerala

पुलिस थाना (Police Station) : Mangalam Dam  
पिनकोड (Pincode) 678705

दूरभाष (Phone) 09447620490 ई. मेल (E-Mail)

prakashtraders.kerala@gmail.com फेक्स (Fax)

7. अनुज्ञापति परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।

The licensed premises consist of following facilities.

**Portable Magazines D type(Sr.No 860) and E type : (Sr.No.1065) fabricated by M/s.Thekkans Engineering & Fabrication Works, Ernakulam**

8.

अनुज्ञापति समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबद्धों 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, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए) Drawings (showing site, constructional and other details) as stated in serial No. 5 above.
2. अनुज्ञप्ति प्राधिकारी व्द्वारा हस्ताक्षरित इस अनुज्ञप्ति की शर्तें और अतिरिक्ति शर्तें।  
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 2022 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2022.

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 अधिक्रमण 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 - 21/03/2018

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

**Amendments :**

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 24/12/2019

नवीनीकरण के पृष्ठांकन के लिए स्थान  
Space for Endorsement of Renewal

उप मुख्य विस्फोटक नियंत्रक  
Deputy Chief Controller of Explosives  
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 दांडिक अपराध होगा।**

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



**FORM M**

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

**GOVERNMENT OF KERALA  
DEPARTMENT OF MINING & GEOLOGY DISTRICT OFFICE, PALAKKAD**

**QUARRYING PERMIT FOR EXTRACTION OF GRANITE BUILDING STONE  
GRANTED UNDER RULES 3(1), 9 AND 10 OF THE KERALA  
MINOR MINERAL CONCESSION RULES, 2015  
(Issued vide G.O(P) No. 144/2015/ID, Dated 05/10/2015 of Industries (A) Department)**

**No. 28/2019-20/GBS/DOP/34/2018/A1**

**Dated. 03/06/2019**

**Shri. Prakash. N, S/o. Nagarajan, Mudappallur. P.O, Alathur** is hereby permitted to extract and remove **Granite Building Stone** (Name of mineral) from an area of **97.12 Are** in **Re.Sy.Block No. 49, Re.Sy.No. 229 of Vandazhi-I Village of Alathur Taluk of Palakkad District Kerala State** under rule 3(1) and 9 of the Kerala Minor Mineral Concession Rules, 2015 subject to the conditions mentioned in rule 10.

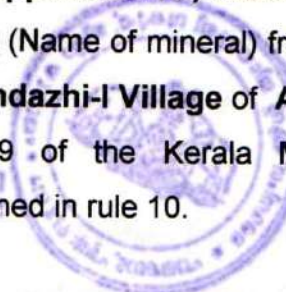
Quantity of extraction of mineral permitted : **66,000 MT**  
(Not applicable in the case of CRP System) :

Whether the permit holder opted CRP System : **No**

Number of mineral transit passes to be issued : **Transit passes can be issued subject to the limitation of quantity allowed 66,000 MT**

Name and address of the owner of the land under mineral concession / particulars of consent / NOC received from the occupier of the land (if applicable) : **C.V. Nagarajan, Vellathayi Chetttiyar, Vaniyathara, Mudappallur (Consent Date : 05 years)**

Date of expiry of permit : **31/03/2020**



**GEOLOGIST**  
District Office of the Department  
Mining and Geology, Palakkad  
044 619 334

**Details of fee remitted**

Item	Chalan No & Date	Amount	Name of Treasury
Application fee	No. KL009383776201718M, dated 01/01/2018	Rs.1,000/-	Dist. Treasury, Palakkad
Royalty	No. KL002693591201920M, dated 03/06/2019	Rs.15,84,000/-	Dist. Treasury, Palakkad
Surface Rent	No. KL002693741201920M, dated 03/06/2019	Rs. 500/-	Dist. Treasury, Palakkad
Addl. Royalty remitted, if any			



Office Seal

Signature & Address of the issuing authority

**GEOLOGIST**  
District Office of the Department  
Mining and Geology, Palakkad  
PIN : 678 014

കുറിപ്പ് : DEIAA, പാലക്കാടിന്റെ എൻവയോൺമെന്റ് ക്ലിയറൻസ് നം. DIA/KL/PL/25/2018 dated 29/11/2018 നമ്പർ ഉത്തരവിലെ നിബന്ധനകൾ പാലിച്ചു മാത്രമേ കരിങ്കല്ല് ഖനനം ചെയ്യുവാൻ പാടുള്ളൂ.

