

HALF YEARLY COMPLIANCE REPORT

FOR

APRIL 2017 - SEPTEMBER 2017

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.**

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.

<p>Facility for solid waste management</p>	<p>The waste generated during the mining period is 16921m³ will be proposed dumping to south side of the lease area and along the lease boundary</p>
<p>Topographic features</p>	<p>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</p>
<p>proneness of the area for land slides</p>	<p>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.</p>

Air:-

<p>Air quality requirements</p>	<p>Air quality to meet requirements as per rules</p>
<p>Noise level meeting requirement</p>	<p>Noise level to be within limits as per rules</p>
<p>Likely emission affecting environment</p>	<p>Emission of dust, SO₂, Nitrous Oxide during drilling ,blasting , loading and transport activities. Noises will be generated by the mining machineries.</p>

Biodiversity:-

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

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	1026/17
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 Kanjiappally	1026/1

295/5	1.0230 TP 32/1047	Selestian s/o mathew .plakkoottathil(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.

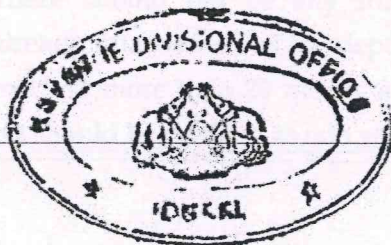
6. Validity of the environmental clearance will be five years from the date of this environmental clearance, subject to the earlier review in the event of genuine complaint from anybody from the safety area or violation or non-compliance of any of the conditions stipulated herein.

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.



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

**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

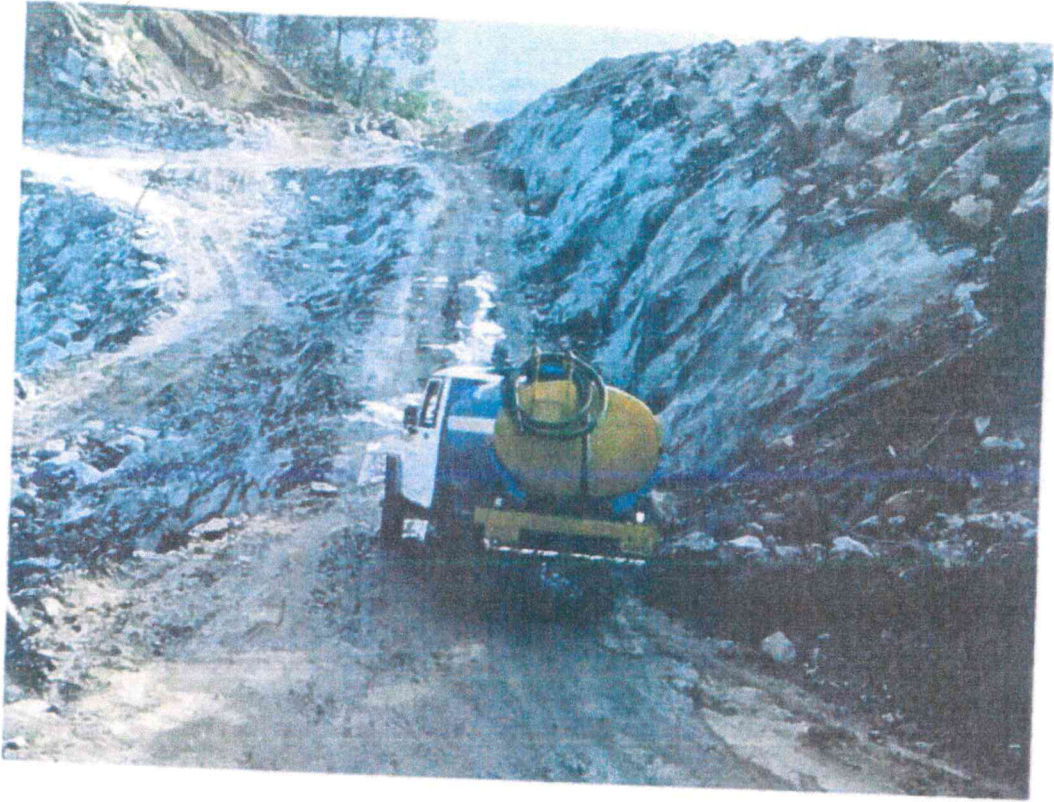
Sr. No.	Specific Conditions	Compliance Status
1.	Boundary pillars should be numbered and fixed in the lease area as per the approved mining plan.	Boundary pillars are fixed and numbered as per the approved mining plan. The photographs showing the boundary pillars are attached as Annexure 1 .
2.	Fencing 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.
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.

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 3
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 shall be developed on the north-eastern valley part.
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 shall be 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 4
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.