To

**Shri. Prakash. N, S/o. Nagarajan,  
Mudappallur. P.O, Alathur**

(Name and Address of the owner of the land)

- Copy to :
- 1). The District Collector, (with C/L)
  - 2). Deputy Chief Controller of Explosives, Kakkanadu, Ernakulam.



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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 01

Client Name & Address	Certificate No:	PL/AMB/RT/11316/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Date of sample received:	23/12/2019
	Date of analysis	23/12/2019
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample description	Ambient air – Near North 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	47.5 µg/m <sup>3</sup>	100 µg/m <sup>3</sup>
02	Particulate Matter (PM <sub>2.5</sub> )	CPCB	21.3 µg/m <sup>3</sup>	60 µg/m <sup>3</sup>
03	Sulphur dioxide	IS 5182 Part 2 2001 RA 2017	4.6 µg/m <sup>3</sup>	80 µg/m <sup>3</sup>
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	2.8 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.   AUTHORIZED SIGNATORY
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SREEJA  
QUALITY MANAGER  
POLUCHEM LABORATORIES (P) LTD.



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## TEST REPORT


Page 01 of 01

Client Name & Address	Certificate No:	PL/AMB/RT/11318/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Date of sample received:	23/12/2019
	Date of analysis	23/12/2019
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample description	Ambient air – Near West 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	48.6 µg/m <sup>3</sup>	100 µg/m <sup>3</sup>
02	Particulate Matter (PM <sub>2.5</sub> )	CPCB	23.6 µg/m <sup>3</sup>	60 µg/m <sup>3</sup>
03	Sulphur dioxide	IS 5182 Part 2 2001 RA 2017	4.6 µg/m <sup>3</sup>	80 µg/m <sup>3</sup>
04	Nitrogen dioxide	IS 5182 Part 06 2006 RA2017	3.4 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.   AUTHORIZED SIGNATORY
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QUALITY



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## TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/11319/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
East side boundary	10.00 Hrs	49.8 dB (A)
	11.00 Hrs	48.7 dB (A)
	12.00 Hrs	47.4 dB (A)
	13.00 Hrs	45.7 dB (A)
	14.00 Hrs	46.3 dB (A)
	15.00 Hrs	45.3 dB (A)
	16.00 Hrs	42.3 dB (A)
	17.00 Hrs	41.3 dB (A)
	18.00 Hrs	39.5 dB (A)
	19.00 Hrs	38.5 dB (A)
	20.00 Hrs	37.7 dB (A)
	21.00 Hrs	36.3 dB (A)
	22.00 Hrs	35.2 dB (A)
	23.00 Hrs	34.2 dB (A)
	00.00 Hrs	35.2 dB (A)
	01.00 Hrs	34.2 dB (A)
	02.00 Hrs	36.8 dB (A)
	03.00 Hrs	35.2 dB (A)
	04.00 Hrs	37.4 dB (A)
	05.00 Hrs	41.3 dB (A)
06.00 Hrs	42.5 dB (A)	
07.00 Hrs	42.6 dB (A)	
08.00 Hrs	44.3 dB (A)	
09.00 Hrs	45.6 dB (A)	
Leq (Day time)		48.7 dB (A)
Leq (Night time)		34.4 dB (A)

\*End of the Report \*

For PoluChem Laboratories (P) Ltd.

Authorized Signatory

SREEJA RAJESH  
QUALITY MANAGER

POLUCHEM LABORATORIES (P) LTD.