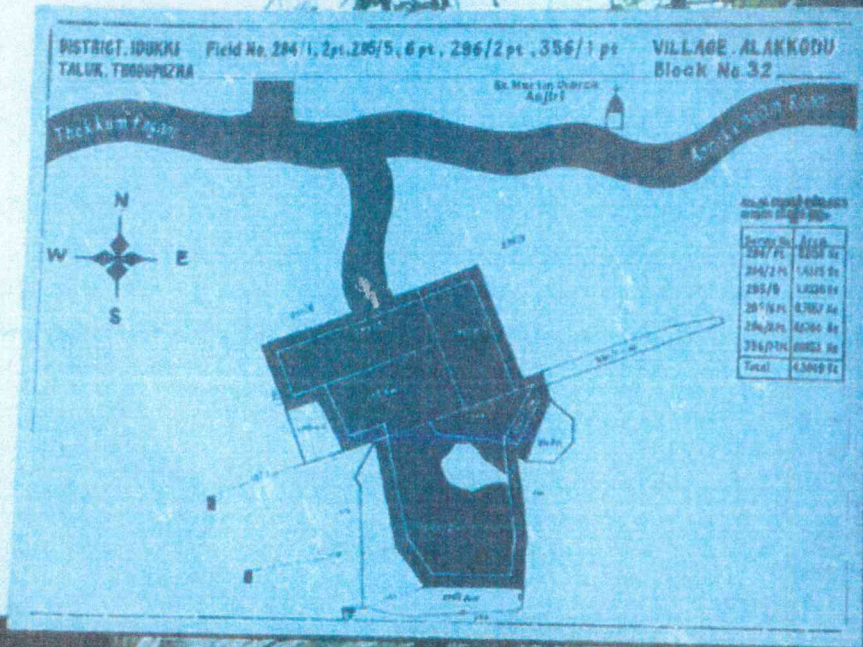












ലൈസൻസി
 ജില്ല
 താലൂക്ക്
 വില്ലേജ്
 സർവ്വേ നമ്പർ
 വിസ്തീർണ്ണം
 E.C. No.
 LEASE ORDER NO
 LEASE STARTING DATE
 D & O LICENSE
 NAME OF MINERAL
 ANNUAL PRODUCTION

ഷിജു തോമസ്, പള്ളിവാതുക്കൽ, ചിലവ് പി. ഒ., ഇഞ്ചിയാനി
 ഇടുക്കി
 തൊടുപുഴ
 ആലക്കോട്
 294/1, 294/2, 295/5, 295/6, 296/2, 356/1-1
 4.3049 ഹെക്ടർ
 1/2016/DEIAA/IDK/KERALA
 dtd: 20/04/2017 to 19/04/2022
 55/2017-18/6319/M3/2016 DMG dtd: 04/05/2017
 10/05/2017 ending date: 09/05/2029
 27/04/2017 to 31/03/2018
 Granite (Building Stone)
 1,45,000 METRIC TONNE

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 SHILJE 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	Tahuk	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) (2) of the Water Act shall also be made along with.
- 2.2 Water consumption: 17000
- 2.3 Effluent generation: 1500 liter/day
- 2.4 The characteristics of effluent after treatment shall conform to the following tolerance limits:

SL.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 E-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/idk/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





भारत सरकार | Government of India
 वाणिज्य और उद्योग मंत्रालय | Ministry of Commerce & Industry
 पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) | Petroleum & Explosives Safety Organisation (PESO)
 पूर्व नाम: विस्फोटक विभाग | Formerly- Department of Explosives
 केन्द्रीय भवन, ब्लॉक सी-2, तीसरी मंजिल | Kendriya Bhavan, Block C-2, 3rd Floor
 CSEZ पी.ओ. कक्कनाड कोट्टी | CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037
 फोन (Phone):- 2427286 | फैक्स (Fax):- 2427276

संख्या (No.): E/SE/KL/22/95(E93346)

दिनांक (Date): 14/09/2017

सेवा में | To,

Shri Shiju Thomas,
 Pullivathukkal House, Chilavu P.O., Thodupuzha, Town/Village - Thodupuzha
 District-IDUKKI, State-Kerala, Pincode - 685588

विषय Survey No. Block No.32, Sy. No.589, ग्राम Alakkode, जिला IDUKKI, राज्य Kerala में मेसर्स Shri Shiju Thomas द्वारा विस्फोटक के मैगजीन में उपयोग के लिए कब्जा हेतु विस्फोटक नियम, 2008 के अंतर्गत LE-3 में जारी अनुज्ञप्ति सं E/SE/KL/22/95(E93346) के संशोधन संदर्भ में।
 (विस्फोटक की मात्रा / मासिक खरीद सीमा में परिवर्तन)
Subject: Possession for Use of of Explosives from magazine situated at Survey No.:Block No.32, Sy. No.589, Alakkode, Dist. IDUKKI, Kerala -Licence No.: E/SE/KL/22/95(E93346) granted in Form LE-3 of Explosives Rules, 2008 -
 (Amendment of Quantity of Explosives/Monthly Purchase Limit).

महोदय ! Sir,

आपका उपर्युक्त विषय पर पत्र संख्या Nil दिनांक 07/08/2017 का संदर्भ ग्रहण करें।
 Please refer to your letter no. Nil dated 07/08/2017.

अनुज्ञप्ति संख्या E/SE/KL/22/95(E93346) विस्फोटक की मात्रा / मासिक खरीद सीमा में परिवर्तन के संदर्भ में यथा संशोधित कर भेजी जा रही है।
 The Licence No.: E/SE/KL/22/95(E93346) is forwarded herewith duly amended in respect of followings:

Quantity of Explosives/Monthly Purchase Limit

किसी भी एक समय में लाइसेंस क्षमता निम्नलिखित वर्ग तथा मात्रा से अधिक नहीं होगी।
 The licence capacity at any one time shall not exceed the kinds and quantities mentioned below:

संख्या No	विस्फोटक Explosive(s)	वर्ग Class	प्रभाग Div	उप-प्रभाग Sub Div	क्षमता Capacity	इकाई Unit
1	Nitrate Mixture	2	0	0	100	Kg.
2	Safety Fuse	6	1	0	1500	Mtrs
3	Detonators	6	3	0	1000	Nos.

किसी एक कैलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा (अनुच्छेद 3 (ख) और (ग) के अधीन अनुज्ञप्ति के लिए लागू): 8 गुना
 Quantity of explosives to be purchased in a calendar month/applicable for licence under article 3(b) and (c): 8 times as above.

यह अनुज्ञप्ति दिनांक 31 मार्च 2021 तक प्रवृत्त रहेगी।
 This licence shall remain valid till 31st day of March 2021.

आपके खाते में रुपर 200/- की राशि शेष है जो इस संदर्भ को उद्धृत करते हुए भविष्य के संव्यवहार में समायोजित की जा सकती है।
 An amount of Rs. 200/- balance is in your credit, which may be utilized for future transaction by quoting this reference.

अनुज्ञप्ति के आगामी नवीकरण हेतु कृपया विस्फोटक नियम, 2008 के नियम 112 के अंतर्गत प्रक्रिया का पालन करें। कृपया पावती दें।
 For further revalidation(if required), please follow the procedure under Rule 112 of Explosives Rules, 2008. Receipt of this letter may please be acknowledged.

भवदीय ! Your's faithfully

(ए.के.मेहता | A.K. Mehta)

विस्फोटक नियंत्रक | Controller of Explosives
 कृते उप मुख्य विस्फोटक नियंत्रक | For Dy. Chief Controller of Explosives
 कृते उप मुख्य विस्फोटक नियंत्रक
 For Deputy Chief Controller of Explosives
 एरनाकुलम Ernakulam

प्रतिलिपि भेजित | Copy Forwarded to:

- District Magistrate, IDUKKI, Kerala with reference to his Noc No: E2-50159/2015/K Dis. Dated: 05/02/2016
- Superintendent of Police, IDUKKI, Kerala.

कृते उप मुख्य विस्फोटक नियंत्रक | For The Dy. Chief Controller of Explosives

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

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

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 व वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने
Licence to possess: (c) for use explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञप्ति सं. (Licence No.): E/SE/KL/22/95(E93346)
वार्षिक फीस स्मर (Annual Fee Rs): 2400/-



1. Licence is hereby granted to

Shri Shiju Thomas (अधिगामी / Occupier : Shri Shiju Thomas), Pallivathakkal House, Chilavu P.O., Thodupuzha, Town/Village - Thodupuzha, IDUKKI State-Kerala, Pincode - 685588

को अनुज्ञप्ति अनुदत्त की जाती है।

2. अनुज्ञप्तिधारी की प्रास्थिति | Status of licensee : Individual

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

possess for use of Nitrate Mixture, Safety Fuse & Detonators के उपयोग के लिए -

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

क्र. सं. 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	100 Kg.
2	Safety Fuse	6, 1	0	1500 Mtrs
3	Detonators	6, 3	0	1000 Nos.

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

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

15 times as above.

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

रेखाचित्र क्र. (Drawing No.) E/SE/KL/22/95(E93346)

दिनांक (Dated) 14/09/2017

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

Survey No. Block No.32, Sy. No.589, ग्राम (Town/Village) : Alakkode

जिला (District)

IDUKKI

राज्य (State)

Kerala

पिनकोड (Pincode)

685588

दूरभाष (Phone)

9447522690

ई.मेल (E-Mail)

फैक्स (Fax)

7. अनुज्ञप्त परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।
The licensed premises consist of following facilities.

G (Sl.No.837 & 838) & T (Sl.No.1287) type three portable magazines fabricated by M/s. Nobel Explosives, Kadayirupu, Ernakulam.

8. अनुज्ञप्ति समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपबंधों 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.

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

9. यह अनुज्ञप्ति तारीख 31 मार्च 2021 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2021.

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 अधिकरण 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 - 05/04/2016

उप मुख्य विस्फोटक नियंत्रक | Dy. Chief Controller of Explosives
कृते उप मुख्य विस्फोटक नियंत्रक
For Deputy Chief Controller of Explosives
एरनाकुलम Ernakulam

Amendments :

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 12/08/2016
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 28/04/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 14/09/2017

नवीनीकरण के पृष्ठांकन के लिए स्थान
Space for Endorsement of Renewal

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

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(सेट VIII) (Set VIII)

मैगजीन में वर्ग 1,2,3,4,5,6, और 7 के विस्फोटकों को बिक्री या प्रयोग हेतु रखने के लिए प्रत्येक एन.ई. 3 [अनुच्छेद 3 (ख) से (ग)] में मुख्य विस्फोटक नियंत्रक या विस्फोटक नियंत्रक द्वारा पदान किए जाने वाले अनुज्ञापित सं. E/SE/KL/22/95(E93346) की शर्तें निम्नलिखित हैं।
The following are the conditions of licence number E/SE/KL/22/95(E93346) to possess for sale or use, explosives of Class 1,2,3, 4, 5, 6 and 7 in a magazine in Form L.E-3 (articles 3(b) to (c)) granted by Chief controller of Explosives or Controller of Explosives.