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## TEST REPORT

Page 01 of 02

Ref.No. PL/RT/OW/11325/2019

Date of Issue: 27/12/2019

Name & address of customer

: Mr. Prakash N.  
Prakash Nivas  
Vaniyar Street  
Mudapallur, Palakkad

Project Site

: Quarry Owned Mr. Prakash N.  
Sy.No.:229  
Village: Vandazhi I  
Panchayath: Vandazhi  
Taluk: Alathur  
District: Palakkad, Kerala

Sample drawn by

: PoluChem Laboratory Sample Collector

Sample description

: Drinking Water

Location of sampling

: Openwell Water-East Side-Own property

Date of sample collected

: 22/12/2019

Date of analysis started

: 23/12/2019

Date of completion of analysis

: 26/12/2019

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	5.93	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	40 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 – 1983 RA2014	12.6 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 – 1986 RA2014	9.76 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	10.6 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	4.53 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	3.24 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.10 mg/l	0.3 mg/l
Sulphate as SO <sub>4</sub>	IS 3025 (P) 24 – 1986 RA2009	4.54 mg/l	200 mg/l
Fluoride as F	IS 3025 (P) 60 -2008 RA 2013	BDL	1.0 mg/l

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

SREEJA R. Authorized signatory  
QUALITY MANAGER  
POLUCHEM LABORATORIES (P) LTD.



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Continuation of Test Certificate No: 11325/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 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
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	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 RA 2009	23	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For PoluChem Laboratories (P) Ltd.

Authorized signatory

\* End of the report\*

SREEJA RAMESH  
 QUALITY MANAGER  
 POLUCHEM LABORATORIES (P) LTD.

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## TEST REPORT

Page 01 of 02

Ref.No. PL/RT/SW/11326/2019  
Name & address of customer

Date of Issue: 27/12/2019

: Mr. Prakash N.  
Prakash Nivas  
Vaniyar Street  
Mudapallur, Palakkad  
: Quarry Owned Mr. Prakash N.  
Sy.No.:229  
Village: Vandazhi I  
Panchayath: Vandazhi  
Taluk: Alathur  
District: Palakkad, Kerala.

Project Site

: Poluchem Laboratory Sample Collector  
: Water Sample  
: Pond Water- North Side  
(From Adjoint of the Kanthala river)

Sample drawn by  
Sample description  
Location of sampling


: 22/12/2019  
: 23/12/2019  
: 26/12/2019

Date of sample collected  
Date of analysis started  
Date of completion of analysis

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 - 1983 RA2017	9 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 - 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 - 1984 RA2017	2 NTU	1 NTU
pH	IS 3025 (P) 11 - 1983 RA 2017	5.73	6.5 - 8.5
Total Dissolved Solids	IS 3025 (P) 16 - 1984 RA2017	50 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 - 1983 RA2014	17.5 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 - 1986 RA2014	13.4 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	7.25 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 - 1991 RA2014	3.73 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 - 1994 RA2014	1.45 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 - 2003 RA2014	0.42 mg/l	0.3 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

Note : BDL - Below Detection Level

For Poluchem Laboratories (P) Ltd.

  
Authorized signatory  
SREEJA RA  
QUALITY MANAGER  
POLUCHEM LABORATORIES (P) LTD.





# POLUCHEM LABORATORIES (P) LTD.

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## TEST REPORT

Page 01 of 02

Ref.No. PL/RT/SW/11324/2019

Date of Issue: 27/12/2019

Name & address of customer

: Mr. Prakash N.

Prakash Nivas

Vaniyar Street

Mudapallur, Palakkad

Project Site

: Quarry Owned Mr. Prakash N.

Sy.No.:229

Village: Vandazhi I

Panchayath: Vandazhi

Taluk: Alathur

District: Palakkad, Kerala

Sample drawn by

: PoluChem Laboratory Sample Collector

Sample description

: Water Sample

Location of sampling

: Quarry Water- North Side-Own property

Date of sample collected

: 22/12/2019

Date of analysis started

: 23/12/2019

Date of completion of analysis

: 26/12/2019

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	8 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	1 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	5.79	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	50 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 – 1983 RA2014	17.5 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 – 1986 RA2014	12.5 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	8.95 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	4.39 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	2.32 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.43 mg/l	0.3 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

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

Authorized signatory  
SREEJA RAJESH  
QUALITY MANAGER  
POLUCHEM LABORATORIES (P) LTD.



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Page 02 of 02

Continuation of Test Certificate No: 11324/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 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
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	BDL	0.5 mg/l
Biochemical Oxygen Demand (3 days at 27 <sup>o</sup> C)	IS 3025 (P) 44 - 1993RA 2014	2.8 mg/l	--
Chemical Oxygen Demand	IS 3025 (P) 58 - 2006 RA2017	19 mg/l	--
Dissolved Oxygen	IS 3025 (P) 44 - 1989RA 2014	6.2 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 RA 2009	70	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For PoluChem Laboratories (P) Ltd.