- परिसर में किसी भी समय विस्फोटकों की मात्रा अनुज्ञापन योग्य सामर्थ्य से अधिक नहीं होगी।
The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
- विस्फोटकों के भंडारण के लिए प्रयुक्त होने वाली मैगजीन अनुसूची III और अनुज्ञापित के उपाबंध में विनिर्दिष्ट सुरक्षा दूरी बनाए रखना होगा।
The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.
- मैगजीन का प्रयोग उन सभी विस्फोटकों के, जो इस अनुज्ञापित में विनिर्दिष्ट हैं, रखे जाने के लिए और ऐसे रखे जाने से संबद्ध आधान या औजार या उपकरणों के रखे जाने के लिए ही किया जाएगा; अन्यथा नहीं।
The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
- पैकजों को खोलने का कार्य और विस्फोटकों को तौलने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा।
The opening of packages and the weighing and packing of explosives shall not be carried on in the magazine.
- दो या दो से अधिक वर्णन के विस्फोटकों को, जिन्हें मैगजीन में रखे जाने की अनुज्ञा दी जा सकती है, मैगजीन में तभी रखे जाएंगे जब उनमें से प्रत्येक को, ऐसे पदार्थ या स्वरूप का कोई मध्यवर्ती विभाजक लगाकर या उनके बीच ऐसा मध्यवर्ती स्थान छोड़कर, परस्पर पृथक कर दिया जाए कि किसी बजह से विस्फोटक में लगने वाली आग या होने वाला विस्फोट किसी अन्य वर्णन के विस्फोटक तक न पहुंच सके; परंतु -
(घ) 2 (नाइट्रेट मिश्रण), वर्ग 3 (नाइट्रो योगिक) के विभिन्न विस्फोटक, वर्ग 6 प्रथम प्रभाग के अंतर्गत आने वाले सुरक्षा पत्तीते और वर्ग 6 प्रभाग 2 के अंतर्गत आनेवाले विस्फोटक प्रेरक पत्तीते, जिनमें कोई खुला लोहा या इस्पात नहीं है, एक दूसरे के साथ बिना किसी मध्यवर्ती विभाजक या स्थायक के रखे जा सकते हैं।
(ङ) वर्ग 6 प्रभाग 3 के अंतर्गत आनेवाले विस्फोटक प्रेरक अलग रखे जाएंगे।
(च) वर्ग 1 के अंतर्गत आने वाले बारूद को अलग रखा जाएगा।
Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other; Provided that—
(d) the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1 and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space;
(e) Detonators belonging to Class 6 Division 3 shall be kept separately.
(f) Gun powder belonging to Class 1 shall be kept separately.
- वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात सिवाय अनुज्ञापन प्राधिकारी की विशेष मंजूरी के मैगजीन में नहीं रखा जाएगा।
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.
- वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात मैगजीन में तभी रखा जाएगा जब कि किसी विस्फोटक नियंत्रक ने इसके लिए विशेष मंजूरी दे दी हो।
(i) जब ऐसी मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक नियंत्रक से ऐसा लिखित प्रमाणपत्र अभिप्राप्त कर लिया जाए जिसमें दी गई मंजूरी के अंतर्गत आनेवाली अवधि दर्शित की गई हो और ऐसे प्रमाणपत्र के अनुज्ञापितधारी अपने पास रखेगा और मांग की जाने पर प्रस्तुत करेगा।
(ii) जब कोई विस्फोटक मानक शुद्धता का न रह जाने के कारण या द्रवणीकरण या नाइट्रो ग्लिसरीन या द्रव नाइट्रो योगिक के निकल जाने के चिन्ह प्रकट होने के कारण मैगजीन में भण्डारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुज्ञापितधारी अपने ही व्यय पर ऐसे विस्फोटक के निपटारे के लिए ऐसे निदेशों का अनुपालन करेगा जो मुख्य नियंत्रक या विस्फोटक नियंत्रक जारी करें।
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.
(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on demand.
(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitrocompound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.
- मैगजीन के भीतरी भाग या उसमें लगी बेंचों, शैल्फों और उसकी फिटिंग का इस प्रकार सज्जित किया जाएगा या उन्हें इस प्रकार अंतरित या अवतरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क रोका जा सके। भीतरी भाग में लगी बेंचें, शैल्फें और फिटिंग यथासाध्य ग्रिट से मुक्त एवं साफ रखे जाएंगे तथा ऐसे विस्फोटक, जो जल से खतरनाक रूप में प्रभावित हो सकते हैं, इस बाबत सम्यक सावधानी बरती जाएगी कि वहां कोई जल मौजूद न रहे; परंतु किसी लोहे या इस्पात के खुले होने के विरुद्ध सावधानी से संबंधित इस शर्त का वह भाग ऐसे किसी भवन में बाध्यकर नहीं होगा जिसमें वर्ग 6 (गोला बारूद) के प्रथम के विस्फोटक से भिन्न कोई विस्फोटक रखा गया है।
The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water there from;
Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a

building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.

- यदि तडित चालक का परीक्षण विस्फोटक नियंत्रक करता है तो अनुज्ञप्तिधारी ऐसे परीक्षण के लिए विहित फीस का संदाय करेगा यदि परीक्षण असमाधानकारी साबित होता है तो उतनी ही फीस अनुज्ञप्तिधारी द्वारा पश्चात्पूर्वी प्रत्येक परीक्षण के लिए तब तक दी जाती रहेगी जब तक कि परीक्षण अधिकारी तडित चालक को समाधानप्रद घोषित नहीं कर देता :
परंतु किसी एक परीक्षण के लिए देय फीस किसी एक दिन के दौरान किसी चालक के किए गए सभी परीक्षणों के लिए प्रभावी होगा :
परंतु यह और कि यदि दो या अधिक तडित चालक एक ही मैगजीन से संबद्ध हैं तो ऐसे सभी चालकों के परीक्षण के लिए फीस ऐसी किसी फीस से अधिक नहीं होगी जो किसी एक तडित चालक के परीक्षण के लिए हर स्थिति में विहित की गई है ।

If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test. In the even of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:

Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :

Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.

10. उपयुक्त तथा जेब रहित कार्यकरण वस्त्रों , उपयुक्त जूतों के प्रयोग द्वारा तथा तलाशी लेकर या अन्यथा अथवा ऐसे किन्हीं साधनों द्वारा इस बाबत सम्यक उपबंध किया जाएगा कि फैक्ट्री परिसर में अग्नि, दियासलाई अथवा ऐसी कोई वस्तुएं या पदार्थ, जिससे विस्फोट हो सकता है या आग लग सकती हो, किन्तु इस शर्त के कारण ऐसी संरचना, स्थिति या स्वरूप में किसी कृत्रिम बत्ती का प्रवेश वर्जित नहीं है जिससे आग लगने या विस्फोट होने का खतरा न हो :
परंतु इस शर्त का वह भाग, जो लोहे या इस्पात के अपवर्जन को लागू होता है, ऐसे किसी भवन के संबंध में बाध्य कर नहीं होगा जिससे भिन्न कोई विस्फोटक नहीं रखा गया है ।
Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory premises of fire, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion:
Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.
11. अनुज्ञप्तिधारी प्ररूप आर.ई.-3 और आर.ई.-4 या आर.ई.-5, जैसी स्थिति हो, में सभी विस्फोटकों का अभिलेख और लेखा रखेगा और विस्फोटक नियम, 2008 के अधीन प्राधिकृत किसी भी अधिकारी के समक्ष उसके द्वारा ऐसा करने की मांग की जाने पर स्टॉक पुस्तक और अभिलेख प्रस्तुत करेगा । स्टॉक पुस्तक विहित प्रोफार्मा में पृष्ठ संख्यांकित होगी ।
The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so
The stock books in the prescribed proforma shall be page numbered.
12. परिसरों में कोई परिवर्तन या तबदीली अनुज्ञापन प्राधिकारी के पूर्वानुमोदन बिना नहीं की जाएगी और अनुज्ञप्तिधारी ऐसी किसी शर्त का अनुपालन करेगा जो इस निमित्त अनुज्ञापन प्राधिकारी विनिर्दिष्ट करे ।
No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.
13. मैगजीन सभी समयों पर अच्छी मरम्मत की स्थिति में बनाई रखी जाएगी (या अच्छी हालत में बनाई रखी जाएगी) । यदि किसी कारणवश किसी विस्फोटक के भण्डारण के लिए मैगजीन अनुपयुक्त हो जाती है तो अनुज्ञप्तिधारी इस बात की सूचना अनुज्ञापन प्राधिकारी को तुरंत देगा ।
Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.
मैगजीन का अनुज्ञप्तिधारी इन नियमों के नियम 24 के उप-नियम 3 के अनुसार त्रैमासिक विवरणी प्रस्तुत करेगा ।
The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.
14. यदि सुरक्षा दूरी का कोई अधिक्रमण होता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को आवश्यक सलाह और कार्यवाही के लिए तुरंत दी जाएगी ।
Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.
15. यदि कोई विस्फोटक विनष्ट हुआ अथवा अनुपयोगी जाया जाता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को, सलाह प्राप्त करने के लिए, तुरंत दी जाएगी ।
The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.
16. विस्फोटकों के पैकेटों के चट्टे इस प्रकार लगाए जाएंगे कि कम से कम एक व्यक्ति भण्डार किए गए सभी पैकेटों की हालत की जांच करने और प्रत्येक पैकेज की विनिर्माण विशिष्टियों को पढ़ने के लिए उनके बीच से होकर आ जा सके ।
The explosive packages shall be stocked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package:
तडित चालकों की भूमि के लिए प्रतिरोध यथासंभव न्यूनतम होगा और किसी भी दशा में 10 ओहम से अधिक नहीं होगा ।
The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.
17. मैगजीन के चारों ओर 15 मीटर की दूरी के अंतर्गत कोई शुल्क घास या झाड़ी या ज्वलनशील सामग्री नहीं रहने दी जाएगी ।
A distance of 15 meters surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials.
18. विस्फोटकों के प्रत्येक पैकेट की, जब उसे मैगजीन के भीतर लिया जा रहा हो, ठीक दशा जानने के लिए परीक्षा की जाएगी ।
Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.
19. किसी मैगजीन भण्डारगृह में किसी एक समय में चार व्यक्तियों से अधिक को नहीं रहने दिया जाएगा ।
Not more than 4 persons shall be allowed inside the magazine or store house at any one time.
20. विस्फोटकों के खाली पैकेटों को शीघ्रतः वहां से हटा दिया जाएगा और नष्ट कर दिया जाएगा ।
Empty packages of the explosives shall be removed at the earliest and destroyed.
21. अनुज्ञप्तिधारी और कर्मचारीयों को परिसर के भीतर आपातकाल के दौरान की जाने वाली प्रक्रियाओं से अवगत होना चाहिए ।
The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.
22. निरीक्षण या नमूना अधिकारी को सभी युक्तियुक्त समयों पर अनुज्ञप्त परिसर में अबाध रूप से पहुंचने दिया जाएगा और यह सुनिश्चित

करने के लिए कि अधिनियम और इन नियमों के उपबंधों और सुरक्षा स्थितियों को सम्यकतः अनुपालन किया जा रहा है. अधिकारी प्रत्येक सुविधा प्रदान की जाएगी।

Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.

23. यदि अनुज्ञापन प्राधिकारी या विस्फोटक नियंत्रक अनुज्ञप्तिधारक को अनुज्ञात परिसरों या मशीनरी, टूल या उपकरण में ऐसी कोई मरम्मत या परिवर्धन या परिवर्तन करने या सिफारिशों को लागू करने को लिखित रूप में सूचित करता है जो परिसर के अंदर या बाहर या व्यक्तियों की सुरक्षा के लिए आवश्यक है. अनुज्ञप्तिधारक सिफारिशों को निष्पादित करेगा और विनिर्दिष्ट अवधि के भीतर अनुपालन रिपोर्ट ऐसे प्राधिकारी को देगा।

If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the licence shall execute the recommendations and report compliance within the period specified by such authority.

24. अनुज्ञप्तिधारी मैगजीन में रखने और बिक्री के लिए प्राधिकृत विस्फोटक सूची में उल्लिखित अनुज्ञात फैक्टरी या कंपनी से प्राधिकृत विस्फोटक / आतिशबाजी या सुरक्षा पत्ती खरीदेगा।

The licensee shall purchase authorised explosives/ fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.

25. निम्न से अधिक ध्वनि स्तर उत्पादित करने वाले आतिशबाजियों पटाखों की बिक्री और रखने के लिए -

(क) जो फटने की जगह से चार मीटर की दूरी पर है, 125 डी.बी.(ए1) या 145 डी.बी.(सी)पी.के. प्रतिबंधित होंगे;

(ख) शृंखला (जुड़े हुए पटाख) को गठन करने वाले व्यक्तिगत पटाखों के लिए उपर्युक्त उल्लिखित सीमा 5 लॉग₁₀(N) डी.बी. (सी) पी.के. प्रतिबंधित होंगे ;

The possession and sale of fire-crackers generating noise level exceeding;

a) 125 dB(A) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited;

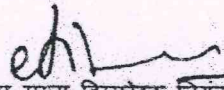
b) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log₁₀(N) dB, where N = number of crackers joined together.