Authorized signatory

SREEJA RAJESH

QUALITY MANAGER

POLUCHEM LABORATORIES (P) LTD.

\* End of the report\*

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Page 02 of 02

Continuation of Test Certificate No: 11326/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 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
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	BDL	0.5 mg/l
Biochemical Oxygen Demand (3 days at 27 <sup>o</sup> C)	IS 3025 (P) 44 - 1993RA 2014	2.9 mg/l	--
Chemical Oxygen Demand	IS 3025 (P) 58 - 2006 RA2017	16 mg/l	--
Dissolved Oxygen	IS 3025 (P) 44 - 1989RA 2014	5.1 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 RA 2009	110	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For PoluChem Laboratories (P) Ltd.

Authorized signatory  
SREEJA RA

QUALITY MANAGEMENT

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## TEST REPORT

Page 01 of 02

Ref.No. PL/RT/SW/11323/2019

Date of Issue: 27/12/2019

Name & address of customer

: Mr. Prakash N.  
Prakash Nivas  
Vaniyar Street  
Mudapallur, Palakkad

Project Site

: Quarry Owned Mr. Prakash N.  
Sy.No.:229  
Village: Vandazhi I  
Panchayath: Vandazhi  
Taluk: Alathur  
District: Palakkad, Kerala

Sample drawn by

: PoluChem Laboratory Sample Collector

Sample description

: Water Sample

Location of sampling

: Quarry Water- South Side

(From Adjoint plot of M/s.TMT Crusher)

Date of sample collected

: 22/12/2019

Date of analysis started

: 23/12/2019

Date of completion of analysis

: 26/12/2019

Parameters tested	Test method	Results	Acceptable Limit As Per IS 10500-2012
Color	IS 3025 (P) 04 – 1983 RA2017	10 Hazen Unit	5 Hazen Unit
Odour	IS 3025 (P) 05 – 1983 RA2017	Agreeable	Agreeable
Turbidity	IS 3025 (P) 10 – 1984 RA2017	2 NTU	1 NTU
pH	IS 3025 (P) 11 – 1983 RA 2017	5.86	6.5 – 8.5
Total Dissolved Solids	IS 3025 (P) 16 – 1984 RA2017	58 mg/l	500 mg/l
Total Hardness as CaCO <sub>3</sub>	IS 3025 (P) 21 – 1983 RA2014	21.6 mg/l	200 mg/l
Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (P) 23 – 1986 RA2014	16.4 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	9.46 mg/l	250 mg/l
Calcium as Ca	IS 3025 (P) 40 – 1991 RA2014	5.63 mg/l	75 mg/l
Magnesium as Mg	IS 3025 (P) 46 – 1994 RA2014	1.23 mg/l	30 mg/l
Total Iron as Fe	IS 3025 (P) 53 – 2003 RA2014	0.54 mg/l	0.3 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

Note : BDL – Below Detection Level

For PoluChem Laboratories (P) Ltd.

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Page 02 of 02

Continuation of Test Certificate No: 11323/2019

Parameters tested	Test method	Results	Acceptable Limits As per IS-10500-2012
Selenium as Se	IS 3025 (P)56 -2003 RA2014	BDL	0.01 mg/l
Arsenic as As	IS 3025(P) 37- 1988 RA2014	BDL	0.01 mg/l
Copper as Cu	IS 3025(P) 42- 1992 RA2014	BDL	0.05 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
Chromium as Cr	IS 3025 (P)52 - 2003 RA2014	BDL	0.05 mg/l
Zinc as Zn	IS 3025 (P)49 - 1994 RA2014	BDL	5 mg/l
Mercury as Hg	IS 3025(P) 48 - 1994 RA2014	BDL	0.001 mg/l
Cyanide as CN	IS 3025(P)27-1986 RA2014	BDL	0.05 mg/l
Lead as Pb	IS 3025(P) 47- 1994 RA2014	BDL	0.01 mg/l
Aluminum as Al	IS 3025(P) 55- 2003 RA2014	BDL	0.03 mg/l
Boron as B	IS 3025(P) 57- 2005 RA2017	BDL	0.5 mg/l
Biochemical Oxygen Demand (3 days at 27 <sup>o</sup> C)	IS 3025 (P) 44 - 1993RA 2014	3.4 mg/l	--
Chemical Oxygen Demand	IS 3025 (P) 58 - 2006 RA2017	23 mg/l	--
Dissolved Oxygen	IS 3025 (P) 44 - 1989RA 2014	5.4 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 RA 2009	110	Absent
E coli	Present or Absent/100ml	IS 1622: 1981 RA 2009	Absent	Absent

For Poluchem Laboratories (P) Ltd.