26. आग या विस्फोट द्वारा दुर्घटना या नुकसान पटाखों की कमी या चोरी, तुरंत पास के पुलिस थाने और अनुज्ञापन प्राधिकारी और अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय को रिपोर्ट की जाएगी।

Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

अतिरिक्त शर्तें / Additional Conditions :

1. अनुज्ञप्तिधारी विदेशी मूल के आतिशबाजी को ना प्रदर्शित करेगा, ना रखेगा और ना ही उसकी बिक्री करेगा। The licensee shall not exhibit, possess and sell fireworks of foreign origin.


 कृते उप मुख्य विस्फोटक नियंत्रक
 For Dy. Chief Controller of Explosives
 कृते उप मुख्य नियंत्रक
 For Deputy Chief Controller of Explosives
 एरनाकुलम Ernakulam

Form DE-2
(See rule 113 of the Explosives Rules, 2008)
(Distance Form to be attached to the licence)

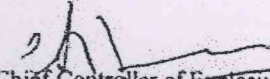
Safety distances required to be kept clear around magazine for high explosives or fire works or factory licence number E/SE/KL/22/95(E93346) in form LE-3 granted to Shri Shiju Thomas, Pallivathukkal House, Chilavu P.O., Thodupuzha, Kerala-685588.

Type of Structure(s)	Safety distances meters	
Inside Safety Distances(ISD)		
	M	UM
1 Room or Workshop used in Connection with the Magazine	11	17
2 Any other Explosives Magazine or store House or Factory of the Applicant		
3 Magazine Office		
Middle Safety Distances(MSD)		
4 Magazine Keeper's or Chowkidar's Dwelling house		
5 Railway including Minerals and Private Railways		
6 Canal (in active use) or other navigable water		
7 Dock or Pier or Jetty		
8 Public Highway or Public Road		33
9 Private Road which is PRINCIPAL means of access to a Temple, Mosque, Church, Gurudwara or other places of worships, Hospital, College, School or Factory		
10 River Embankment or Sea Embankment or Public Well		
11 Reservoir or Bounded tank/rope way		
12 Windmillor or Solar panel for Power Generation		
Outside Safety Distances(OSD)		
13 Dwelling House		
14 Govt. and Public Building		
15 Temple, Mosque, Church or Gurudwara or other Places of Worships		
16 Shops, Market place, Public recreation and Sports Ground, College, School, Hospital, Theater, Cinema or other Building where the public are accustomed to assemble		
17 Factory		
18 Buildings or Works used for the Storage in Bulk of Petroleum, Sprit, gas, or other inflammable or hazardous substances		45
19 Building or Works used for Storage and Manufacture of Explosives or of articles which contain Explosives		
20 Aerodrome		
21 Furnace, Kiln or Chimney		
22 Quarry or mine pit head		
23 Power House or Electric Substation		
24 Wireless Station		
25 Warehouse or other Storage Building		
26 Any other Protected works		
Overhead Electric lines		
27 Electric Power over head Transmission Lines above 440V		45
28 Electric Power over head Transmission Lines upto 440V		15

The Date : 05/04/2016

Amendments :

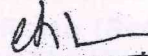
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 12/08/2016
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 28/04/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 14/09/2017


 For Dy. Chief Controller of Explosives
 कृते उप मुख्य विस्फोटक नियंत्रक
 For Deputy Chief Controller of Explosives
 एरनाकुलम Ernakulam

(THIS MAY PLEASE BE KEPT ATTACHED WITH THE LICENCE NO.E/SC/KL/22/95(E93346) WHICH IS AMENDED FOR ADDITION OF QUARRIES ON 28.04.2017)

THE LICENCE NO.E/SC/KL/22/95(E93346) IS FORWARDED HERewith DULY AMENDED IN RESPECT OF FOLLOWING:-


(1.) INTIMATION REGARDING QUARRYING OPERATIONS AT SY.NOs.294/1 Pt, 294/2 Pt, 295/5, 295/6 Pt, 296/2 Pt, 356/1-1 Pt AT ALAKODE VILLAGE, THODUPUZZHA TALUK, IDUKKI DISTRICT, VIDE INDENT LETTER FROM DEPARTMENT OF MINING & GEOLOGY NO.6319/M3/2016 DATED 14.07.2016 IS ACKNOWLEDGED. NO USE OF EXPLOSIVES IS PERMITTED UNLESS VALID QUARRY PERMIT IS OBTAINED AND COPY SUBMITTED TO THIS OFFICE. LOCAL STATE GOVERNMENT AUTHORITIES APPROVAL/ENVIRONMENTAL CLEARANCE AS APPLICABLE AND RENEWED FROM TIME TO TIME SHALL BE IN POSSESSION (2.) LICENSED EXPLOSIVES VAN SHALL BE USED FOR TRANSPORTATION OF EXPLOSIVES FROM MAGAZINE TO BLASTING SITE. (3.) IF ANY CHANGE OF QUARRY OR ADDITIONAL QUARRY IS INVOLVED, NECESSARY PRIOR APPROVAL/ENDORSEMENT SHALL BE OBTAINED FROM THE LICENSING AUTHORITY. (4.) OPENING OF QUARRY SHALL BE INFORMED TO THE DGMS AND BLASTING OPERATIONS SHALL BE CONDUCTED AS PER MINES ACT. (5) APPROVED BLASTER SHALL BE APPOINTED IN THE QUARRY FOR BLASTING.(6.) ALL RECORDS OF USE OF EXPLOSIVES IN RE-3, RE-5, RE-7, RE-13 SHALL BE MAINTAINED. (7). DAILY PASS FOR USE OF EXPLOSIVES (RE-13) SHALL BE GENERATED ONLINE. (8). EXPLOSIVES AND DETONATORS SHALL NOT BE TRANSPORTED IN THE SAME VAN AND TO BE TRANSPORTED SEPARATELY FROM MAGAZINE TO THE BLASTING SITE. (9) VAN SHALL NOT BE USED FOR STORAGE OF EXPLOSIVES AT SITE.



(A.K. MEHTA)

CONTROLLER OF EXPLOSIVES

OFFICE OF DEPUTY CHIEF CONTROLLER OF EXPLOSIVES


D. C. C. E. Emakulam

BY REGISTERED POST



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



E-Mail : dir.bqr@dams.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/ALth-34(6)/P-95/2016-17/

बेंगलुरु, दिनांक,

2017.

प्रेषक,

खान सुरक्षा निदेशक,

बेंगलुरु 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

विषय:-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).

संदर्भ:-

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 supports 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.

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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,

Sd/-

खान सुरक्षा निदेशक,

बेंगलुरु क्षेत्र, द.अं.

रा./SZ/BGR/KAR/IDU/18/Autn-34(6)/P-95/2016-17/ 18 2 A-

बेंगलुरु, दिनांक, 08.11.2017

Copy forwarded for information and necessary action to:

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

खान सुरक्षा निदेशक,

बेंगलुरु क्षेत्र, द.अं.

Issued to :

Mr. Shiju Thomas
Pallivathukal House,
Chilavu P.O, Thodupuzha,
Idukki District- 685 588



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RECOGNISED BY MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE (MoEFCC), GOVERNMENT OF INDIA

TEST REPORT

REPORT NUMBER : ABCTL /171101/AAQ/1137
SAMPLE DRAWN BY : ABC TECHNO LABS INDIA PRIVATE LIMITED
PROJECT SITE : MR. SHIJU THOMAS, SY. NOS. 294/1 PT, 294/2 PT, 295/5, 295/6 PT,
296/2 PT & 356/1-1 PT OF ALAKODU VILLAGE, THODUPUZHA
TALUK, IDUKKI DISTRICT- 685 588
SAPLE DESCRIPTION : AMBIENT AIR QUALITY MONITORING
SAMPLING LOCATION : PROJECT SITE
DATE OF SAMPLING : 01-11-2017
REPORT DATE : 09-11-2017

Page 1 of 1

S.No	Parameters	Results	Test Method	Limits*
1	Particulate Matter size less than 10- μm (PM_{10}), $\mu\text{g}/\text{m}^3$	69.2	IS 5182: Part-23 : 2006	100
2	Particulate Matter size less than 2.5- μm ($\text{PM}_{2.5}$), $\mu\text{g}/\text{m}^3$	34.8	EPA -40 CFR PART-50	60
3	Sulphur Dioxide (SO_2), $\mu\text{g}/\text{m}^3$	6.9	Improved West & Gaeke Method	80
4	Nitrogen Dioxide (NO_2), $\mu\text{g}/\text{m}^3$	20.1	Modified Jacob & Hochheister Method	80

*National Ambient Air Quality Standards prescribed by Ministry of Environment and Forests, Government of India vide Gazette Notification G.S.R. 826(E) dated 18.11.2009.

.....END OF REPORT.....



T. Rooso

Sr. Quality Manager

V. Curaray
Verified

Authorized Signatory

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- * The test report shall not be reproduced in full or part without the written approval of ABC
- * The test items will not be returned for more than 15 days from the date of issue of test report in the case of perishable items unless otherwise agreed with the customer or as required by the applicable regulation.
- * The Laboratory's responsibility under this report is limited to proven fault/ negligence and will in no case be more than the invoiced amount.

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TEST REPORT

REPORT NUMBER : ABCTL /171101/NM/1138-1141
SAMPLE DRAWN BY : ABC TECHNO LABS INDIA PRIVATE LIMITED
PROJECT : MR. SHIJU THOMAS, SY. NOS. 294/1 PT, 294/2 PT, 295/5, 295/6
PT, 296/2 PT & 356/1-1 PT OF ALAKODU VILLAGE, THODUPUZHA
TALUK, IDUKKI DISTRICT- 685 588
SAMPLE DESCRIPTION : NOISE LEVEL MONITORING
SAMPLING LOCATION : PROJECT SITE
DATE OF SAMPLING : 01-11-2017
REPORT DATE : 09-11-2017

Page 1 of 1

Location code	Sample Location	Lday [dB(A)]	Lnight [dB(A)]
N1	Northern Side of the Project Site	57.0	50.8
N2	Southern Side of the Project Site	54.3	49.1
N3	Eastern Side of the Project Site	56.8	49.5
N4	Western Side of the Project Site	59.9	51.2

Method: IS: 9989-1981(Reaff: 2001)-Ambient

AMBIENT NOISE STANDARDS

Zone Classification	Lday dB(A)	Lnight dB(A)
Industrial Area	75	70
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

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T. Rooso
Sr. Quality Manager

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- The Laboratory's responsibility under this report is limited to proven willful negligence and will in no case be more than the amount of the test fee.