Authorized signatory

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QUALITY MANAGER  
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## TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/11319/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
East side boundary	10.00 Hrs	49.8 dB (A)
	11.00 Hrs	48.7 dB (A)
	12.00 Hrs	47.4 dB (A)
	13.00 Hrs	45.7 dB (A)
	14.00 Hrs	46.3 dB (A)
	15.00 Hrs	45.3 dB (A)
	16.00 Hrs	42.3 dB (A)
	17.00 Hrs	41.3 dB (A)
	18.00 Hrs	39.5 dB (A)
	19.00 Hrs	38.5 dB (A)
	20.00 Hrs	37.7 dB (A)
	21.00 Hrs	36.3 dB (A)
	22.00 Hrs	35.2 dB (A)
	23.00 Hrs	34.2 dB (A)
	00.00 Hrs	35.2 dB (A)
	01.00 Hrs	34.2 dB (A)
	02.00 Hrs	36.8 dB (A)
	03.00 Hrs	35.2 dB (A)
	04.00 Hrs	37.4 dB (A)
	05.00 Hrs	41.3 dB (A)
06.00 Hrs	42.5 dB (A)	
07.00 Hrs	42.6 dB (A)	
08.00 Hrs	44.3 dB (A)	
09.00 Hrs	45.6 dB (A)	
Leq (Day time)		48.7 dB (A)
Leq (Night time)		34.4 dB (A)

\*End of the Report \*

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Authorized Signatory

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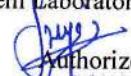
## TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/11320/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
North side boundary	10.00 Hrs	47.8 dB (A)
	11.00 Hrs	46.3 dB (A)
	12.00 Hrs	45.2 dB (A)
	13.00 Hrs	44.1 dB (A)
	14.00 Hrs	43.2 dB (A)
	15.00 Hrs	40.1 dB (A)
	16.00 Hrs	41.2 dB (A)
	17.00 Hrs	40.2 dB (A)
	18.00 Hrs	39.5 dB (A)
	19.00 Hrs	34.4 dB (A)
	20.00 Hrs	35.6 dB (A)
	21.00 Hrs	34.2 dB (A)
	22.00 Hrs	34.2 dB (A)
	23.00 Hrs	35.2 dB (A)
	00.00 Hrs	37.1 dB (A)
	01.00 Hrs	38.7 dB (A)
	02.00 Hrs	39.4 dB (A)
	03.00 Hrs	40.1 dB (A)
	04.00 Hrs	42.4 dB (A)
	05.00 Hrs	43.4 dB (A)
06.00 Hrs	42.4 dB (A)	
07.00 Hrs	46.3 dB (A)	
08.00 Hrs	45.1 dB (A)	
09.00 Hrs	44.2 dB (A)	
Leq (Day time)		47.5 dB (A)
Leq (Night time)		34.3 dB (A)

\*End of the Report \*

For PoluChem Laboratories (P) Ltd.