Issued to :

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TEST REPORT

REPORT NUMBER : ABCTL /171101/SA/1142
SAMPLE DRAWN BY : ABC TECHNO LABS INDIA PRIVATE LIMITED
PROJECT SITE : MR. SHIJU THOMAS, SY. NOS. 294/1 PT, 294/2 PT, 295/5, 295/6 PT,
296/2 PT & 356/1-1 PT OF ALAKODU VILLAGE, THODUPUZHA TALUK,
IDUKKI DISTRICT- 685 588
SAMPLE DESCRIPTION : SOIL ANALYSIS
SAMPLING LOCATION : PROJECT SITE
DATE OF SAMPLING : 01-11-2017
REPORT DATE : 09-11-2017

Page 1 of 1

S. No.	PARAMETER	UNIT	RESULTS	TEST PROCEDURE
1	pH (1:5 Soil Suspension)	-	6.74	IS -2720(Part 26) 1987(RA 2011)
2	Electrical Conductivity (1:5 Soil Suspension)	mS/cm	0.011	IS -14767:2000 (RA 2010)
3	Available Nitrogen	mg/Kg	270	IS -14684:1999, Reaff:2008
4	Available Phosphorous	mg/Kg	36	FAO Chapter 3, ABCTL/SOIL/SOP 2
5	Available Potassium	mg/Kg	213	FAO Chapter 3, ABCTL/SOIL/SOP 7
6	Exchangeable Calcium as Ca	m.eq/100g.	14.1	FAO Chapter 3, ABCTL/SOIL/SOP 4
7	Exchangeable Magnesium as Mg	m.eq/100g	5.6	FAO Chapter 3, ABCTL/SOIL/SOP 5
8	Exchangeable Sodium as Na	m.eq/100g	0.94	FAO Chapter 3, ABCTL/SOIL/SOP 6
9	Organic Matter	%	0.72	IS 2720 (Part 22):1972, Reaff:2010
10	Texture	-	Loam	Robinson Pipette Method
a	Sand	%	36.6	
b	Clay	%	27	
c	Silt	%	36.4	

Note: Results are on dry weight basis

.....END OF REPORT.....



T. Rooso
Sr. Quality Manager

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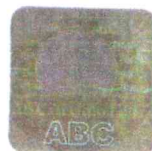
TEST REPORT

REPORT NUMBER : ABCTL /171101/W/1143
SAMPLE DRAWN BY : ABC TECHNO LABS INDIA PRIVATE LIMITED
SAMPLING METHOD : IS: 3025 PART 1 - 1987
PROJECT SITE : MR. SHIJU THOMAS, SY. NOS. 294/1 PT, 294/2 PT, 295/5, 295/6 PT,
296/2 PT & 356/1-1 PT OF ALAKODU VILLAGE, THODUPUZHA TALUK,
IDUKKI DISTRICT- 685 588
SAMPLE DESCRIPTION : GROUND WATER - NEAR PROJECT SITE
DATE OF SAMPLING : 01-11-2017
REPORT DATE : 09-11-2017

Page 1 of 2

S.No	PARAMETER	UNIT	RESULTS	TEST PROCEDURE	DESIRABLE LIMIT AS PER IS 10500:2012
1	Colour	Hazen	Nil	APHA 22 nd EDITION	5
2	Odour	-	No Odour Observed	APHA 22 nd EDITION	Unobjectionable
3	pH at 25 °C	-	6.60	IS : 3025 Part 11- 1983 (Reaff:2002)	6.5-8.5
4	Conductivity at 25 °C	µS/cm	134	IS : 3025 Part 14- 1984 (Reaff:2002)	Not Specified
5	Turbidity	NTU	BDL(<0.5)	IS : 3025 Part 10-1984 (Reaff: 2002)	1
6	Total Dissolved Solids	mg/l	78	IS : 3025 Part 15-1984 (Reaff: 2003)	500
7	Total Hardness as CaCO ₃	mg/l	40	IS : 3025 Part 21-1983 (Reaff: 1998)	200
8	Total Alkalinity as CaCO ₃	mg/l	32	IS : 3025 Part 23- 1986(Reaff:2003)	200
9	Chloride as Cl	mg/l	21	IS : 3025 Part 32-1988 (Reaff: 2003)	250
10	Sulphate as SO ₄	mg/l	4	APHA 22 nd EDN -4500- SO ₄ ²⁻ E	200
11	Fluoride as F	mg/l	0.11	APHA 22 nd EDN -4500-F B&D	1
12	Nitrate as NO ₃	mg/l	2.6	APHA 22 nd EDN -4500- NO ₃ ⁻ B	45

Contd...



T. Rooso

Sr. Quality Manager

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V. Chinnayyan
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TEST REPORT

REPORT NUMBER : ABCTL /171101/W/1143
SAMPLE DESCRIPTION : GROUND WATER - NEAR PROJECT SITE
REPORT DATE : 09-11-2017

Page 2 of 2

S.No	PARAMETER	UNIT	RESULTS	TEST PROCEDURE	DESIRABLE LIMIT AS PER IS 10500:2012
13	Ammonia as NH ₃	mg/l	BDL(<0.05)	APHA 22 nd EDN -4500- NH ₃ B&C	Not Specified
14	Phosphate as PO ₄	mg/l	1.6	IS : 3025 Part 31-1988 (Reaff:2002)	Not Specified
15	Sodium as Na	mg/l	16	IS : 3025 Part 45-1993 (Reaff:2003)	Not Specified
16	Potassium as K	mg/l	6.4	IS : 3025 Part 45-1993 (Reaff:2003)	Not Specified
17	Calcium as Ca	mg/l	12	IS : 3025 Part 40-1991 (Reaff:2003)	75
18	Magnesium as Mg	mg/l	2.5	APHA 22 nd EDITION	30
19	Iron as Fe	mg/l	BDL(<0.05)	IS : 3025 Part 53-2003	0.30
20	Chemical Oxygen Demand	mg/l	BDL(<4)	IS:3025:Part-58:2006	Not Specified
21	Fecal Coliform	MPN/100ml	<2	IS 1622-1981(Reaff 2014)	Absent
22	E.Coli	MPN/100ml	<2	IS 1622-1981(Reaff 2014)	Absent

BDL - Below Detection Limit

.....END OF REPORT.....



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T. Rooso
Sr. Quality Manager

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