  
 Authorized Signatory  
 SREEJA K.A. NISHITH  
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## TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/11322/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad	Date of issue:	27/12/2019
	Date of monitoring	21/12/2019 10.00 Hrs to 22/12/2019 10.00 Hrs
	Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala.
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
South side boundary	10.00 Hrs	48.8 dB (A)
	11.00 Hrs	47.4 dB (A)
	12.00 Hrs	49.4 dB (A)
	13.00 Hrs	47.4 dB (A)
	14.00 Hrs	46.2 dB (A)
	15.00 Hrs	45.3 dB (A)
	16.00 Hrs	42.3 dB (A)
	17.00 Hrs	39.7 dB (A)
	18.00 Hrs	38.5 dB (A)
	19.00 Hrs	37.4 dB (A)
	20.00 Hrs	36.4 dB (A)
	21.00 Hrs	35.4 dB (A)
	22.00 Hrs	34.6 dB (A)
	23.00 Hrs	35.4 dB (A)
	00.00 Hrs	37.3 dB (A)
	01.00 Hrs	39.6 dB (A)
	02.00 Hrs	32.4 dB (A)
	03.00 Hrs	36.2 dB (A)
	04.00 Hrs	35.4 dB (A)
	05.00 Hrs	38.7 dB (A)
06.00 Hrs	39.5 dB (A)	
07.00 Hrs	40.1 dB (A)	
08.00 Hrs	41.3 dB (A)	
09.00 Hrs	43.5 dB (A)	
Leq (Day time)		47.6 dB (A)
Leq (Night time)		35.5 dB (A)

\*End of the Report \*

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## TEST REPORT

Page 01 of 01

Client Name & Address	Certificate No:	PL/RT/SD/9486/2019
Mr.Narayanan K S/o.Koran Kandankol House Mathamangalam .P.O Kannur Kerala	Date of issue:	21/05/2019
	Date of monitoring	13/05/2019 10.00 Hrs to 14/05/2019 10.00 Hrs
	Monitoring Location	Quarry Owned by Mr. Narayanan Sy.Nos.: 331/2 pt,332pt Village: Beemanady Taluk: Vellarikkund District: Kasargod, Kerala.
	Sample Description	Ambient Sound Level (Leq)
Monitoring Location	Time	Results
West side boundary	10.00 Hrs	47.4 dB (A)
	11.00 Hrs	47.1 dB (A)
	12.00 Hrs	46.5 dB (A)
	13.00 Hrs	45.4 dB (A)
	14.00 Hrs	44.1 dB (A)
	15.00 Hrs	40.1 dB (A)
	16.00 Hrs	39.8 dB (A)
	17.00 Hrs	38.4 dB (A)
	18.00 Hrs	37.4 dB (A)
	19.00 Hrs	36.3 dB (A)
	20.00 Hrs	35.2 dB (A)
	21.00 Hrs	34.1 dB (A)
	22.00 Hrs	33.2 dB (A)
	23.00 Hrs	33.4 dB (A)
	00.00 Hrs	34.1 dB (A)
	01.00 Hrs	36.3 dB (A)
	02.00 Hrs	37.4 dB (A)
	03.00 Hrs	38.4 dB (A)
	04.00 Hrs	39.4 dB (A)
05.00 Hrs	40.2 dB (A)	
06.00 Hrs	41.3 dB (A)	
07.00 Hrs	42.4 dB (A)	
08.00 Hrs	44.3 dB (A)	
09.00 Hrs	46.3 dB (A)	
Leq (Day time)		46.8 dB (A)
Leq (Night time)		34.2 dB (A)

\*End of the Report \*

For PoluChem Laboratories (P) Ltd.

Authorized Signatory

SREEJAN RAMESH  
QUALITY MANAGER  
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## TEST REPORT

Client Name & Address		Certificate No:	PL/RT/SO/11327/2019
Mr. Prakash N. Prakash Nivas Vaniyar Street Mudapallur, Palakkad		Date of issue:	27/12/2019
		Date of monitoring	21/12/2019
		Monitoring Location	Quarry Owned Mr. Prakash N. Sy.No.:229 Village: Vandazhi I Panchayath: Vandazhi Taluk: Alathur District: Palakkad, Kerala
		Sample Description	Soil
Parameter	Results		
pH	5.97		
Electrical Conductivity	75 $\mu$ S/cm		
Potassium	41 mg/kg		
Phosphorous	24 mg/kg		
Nitrogen	96 mg/kg		
Organic Carbon	0.73 %		
Calcium	50 mg/kg		
Magnesium	34 mg/kg		
Fluoride	<0.1 mg/kg		
Sulphate	85 mg/kg		
Copper	<0.1 mg/kg		
Zinc	<0.1 mg/kg		
Mercury	<0.1 mg/kg		
Chromium	<0.1 mg/kg		
Lead	<0.1 mg/kg		
Arsenic	<0.1 mg/kg		

For PoluChem Laboratories.(P) Ltd.

Authorized Signatory.

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